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on 18 July, 2018

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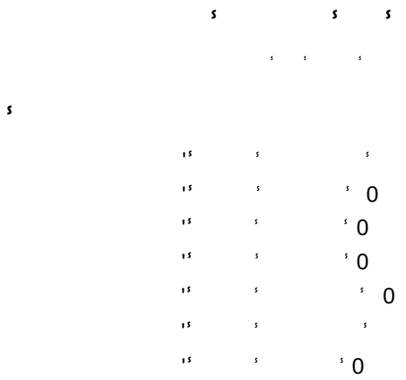

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4 .+2‘ . ‘ 3 ‘‘+& 1 !- ‘ !‘‘!‘ ! ‘‘ !& . ‘‘ -/ ‘ -/‘ -/ . ‘‘/ ‘‘ 2! 1 !- 2‘ & . ‘‘/&-*‘ #. -2&/ !‘‘ ; +!‘ -<‘‘1 &. -‘ . -‘ !‘ . /!‘ . ‘ /‘‘ 7&-*‘ 0 ‘ -/‘
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S=5(*5' '(' ' ' ' **6' *8')7' 0 6 # 5 6 5') ')' 5 ' C 5 # ()' 5('))* # F6 '
' 5 ' D*5 F6 '" B ' C 5 ' ' 5 ')6 *'(+ ' &)7' 5 ' ' =5(*5' 5 @ ' E)' *) 6 7'
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'))* ' **6'' ()' 5 ' ')*5' D ' ' 5 ' 6 ' ' 5 ' ' # ()' =5(*5' ' 5 '
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5 ' 6 ' ' -')7' 9') '8' 0 ' &E () ' 5 ' (' ')7' *)7' ' ( ) ' ' 5 ' 3 () # ++ '' ' 5 @ ' = 8 ' ((5 ' ' E)' +'() 7' ()' 5 ' * + ' ' ' ' 6 # ()') (5#I')7' ' ' ') ' 7' ()' *) ' + ' ()' 5 ' D*5 F6 '' ' C () '')' 5 ' 7(( ) ' E8' C 3(8' ' !) ' !5 + '' & 5 ' Q 5 ' ' 5 ' 97' '' (' +'() 7' ' ' 5 ')') ' ()' !5)* (8# =5(*5# ()' ' ' ' 5 ' !5 + '' ()' =B() # (' ' 7' H' 5 ' 6 ' ' ()' 5 ' ' !5 + UL 6 ' ()' 5 ' +') ' 0 6 L' ' ')*5' D ' ' 5 ' 6 ' 5 ' E)' '' 5 ' (' ' (' +'() 7# B)' ' ' 5 ') - ' !% &' ()' 5 ')) '' + ' (E' '8# =(5' ' ')7) ' ' ' 5 ' / ' !% &' - , '()' 5 ' 7 ( )' (E' '8' ' D '7A' 5 ' E () ' 5 ') 8')6 *'(+ ' 8 ' 7(* @ ' 7' =5(*5' *) ()' 5 ' 6 ' ' 5 ' ' ' ()' ')*5 V 5') ' ' ') ' ' 5(' ')*5' D ' =(5' 5 ' +'() 7' 7(( ) ' ()') (5A' '7 ' @(7)* ' 5 ' 5 ' 6 ' ' 5 ' ' ' = ' ' ' 7' ()' ')*5# ()' (B ')) '' ' ()' 5 ' ( )' ' (*5 '7' ')7' +' * 7() ' ( ) ' 5 ' !)* ' ' 5 ' ')*5' (' #)7' ' 5 ' ' ! 5 + '# ' *)(R() ' 5 ' 3() L' (# ()' *) ' (8' =(5' 5 ' * ' '' 5 ' 6'+ ' ' ()' B7')' 5 ' ' ( ) ' (8' E6 ') ' *) () 7' ()' 5 ' +'() 7') (5' ! +(' ' 5 ' 6 # '7' 6' 5 '' @(7)* ' 5 ' () ' ')*5' D ' = ' * +(7' ' ' ' 6 ' ' 7# ' 5 ' (# ' ' 5 ' @ ' ' '(() ' * ' ' (6 ' 7A) 7' =5(*5' @(7)* ' L(# ()' '))* # * '' E ' 7' E8' 5 ' 6+ '('' **6' *8' ' 5 ' ')*54' D ' @ '' 5 ' 7') (5' ! +(' '(' E '@ E ' 5 ' 5 ' ' * ' ' 5 # - ' '# & ! 5 + '' - ,# ' ' + * () ' 5 ' '*5) ' ' 8# 7)7' 5 ' ' 5 ' 97' '# & ! 5 + '' ->#' ' + * () ' * ' ()' 6(' 5)' 7 +)7(' ()' 5 ' ' ' '6 ' 6 = 7# ' ') ' () ' 7' ()' 5 ' ')*5' D ' ' 5 ' 6 # +' E E 8' E * 6 ' 5 8' = ' ') ' *) (7 ' 7' ' 6E (*' * ' '' 5 ') (5' D # ' 5 ' (' '' * # * '' +)7) ' ' 5 ' @ ' ' !5 + ' ' ' 5 ' 6 # ' ') =' +'() 7' ' ' 5 ')' 5+) 'E)' 5 ' ' ( ) ' # &()' *) ' (8' =(5' 5 ' 5 7' +6' 6 7' ()' (' ' 6 ' ' (*5 '7' ' =(5' ' ' 5 ' 0 '(( ) ' (' 5 ' D*5 F6 '' B')7' 5 ' 7' '() 7' ! +(

5 ' 6 ' ' /') '8' 0 ' & 5 ' 5('7' ' ( ) ' ' 5(' 3 () ' 5 ' = 8 ' E)' +'() 7' ()') (5' ()' 5 '* + ' ' ' ' ' 6 #)7' (' ') ' 7' ()' *) ' + ' ()' 5 ' D*5 F6 '' ' C () '#)7' ()' ' ' 0 1' !% &' E ' ' ' '' 7' A' ('(=5(*5' '' 5 ' 6 ' ' 5 ' (' ')7' 5('7' ' # ' 5 ' E)') (* 7# ' ') ' 7' ()' ')*5 4W 5(' (' 5 ' ' D * ' @(7)* ' 5(5 ' ' E () 7' ' 5 ' +' *(' '(7' ' =5(*5' 5 ' !5) ' B' + * ' ()' 5 ') 6 ' 6 7' ()' ' () ' 5 ' 6 # ' ' =5 ' 6'* ' 5 ' ' (' ! +(' ' 5(' 6 ' = ' ' +'() 7# ' 5 ' D(() ')6 *'(+ ' ') *'(E 7# *)) ') =' E ' * ' () 7 ' 5 8' ' ' @ 6 E ' ' '7() ' 5 ' ' @(7)* ' ' 5 ' 6 ' E () ' 7 '6+' ()' 5 ' ( ) ' ' #)7' 5 ' '() 7' ! +(' 5 @ ' E)' ()') ' ' ' ' @(7)* ' ' 5 ' 6 ' ' 5 ' ' ' 5 ' 6 ' (' 5 ' ' ') =' +'() 7W ' ' 5 ') '8' ()' 5 ' D*5 F6 '' B#)' 5 ' ! 6)' ++' +'(7# ()' ' '' ( ) # ' 5 ' 6 ' D A)7' ()' 5 ' ++ (' ! 6)# ' ' 8' ++' +'(7' ' 5 ' ') ( )# ' ' +'() 7' 5 ' * ' ()' 7' ()' 5 ' ' ( ) ' ' ' 5(' '# =5(*5' * '' +)7' ' 5 ' @ ' ' !5 + ' ' ' 6 A' 5(')') ' E () ' 5 ' @(7)* ' ' 5 ' ' * ' '+ 7' %)' ' ( ) # 5 6 5' 5 8' 5 @ ') ' 5 ' ' ' 'E)' () ' 7' ' ' 5 ' 6'* ' ()')8' ' '' +'() 7' ! * ( )' ' 6 ' ' =(' E ')' 5 ' @ ' ' ! 6 ' '' ' @(' ()' @ 6 '' ' + ' (*6 '' ') ' ' '*) () 7' ()' 5 ' * # =5(*5' ' ') ' () ' 7' ()' 5 ' 6 ' X) ' 7' ()' 5 ' D*5 F6 '' B#) '' +(() 7' ()')8' 7(( )' ' 5 ' 6 A' 5 ' ' ' 5 ' ' ' +'() 7' ()' ' '' 8+

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') 2' .' ;"&/*!1!-2' -'B"!-# ' . ' !' 0 !2' . ' !-"@' ' -/' ' 8 (' L!-"@' M+'2!!'+. ./0#"&. ' .' .+ ' !'' ' !# +' ' ,'3 *!' ,,' .' 5 ' . ' &2' .+01!' -/' !' . !2' !"! !' ' '!-/2' 7& ' !' 0 !' ' !-"@')) !!' *!' J5 ' .' J ' . ' &2' .+01!' -/' !' . !2' !"!

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*%6:8(- ' % < ? 1' &=' D1' ! &? D' 1< ! 1-BD & ' < ' ' ' 7 9 5 6 . ' 3 "&' % ' 467

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*%67 - ' ' < ? 1' &=' D1' '. D D' 1< ' 8' 8' 8' < < ' -' C' N ! 1-BD' & < ' T4 (O ' 6 . ' 3 "&' 5' 645

%4 - ' 78 < ? 1' &=' D1' '- D' 1< ! 1-BD =' <-0B 'C ? >' ' +& ' " .2#"& ' ' ' '-' ? ' &-A' 6 . ' 3 "&' 7' ' P 6(4

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U J8 - ' *%8 < ? 1' &=' D1' ! &? 11- D' 1< ! 1-BD =' <-0B 'C ? >' ' ' -' ? ' &-A' ' 6 . ' 3 "&' *%' 657

%4(8$ - ' 9: < ? 1' &=' D1' ! '= 11- D' 1< 9' : ! 1-BD \ ' <-0B 'C ? >' 3' ' -' ? ' &-A' ' +& ' " -2#"& ' G' ' '#' B<BB' ' 6 . ' 3 "&' *:' ' P 67: ' F 10 > '] '

2 J8 - ' *5 ' < ? 1' &=' D1' '. D 11- D' 1< ! 1-BD =' <-0B 'C ? >' ' +& ' " -2#"& ' ' 3' 4 * RL' '-' ? ' &-A' ' 6 . ' 3 "&' &5

8 5 - ' 6 < ? 1' &=' D1' K1- '1 D' 1< ! 1-BD ' <-0B 'C ? >' I' ' '-' ? ' &-A' 6 . ' 3 "&' 6 ' UJ

8J8 - ' 64 < ? 1' <C?A' F 10 ' '" 1A' <9' <- A' LL '' 3 ' L' LN8 < ? 10' > <A1' <' F 10 > ' -0 1 9' '-' D1' K1- 8 D' A' 1< ' L' " ' ! 1-BD ' & ' 1 & ' ' "6 . 3 "&' 64' 'G' &; # # 'V ! 2 1 ' W ' 46(

< ? 1' ' -' A' +/0' 0' <- - '0' 1. - " 1. '0' 1- 'B" 1L " 1A' < < ? 10' 9' > <A1' ' -' A' +1 0' 1< 0' &=' D1' A . -' & , > . ' 1- '

*%%(8$ - ' 6: " / - - &L] +3 ' L ' L' L =' D1' K1- 8='= D' 1< ' ' L' J ! 1-BD & ' < ' ' > ' $ 6 . ' 3 "&' 6 ' 4%%

*%%5 7 - ' 6$ " 1' - - &' L+'PJ' L' L' L@' =' D1' K1- 801+1- D' 1< ' ' L' ! 1-BD & ' < ' $9("' 6 . ' 3 "&' S) b' H' ' 3! & ' 3 "&' 8 O$ J

*%%7 - ' 65 " 1' - - &' LL+ ' '= ' ' 8' 8 ' =' D1' K1- 81' . D D' 1< ' 8 ! 1-BD & ' < ' ' > ' (6 . ' 3 "&' 65' J

*%: 8 - ' 67 " / - - &' LL LJ' 8' b 8' 8' 2 =' D1' K1- 8-'- D' 1< ' 8' ! 1-BD & ' < ' ' U ' (9' : 6 . L' 3 "&' O7' ' JI

%:6 4 - ' 4 " / - - &' XBLL [' 8' 8' =' D1' D' 8=' 0 ' 1< ' 8 ! 1-BD & ' < ' -' : Y 4 6 . 3 "&' 4*' I' 46 4(

J8 - ' 44 ! ' - - &' LL' ' 3 ' 8' 8 =' D1' D' 8 D' A' 1< ' 8' 8 < ' - & B' ' \ 4Y 6 . ' 3 "&' 44' ' 4(7

*%(' S - ' 47 - - &' LL4 'L[' 8' '8' 8' ' -=' D1' D' 8-'- D' 1< ' 8' 8 ! 1-BD' I' I' < ' -' J & ' < ' ' > ' ' 6 . ' 3 " ' 47' 4$5

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' # ' .' !)%" M8B')"' ' %' /!1)3

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	4				
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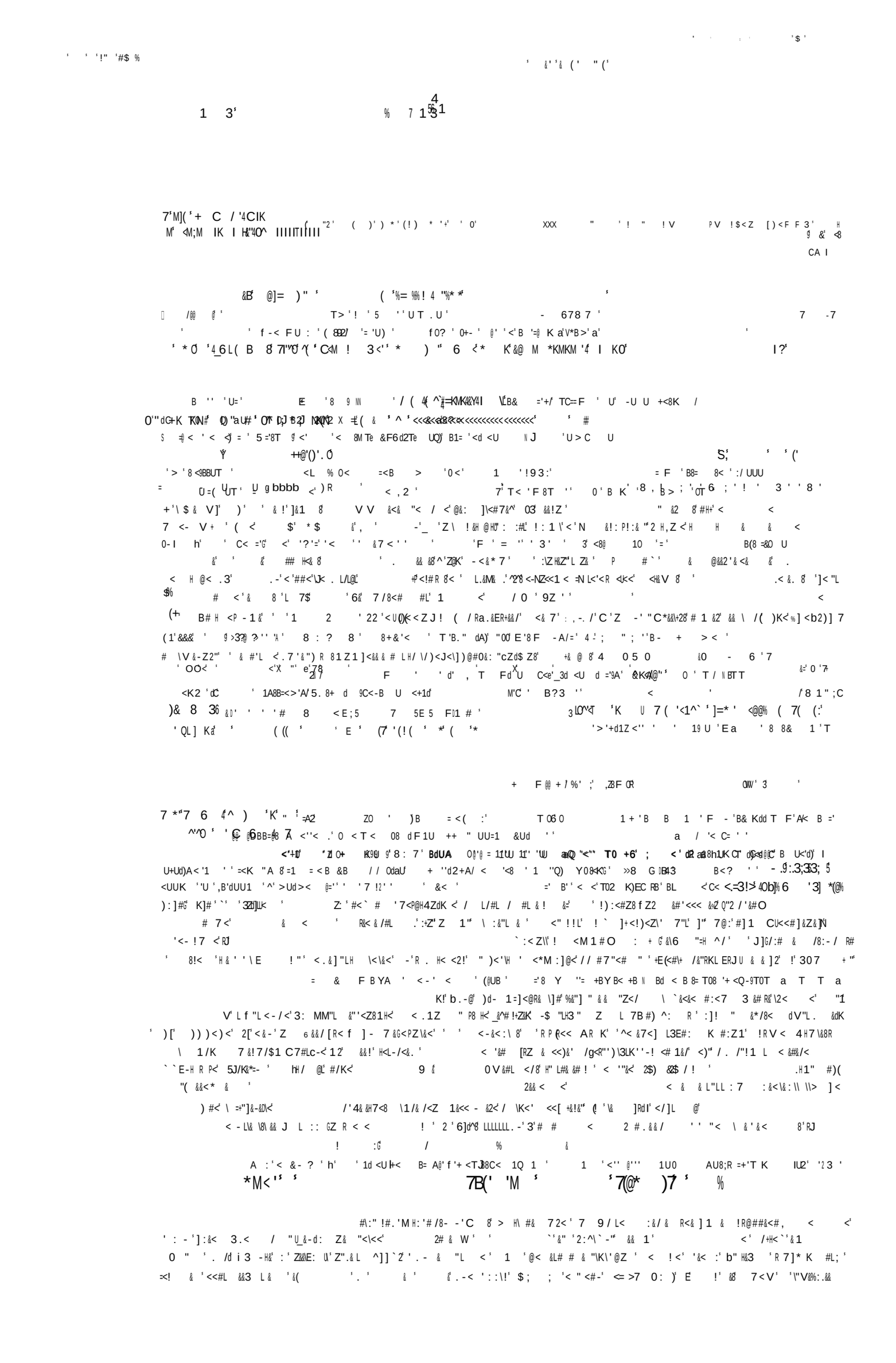
	&@' < ? ' <# - -&' C '>&' AK ' ' ?0H ' <A' <- -' & <+?> ' ' ' 8			$	
	&@@' &=' D1' < ? 10' = &>' D1' ! ' 0 ' 1< ' &' D1' '.D D' 1< ' &=' , '-.' AK< A'				
' *%(*	- ' - =' 8' 8' $ V -' D1' ! ' 0 ' 1< 9' 8' 8' '	! 1-BD =' *'	& ' < 8 ' L' ' 9' * 9' 7	& ' < '' *	45
*%(4	- '4 W ''= '-' D1' D' A' 1< ' 8' 8' 8	! 1-BD =' '	& ' < ' @' ' ' 5'9' $'9' ('	& ' < '9 4 I '%' '	476
*%(% $	- '% J ''= -' D1' ! &? D' 1< ' 8' 8' " #	! 1-BD =' '	& ' < ' ' ' ' (9' : 9' % :	& 9' < '' 4 I '%' Q9'	% 4
'	- '$9 +'= ' 8' ' -' D1' 1+1- D' 1< ' 8' ' 8	! 1-BD	& ' < F ' '4 9 6	& 9' < '' $ I ' 5	% 5
ft *%(5	- ' 5 ' [+'' J' $' 8' 8' 8' ' -' D1' '.D D' 1< ' 8' 8' '	! 1-BD	& ' < ' '6 9' ' ' ' &=' D1' ' ' '-' D1' !	& ' < '9 $ I ' 5 ' 9	%6%
*%$6	- ' *6 < ? <' <C?A' F 10 ='" &A' <' - -&' A?&A1B' > &' 8' ' < ? 10' > <A1' < ' F 10 > ' -0 1 9' '-' D1' K1@= D' 1< ' ;	! 1-BD	'#' B<BB ' F 10 >]	T ' & ' < '' '% ' ' 3' @ ' E& ' 1 & ' ' 2 B ' '5'	
I 8J8	- ' *% < ? <' <C?A' F 10 >' 1A' <' - -&' H?< &' A1B' > &' 8' ' < ? 10 9' > <A1' < ' F 10 > ' -0 1 9' '-' D1' ! &? 11- D' 1< '	! 1-BD	'# B<BB F 10 >]	Z, & , < @ ' U% $5 !' 6' & G ' 1 'Z	J
*%$$85	- ' *$ < ? <' <C?A' F 10 -'' 1A' < ' - -&' A1B' > &' 01C ' > & < ? 10' > <A1' < ' F 10 > ' -0 1 9' ' '-' D1' 1+1- 11- D' 1< ' 8' L	! 1-BD	'#' B<BB8 F 10 >]	Z' & ' < '' *$' ' 9' $) ! 1 '	%:6
*%5684	- ' 66' < ? <' <C?A' F 1 ' ' 1A' < ' - -&' +'B10' > &' 01B?-A&' + < ? 10' > <A1' < ' F 10 > ' -0 1 9' ' '-' D1 K1- 11B&-A' 1< ' ' <9	!' 1-BD	'# B<BB F 10@ >]	' & ' < '' 66 ' ' $ 1 ' -	%(5
'B ==@ *%54 %	- ' * < ? <' <C?A' F 10 >' 1A' <' - -&' C '>&' 'B< A'' 1 B'' ' < ? 10' > <A1' < ' F 10 > ' -0 1 9' ' '-' D1' ! ' 0 ' 1< ' &=' , '-.' 'BD< A' ' <9	! 1-BD	'#' B<BB ' F 10 >]	& < ' R 'B' @@ '' ' & ' 1 ' 2 ' < &-9 @&'	%$$
! 5) *%5:	- ' < ? <' 1. '0' 1- 'B'' H' ' > '9' - -&' C '>&' 1A' <' 8' + < ? 10' > <A1' '-' D1' ! ' 0 ' 1< ' &=' , '-.' 1- ' D1' 1+1- D' ' 89	! 1-BD' ' I -.@'0D'-	1 ' W 5 '#' B<BB ' F 10 >]	' & ' < '' ' < &-' @&' 3 '' 'D B<B ' F 10 >] 9	' '
*%5$	- '4 < ? <' <C?A' F 10 >' 1A' <' - -&' 1. &' 1C0' 1- 'B'' 1C '>'' C&0 ' & - ' -.D1' 1 B'&' 8' d D1' 1B&-A1' < @'<>1- 9' =' D&@A1-' D1' #' A1' 1 1' &=' , -.' 1- ' D1' +' 33'	! 1-BD e C' K' -.@'0D' 9	1 N 5 '#' B<BB F 10 >]	= & < '4' ' ' < &-' * ' K' '@2 B<B F 10 >	: 7' 9
*%5587	- '% < ? <' <C?A' F 10 ='" 1A' <' - -&' H?< & 1- 'B'' 1C '>'' 8' ' 8' L < ? 10' > <A1' < ' F 10 > ' -0 1 9' ' '-' D1' ! &? D' 1< ' &=' , '-.' 1- ' ' 8'	-.@'0D	'# B<BB ' F 10 >]	& ' < '' %' '	:6%



<Ø D1' 0<'A' < ? 1Ø 1H?' 1Aᵍ <@@ 1@< 1Ø <-A' @1 aØ 0D<@@ = &>' D1-B1=& D' D<+1' D1' ' = '&-Ø <.<'-0' <@@ 0?BD' ? +1 & Ø <-A' ? 1 0ᵍ # ' B '&-Ø &=' 10C<00ᵍ <-A' 1B&+1 ' D1' ' 1#@1' "<>.1

"' <<@ '1Ø=&' <'? B&<&BB

' ' 'Ø & A<'-1A' <-A' 0 <#@'0,1Aᵍ <-A' D1' -.' &? ' & A'0 <' @ 'B&> ><-A1 Dᵍ D< ' `-&-1'&='D'Ø &?-j 01@@& 0ᵍ ='B1 0ᵍ & ' 1 +<- 0ᵍP' -& ' <- ' & D1 ' 1 0&-' K' D'-' D1' 1<@>' &='@-.@<-Aᵍ &=' KD< 0&1+1 ' 0 < 1'& ' &-A' '&-' D1 '#1ᵍ 0D<@@ = &>' D1-B1=& D' <a1' -& '0?0j <'-' <- ' ^?< 1@ # ' <'- 1-<-B1' '-' D1' &?- ᵍ -& ' 1@01KD1 1ᵍ ?C&-' <' . '1+&?Ø <'-G D<' 'Ø &' 0< ᵍ D1' 0<'A' &?-01@@& Ø <-A' D1' , '-./Ø . 1< ='B1 0ᵍ ?C&-' <' <'-' KD'BD' 0D<@@ #1' & A<'-1A' # ' D1' , '-.' D'>01@=ᵍ # ' D1' A+'B1' &=' D1' & AØ &=' D'Ø 1<@>'G <-A' & D1 ' @10Ø ='B1 Ø <-A' 1 +<- 0' &=' D1' , '-.ᵍ <Ø K1@@ '-' D1' Lj BD1H?1 ᵍ <-A' <@@ D'Ø & D1 ' &? Ø <-A' @<B10ᵍ <Ø &=' D'Ø &K-' 1'- ᵍ ?C&-' <'-' &'&01' D1' ' ='B1Ø <-A' 1 +'B10ᵍ <-A' &' #1' '>C '0&-1Aᵍ <-A' D1-' &' #1' <-0&>1A' < ' D1' , '-./Ø F '@@ᵍ 1+1 ' &=' D1>' <BB& A'-.' &' D1' ' "1. 11ᵍ 0 < 1ᵍ <-A' "101 G <-A' <@@ & D1 ' 1 0&-Ø D &?.D' D1' 1<@>' ?C&-' <'-' &=' >C '0&>-1-ᵍ <-A' &' #1' <-0&>1A' <Ø D1' & D1 ' <=& 10<'A

0 !Z' ." &#!"2. ' !' %# !SO!"' #.-&"1!/' !;Z'.-#!' &/'-.'.';!' /!1 -/!/'_ 30-i2 1!-' . ' +!"E . !-/&-*

ᵍ ' 'Ø & A<'-1A' D<' <@@ <?10Ø <-A' A'j -<-B1Ø ><A1' #1=& 1' D'Ø '>1'&=' ='B1 Ø &=' D1' LBD1j H?1 ᵍ #1' D&@A1-' <-A' =' >@ ' a1C ' '-' <@@ &'-0G <-A' >& 1&+1 ' ' ' 'Ø & A<'-1A' <-A' 10 <#@'0D1Aᵍ D<' <' KD<' '>1'<- ' "1# Ø #1' &-B1' C<'Aᵍ <-A' D1' <@@'1Ø D1 1&=' ><A1' 1 &'-1A' <-A' <@@&K1A' '-' D1' 0<'A' LBD1H?1 ᵍ D<' D'Ø "1# ' 0D<@@ -1+1 ' \)' B&>1' '-' "1>-A@ <-A' '=' ' '0&' D<CC1-ᵍ D<' <=1 '0?BD' @@&K<-B1' ><A1' D1 1ᵍ <-' @1 a' &=' D1' k/)' LBD1H?1 ' ><a1' <-' F ' ' & ' &B10Ø &' @1+ ' D1 '0<>1' "1# ' &=' -1Kᵍ <-A' D<' A?@ ' C &+1Aᵍ D1'0<>1' @1 a' 0D<@@ @&01' D'Ø ='B1ᵍ <-A' D<+1' >C '0&->1-' '@@ D1' D<D' ><A1' E 11' &' D1' < '# ' 0&' >?BD' <Ø D1' 'Ø 1-A<><.1Aᵍ '=' <- ' K'@@ 0?1ᵍ # ' D1' "'0B 1 '&-'&=' D1' 1<0? 1 ' <-A' D1' < &-Ø &=' D1' 0)' LBD1H?1

&++ &-!Z -/' -/ !- -Z' 7& /" 7&-*' !&'' !"'&#!2 0-/!'' !' 3"'! !%' . ' %!1 +& &# L' &.-Z' ".1' !'4..E. ' .1!2/ @

ᵍ ' D1' . '1+&?Ø &>C@<'-' &=' D1' & AØ <-A' &>>&-Ø &=' D1' 1<@>ᵍ <Ø K1@@ 1-'&=' &@ ' D? BD' <Ø & D1 ᵍ ><A1' '-' D1' < @'<>1-ᵍ &=' D<' D<' '-' ><-' '.-& '1Ø <-A' < Ø &=' D1' 1<@>' &=' -.@<-Aᵍ D1' '@@<'-1Ø <-A' <-A 1-<-Ø '-' '@@1-<.1ᵍ KD&' &K1' 1 8' +'B1Ø <-A' ?0 &>Ø &' D1' ' 0<'A' & AOᵍ D<+1' -&K' @< 1' K' DA <K-ᵍ <-A' A&' A<'@ ' K' DA <K' D1' ' 1 +'B1Ø <-A' ?0 &>Ø A?1' &' D1' ' 0<'A' & AOᵍ # ' &>=& ' <-A' &B? 1>1-' &=' & D1 ' D1' ' &?-01@@& 0ᵍ <'D <'-1 0ᵍ <-A' #1 & Ø '-' D1' &?- ᵍ KD'BD' D< D' <a1-' ' 1' <-A' &=' ' &=' D1' 0<'A' '@@<'-1Ø <-A' <-A 1<-<- 0ᵍ # ' &@&? ' &=' B1 <'-' L1>C@'=B< '&-Ø' ><A1' &?' &=' D1' &&a' &=' "&>10A< ' &=' D1' <-& Ø <-A' &K-Ø KD1 1' D1 ' D<+1' #11-' AK1@@'-.ᵍ <-A' # ' +' ?1' &=' D1' 0<>1' L1>C@'=B< '&-0ᵍ <-A' D1' ' 1+'ᵍ - 1 C 1 < '&-Ø &=' D1' 0<>1ᵍ D1 ' <==' >' D1>' &' #1' H?' 1' <-A' ? 1 @ ' A'0j BD< .1A' &=' <@@ <--1' 1 +<.1ᵍ A?1' <Ø K1@@ &=' D1' ' &A ' <Ø &=' D1' ' 0<'A' 1-? 10ᵍ <-A' K'@@ -& ' 0?==1 ' <- ' "'0 10Ø & ' & D1 ' ?0 'B1' &' #1' ><A1' ?C&-' D1>G #?' A&' >1-<B1' D1' '-'0 1 Ø &=' D1' ' & AØ &=' '=1' <-A' 1>#1 ᵍ <-Aᵍ KD'BD' >& 1' '0ᵍ .< D1 ' D1>01@+10' &.1 D1 ' '-' . 1< ' &?0ᵍ <-A' <. 11' # ' 0?BD' &-=1j A1 <B ᵍ D< ' 1+1 ' &-1' 0D<@@ <'A' & D1 ' &' 10'0 ' D1' ' & AØ K' D'0 &-.' <-A'G <-A' >?BD' & D1 ' < >' D1 ' A&' '-' 0?-A ' <--1ᵍ &' D1' . 1< ' "<>><.1' &=' D1' ' 0<'A' & AOᵍ <-A' 1+'ᵍ L<>C@1' &' & D1 ' &' #1.'-' 0?BD' '& 0G 0&' D< ' '=' A?1' 1>1A ' #1' -& ' D1' < D1 ' C &j +'A1A' ?C&-' D1' 0<>1' 1#1@0ᵍ . 1< 1 ' '0BD'1=ᵍ KD'BD' E&A' C &D'#' ᵍ >< ' D1 1&=' 0C '-.' D &?.D' D1' 1<@>G ' 'Ø A<'-1A' <-A' 0 <##@'0D1Aᵍ D<' D1' & AØ KD'BD' =11ᵍ D1>01@+10' . '1+1A ᵍ 0D<@@ D<+1' 0C1B'<ᵍ &>>'0j 0'&-Ø ?-A1 ' D1' E 1<' 1<ᵍ &' D1' ?0 'B1Ø &=' 1<B1ᵍ &' &' & D1 ' 0?=='B'1- ' 1 0&-0ᵍ &' 1-H?' 1' &=' <@@ 0?BD' 1#1@0ᵍ <-A' &=' D1' ' ==1-B10ᵍ <-A' D1' ' &?-01@@& 0ᵍ &B? 1 0ᵍ <'- <'-1'Ø <-A' #1 & 0ᵍ <-A' &' '>C '0&-' <@@ D&01' D<' D1 1&=' 0D<@@ #1' 1-A' 1A' #1=& 1' D1>ᵍ <Ø K1@@ =& ' D1' '>1' C<0 ᵍ <Ø =& ' D1' '>1' &' B&>1ᵍ K' D&?' A1@'+1 '-.' D1>' &?' &=' '0&-' # ' <'-C '01ᵍ <'@ᵍ & ' & D1 K'01ᵍ K' D&?' 001-' &=' D1' ' & A0ᵍ

' -&-' B&?-0<'@1' &='B1' -& ' =+<?-' -1' -&-' & D1 ' K' D D >ᵍ " 'G '6' /' $ ' 0! &

B&>1' @1Ø A' \' 10 < ? \' A1><-A1-ᵍ H' &? 1Ø 1@< \' I' @1 BØ 1-' 1'1-' A10& 1' @&Ø <BB'&-Ø 1-,Ø &?\' '1?L' C +1&? Ø &?' <BD< &>Ø C' +&'1' A1' R0C<Ø I' ' 1B&C1-' '@&? 'A<><.1Ø <?' 1#@1

=>' & A1'.-1' 10' I' 10 <#@" I' @1' &" -=1' ' A1=1-A' 10 &' 1>1-ᵍ H' -?@' &-01'@1 ' ==B1 ' &?' ,+<-' -<? 1' &+10Hᵍ @?" -<0B?-' <? 1' C0&-1' A?' &'<@>1' "1-.@1R 1' A1' H?1@ 10<1' &?' B&-A'B'&-' H'@0' 0&'1-ᵍ -1-C1'.-1-' A10& 1' &?' 0?0 1'.-1-' <0B?-' H?1 1@@ C' -< - < <-B1' 1-' C<'Ø &?' <'@@&0ᵍ 0? ' . 1+&?01' C1 -1G B10' <00<+&' ' @10' A' \' &-01'@@1 Ø I' .J-\' ==B1 Ø A?' &" 0?' C1 -1' H' = <' & A1'.-1' C' @1' &" >10>10' A1@ <+ Ø A10' = /Ø A1' &'<@>1G I' @10' <? Ø ' >1 -A 10' ='B1 Ø I' M+<-\' @1' &'ᵍ '#'1-' 1-' @10BD1H1 ' I' 1-' &? 10' 01\' <? 10' &? 10' I' C@<B10' B&>1' A1' 0<' CC 1' >1'.-11ᵍ 0? ' C1 1' A1' CA1 ' @&? ' &=='B1Ø I' M+'B10' I' A10 1' 1>C '0&-1\ᵍ I' A'@@&H10' 10 1' 1'- \' <' @<' +&@?- 1' @1' &'ᵍ BD10B -' A1' 1?L' 0&@&-B' 01\' A1. 1' 10 <' I' A101 G I' &? \' <? 10' C0&-10' C> ' @1' &'<@>1ᵍ 0? ' @<' A' 1' C1 -1' A1-8' C '0&-1>1-ᵍ I' A10 1' 1'- \' B&>1' @10' <?R0' A 0?0A' \

1>' & A1'.-1' 1 ' H' &? \' 10 < ? \' I' & A1'.-<-B10' =1' \' <+<-' 010' D&1? 10' A10' ='B1 Ø A1@' QiBD1H1 ' 0&'1-' 1-?\' I' =1 -1>1-' .< A1\' 1-' &? \' C& - \G' I' &? 1' B1' & A1'.-1' 10' I' 10 <#@'\ᵍ H' <' H?1@ D1? 1' H<0B?-Ø A1 10' 0&'1-' ?-' =C' \' C<'1\' I' @10' <@@'10' 1D' =<' \' 1 &'- \' I' <@@&K1\' 1-' A' 1' 0BD1H1 ᵍ H' H1@ A1 1' - ' B&? .1' <><'Ø 1-' A1><-A1G' I' 0'@ <+1'.-1' 1-" H<C@Ø '1@ <@@&K<-B1' =<' ' '@@1&H1 ᵍ <0B?-' @1 ' A?' A ' 0BD1H1 ' =<B1' # '1=' &?' C11Ø' C' @1+1 ' >10>1' @1' A1 1' A1' -# 1@@ I' B1' A?1&'1-' C+1\ᵍ H' >10>1' @1' B@1 B' CA1' 0&-' &=='B1' I' 1' ' @<' C '0&=' <-f' '@ <C<' = ?' . 11' <' @<' C '1' C' <-' 1-A<><.1' 0" <0BH- ' +& <' 0? ' C' @<' A'0B'1A&-' A1Ø 1 & 1 ' J=' < &-Ø' A?' A' ' 01D1H1 ᵍ

1>' <' @<' . 1+&?01' C@1'-' A1Ø=0 ' I' &1Ø' A13 &'<@>1' 0'#'1-' .1-\' A1' 1'-' .@'01' B&>1' <? 10' =1' ' 1-' C@1>1-ᵍ A1' B1&' H' 1-' C@?0&? Ø ='1Ø' I' C '1Ø A?' &'<@>1' "1-.@1 1' @1Ø +'@@1 -Ø' I' 1' 1-<-\' 1-' +'@@1-<.1ᵍ H" A1 +1-',+'B1Ø I'B?0 ?>1Ø <' @&?'= 0ᵍ &?-=' & 1'-& 1@>1-' 1 1' I' 1 1'1-' A1' &' 1-' <? 1' @&ᵍB?0 ?>1Ø I' 'B1Ø A?1\' <' @&' A@ .' = 0ᵍ C' B&-=& ' I' C1? 1>1-' A< ' Ø '&/Ø B&-01 @&Ø >1 - 1-&? Ø I' <#1 &? Ø 1-' C<''0ᵍ H&-' C 'Ø @&?1 ' I' C=' ' A1Ø A' 1Ø +'@@14>Ø I' 1' 1-<-\ᵍ C' B&@&? ' A1Ø @<-Ø 1a1>C@'='B<B'&-Ø ='? \' D& Ø A1' @'+ 1' A1' " & >10A< ᵍ A1Ø ><-C' Ø I '3 '@@1Ø A1>\' H?1?Lᵍ '#' 0&-' A1> <-\ᵍ I' C' +1 ?1' A'B1@@1Ø 1L1>C@'=' B 'B'&-Ø I' & ><@1' 1- C <B'&-' A'B1@@1Øᵍ '@Ø' 0<=1 >1-' A10 1' H?D1Ø ' C? 1>1-' A10BD< .1\' A1' &?' ><51' A1' M+<.1ᵍ A?1' 0'#'1-' A1' @&? ' B& CØ' B&>1' A1' @&? ' 1-? 1Ø <+<-' A' \' I' -1' &'@@1-' 0&1== 1' <01 >' A10 1001' &?' <? 1' ?0 'B1' 10 1' =<' ' 0? ' 1?L'G <-\' ><-<001-' @1Ø >'-'0 1Ø A1' @&? Ø = 0' A1' '1' I' A1' >1># 1ᵍ I' H' C@?Ø' 10 ᵍ '@Ø' 01' B&'@@'1-' 1-01>#@1' <' .W-\' &? 1RᵍI'01- 1@'1-' C' '1@ B&-=1A1 <B'1' H' BD10B?-' <'A < <? 1' `I /P' B&- 10 1' @&Ø = 0' <' =& ' >< -G I' >&? \' A<? 1Ø ><@L' '=&-' 1-' A'C01Ø ><51Ø <' .D'' A<><.1' A1' @&' '' \' = 0' I' ><@1' 1-0<>C@1' <Ø <? 1Ø A1' B&>1-B1' A1?L' '& 10G '00'-' H' 0" A?1' 1>1A'1' - '0>' > R' @1'C@?Ø 1-' 'a'0' 0? ' @1Ø A' \' 1#1@L ᵍ . 1 -&?' >10BD'1=' H' "'1?' -1' +&'@@1' 1-' C &' ' 0&? A 1' C' > ' @1' &'<@>1;' '7 ( ) ' 10' I' 10 <#@ ᵍ H' @1Ø = 0' H' & '01- 1-' . 1+1\' <1-' 10C1B'<@Ø 1 >'00'&-0ᵍ 0& \' @1' .D'A1' 01<@ᵍ <Ø ?0 'B1Ø A1' @<' C<'L' &?' <Ø <? Ø C0&-1Ø 0?=='0<- \ᵍ A1-H?1 ' A1' '1?L' 1#1@L' I' A1' @&? ' ><@='''' \ᵍ B&-01'@@& Ø /)' >1 - 1-&? Ø I' <#1 &? 0ᵍ I' A1'=''1' 1-C '0&-1 ' ? \' B1 L' H?1?L' 1-' = &-' 1-A' 1\' A1+<-' 1?Lᵍ 0'#'1-' C' @1' 1>C ' C<001' B&>1' C' @1' 1>CØ <+1-' ' 0-\' <' A1@'+1 ' D& Ø A1' C '0&-' C' >< -C 'Ø #<'_' -<? 1>1-' 0<-\' @<001-' A1' @&' = 0ᵍ

ᵍ =' <' # ? ' W C1? & Ø = ' :

' A1' = ' ' ' '55

1- ' '1 - ' < 1'- \' &?' <BH?' 1\ I ' H' >10 10 @10 ?0 'B1' ' 1'1- ' C&<' ' A&'1 ' I ' R>' -1 0'#'1-' <' @< 0? 1' @1' &'' B&>1' <' @<' 0? 1' A1' CA1 ' ? +1?\' &'?\' I ' \' H< ' @10 Aa\' '@=1 >0 &?' RPU' K > ' \' 1#1<@L' 1- ' 0&'1- ' < A- \' <' @<' 0? 1' A10' A' \' = 0 -1' 0&'1&' '#' <B?-1>1- ' A1 +01\ <-H ' '@0' <'1- ' '<' ' ='-' <' &'' I' <+1B' B1&' '@0' 1'1- ' @<001- ' A1' @& 0' A' 10 1' . - & 0 1 ' H?<- ' <0 A' 10 B& 0>@@& 0 CB? & 0 - - 1-& 0' I ' <#1 0&'@' <? '1 ' =B1 I ' I ' 01- 1<#@K1- ' ='' ' A1' 1?L' H >@ ' = & - ' < 1'- 0' '0 ' H I ' 01' 0&'1- ' >;?-1 '1=' ' A1@' 1\' A?' C '0&-' <-H ' '@0' < & - ' ='? ' ='-' <-' &'' I' . 11' <0 _ 0' '00'- ' . 1+1\ 01@&-B' B1&' H' @& ' 10 < 10 I ' @< H?<- ' 1' A1' @&' >< <' ' A1><-A1- 0 0'' >10>10 10 5 ' +1?@@1- ' 0? ' 1-R 0 1?L' C ' # '1=' &?' C ' #'@@ ' 0<+<- ' &? 0 I ' H?<- ' <0 A' \' ='-10 @10' = <-BD'010 I ' @'# 10 A10 1'. - & 0' H&- ' ='-10 I ' < A1>1- \' A1' @&? ' 1-<- \;' I ' HO- ' <' @10 A' 10 1L1>C@'='B<B'&-0 => \' I ' C B#<B1\' B&>1' A10?0 10 ' A' 0 @10 H?1@L' =? 1- ' =<' \' +1- ' ' 1-' C@1>1- 0 10 ' A1B@< 1' 1-' A' ' C@1>1- ' H' B1@@10 -1' C&'1- ' $ -1' A1 +1- ' '+< 1 0 &?' 1?' 1- ''0 <0' +A 1 -0' I R 1' 1-<- \0 HO- ' <' @<' I<?-BD'01' A1' # ' B& C0 -1' <' BD<?-.1 ' @<' B&-A'A&-' A1' @&? ' 1-? 1' I ' B?0 ?>10 <?-8 A1-1>1- ' A?1\' -1' =<' 18 ?A'B1' <0' A' \' _ 0' A<+&' ' @&? ' +'B10 I ' B?0 ?>10 B&>1' '@0' 0&@A1- ' A<?-A1-' 1>C0 1 & AA. -1' 10 'H0? ' B10 ' A1B@< <B#-' @10' A' \' <R&- ' @'10' C< >L10 0&?@\' @1' . -A1' 01 ' <- \' I ' A1?L' B&>1' @& '1- ' #?0&'. -1 <' 0'@0 @10 +& &- 'A1><-A1 ' +' ' R>' C ' B1' H' C@?0& 0 .1- \' A1' C1 ' ' .< '0&-' A1' R 1 1- ' &?' A<? 0 C&00100'&-0 =&- ' . > \' 1 1-?\' A10 .1- \0 0'#'1-' A10H?'1 0 B& >1' A<?R0 1-' C@?0& 0 C '10 A1@ &'<@ <1 A&-<- \' <' 1?L' BD<C&-0 I ' <? 1' @'+1' A?-1' 0? 1' C' <-' 1C 1'. -<- \' 0 1?L' @<' +<@?1' A1' B1@ '', 1 &?' C' B<0 @<' A&?#@1' +<@?1 C' A1 B&+1-<- ' B <00? <-B1' H' H#10B?D' A1' 1?L' >< - 1-A <' <? 1' 1-' &? \' H?1 1@@10 0&'1- ' 1@10 10&-<#@10 &?' -&?' 10&-<#@10 <' .W- ' >10 B=?1=' I ' & C '& - ' A?' C&1C@1 AA. -1' 10 ' I ' <001- ?\ H' @10 10 < ? \' I ' & A1-<-B10 10' 1-' #?' B<0' <+<- ' 01 D1? 10 0&'1- ' .< A1\' I ' A?1>1- ' 1L1B? \ I ' &? 1' B1' @1' &'' A1=1-A' 10 &' >1- ' H' A10& >10 -?@ A1 @', 1' -1' 0&'@ A&-1' <' -?@@ ' C? ' >< - 1-<-B1' <0' H?1 1@ -<? 1' B&-=1A1 <B'1 0? ' C1 -1' A1-C '0&-1>1- ' I ' . 1 &?01' =& ='?=1' &'G' I ' 1-H?1 .1- ' A'@'.1<@1>1<' @10 ?0AB10 A10 00'010 A10 &?\' B1?L' H'' 01' B&'@@1 ' 1-01>#@1' 1-' = <R-' 1\' C' A1 , 1 <==<' 1' >1 - 1-<-B1 I ' 1?L' H'' 1- ' = &- ' &+1\' B&?C<#@1\ 0&'1- ' A?1j >1- ' C?- 0' BD10B?-' 01@&-1' @<' HO- ' 1' A1' 0<' A101 1>' 10 '<001- ?\ H' A10& 1' -?@ C 1BB'&-' &+1' B@<?01 A1' &@?> h' 0&' <@@&K0' A1+<- ' <0B?-' ?.1 C ' +' <=@@10 C '0 &?' <BD< 1\' 0? ' @1' +'<.B' &?' M+a1' A&- ' @<' C 1BB@&-' =<' ' >1-B'&-G -<?L'- ' 1-' C@110' A1' R0C<0' &?' A<? 1' B&-8 <= 1' =1' ' &?' CC1 1\' C?'0 @<' A< 1' A1' >10>1' @<' C 1BB@&- ' 'L ' 1>' C ' B1&' F C@>- ' 10 ' =1 ' ' <' &'' F C@?0& 0' .1- \ A1' =' 1' &'<=<-1' 0'#'1-' . 1 -A 10 B&>1' >1 -A 10 1'<- \' A &' ' I ' +1 &'0' A @10 0'#'1-' <0' R 10 1- \' 4 ' 1- \' B&>1' 1-' <?R0' <BB'&-0' C0&-1@0 0&- ' & B1-&?018 >1- ' A1@<'1\' A1' @&' A &' ' I ' <BB'&-0 C> ' B1&' H' @10 &BB?C'&? 0' &?' A1=1-A<- 0 C ' 10 1' 0?0 1-?\' I ' >< -8 1-?\' 1-' 1' & =&- ' B&1>' <' ' A&?-10 I ' =1&==1>' <' \' A1' @&' , 10 I ' 1- \' F 0&- ' 1-' A1#< 1 I ' A1' @& 0' <? 0 #'1-0 I ' BD< 1?L' <0 =0 ' I ' <? 0 . > \'VA?' &'<@>1 +00 H?1?L' @10 A' \' C 0?<- \ C ' . - ' ><-<B1' H' @& ' `10 4' =1' ' -1' C&'1- ' -1' -1' &01- '=<' 1' @&? ' C 0? 10 I ' <?L - ' A<? 1' C ' C@1'- ' 10 ' =1 ' ' F >1 - => \' C@?0& 0' .1- \' A'001'01- ' <?R0' A1' @&' 1'@ \' I ' <- & ' < ' @<' A'001'0'-1' =<' =&- ' A',010' <@'1-<B'&-0' I ' =1&==1>1- \ <0B?-=&' \' <0' _ 0' I ' . ' \' A1' &'<@>1' C ' >1 - 1-<-B1' <+&' I ' <0B?-=&' \' <0' C@?0&0' C0&-10' A1' H'' -&?-0' @10' A'001' 1\

'@@ D1 ' D1 1&=' #1' < <'- 1A' & ' <BH?' G >'=' D<' D1' 0<>1' ?0 'B10' D<+1' &K1 ' &' D1<' <-A' A1 1 >'-1' <0' K1@@ <' D1' ,&-./0 ?' 9 <0' <' D1' ?' ' &=' D19 < ' &+'A1A3' <@K< 0' D<' '=' D1' 0<'A' '@@<'-10' & ' <- ' 1>>0' 1#1@0 #1' D1 1&=' < <'- 1A' <' D&' ?' ' &=' D1' 0<'A' & A09 D1 ' 0D<@@ '-' -&' K'01' #1' A1@'+1 1A9 '@@ D1 ' D<+1' ><A1' <' !'-1' &' D1' ,'-.9 <-A' <@0&' D1 ' &' D<+1' D1' 001- ' &=' D<' & A0' <=& 10<'A <-A' <0' &' D1' 0<'A' &?-01@@& 09 &B? 1 0 <'- <'-1 0' <-A' #1 & 09 0?BD' &B100' '-' @'a1' < -'1 ' 0D<@@ #1' ><A1' &=' A'1-+' KD'BD' D1 1&=' 0D< ' #1' < <'- 1A9 0&' D<' D1 ' #1' '-' -&' K'01' A1@'+1 1A' = &>' '0&-9 '@@ D1 ' D<+1' ><A1' <' !'-1' &' D1' ,'-.9 <-A' . 11' &' D1' & A0' 0&' . '1+1A9 <BB& A'-.' <0' D1' ' 0 < 19 <-A' D1' ^?<- ' ' &=' D1' ' ==1-B1' A& D' 1H?' 19 '=' D1' 0<>1' & A0' K'@@ 0?1' <.<'-0' D1>' # ' F ' ' & ' # ' '@@G' 0<+'-.' <@K< 09 <0' &' D1' 0<'A' !'-109 =11' ! <-BD'010' <-A' 21 '10 &=' & 9 KA''BD' D<+1' !'-10' <-A' >1 B'<j >1-0' &=' DA ' 1-<- 0;' -A' <0' &' D1' 0<'A' Lj 1>C@'='B< '&-0' ><A1' <-A' C? BD<01A' <0' <=& 1' '0' 0<'A9 KD'BD' K1 1' B<?01A' &' B&>1' '-' D1' < @'<>1-9 `<-A' &' #1') ' A1B@< 1A' '-' D1' 0<'A' < @'<>1-9 D<' D1' 0<>1' >< ' -& ' -& ' &?.D ' &' <+<'@ & ' D&@A' C@<B1' &' D1' 0<'A' +'@@<'-10' & ' <-A 1&<- 09 <0' &' D1' ! <-BD'01' &=' D1' ' &A'10G -& ' &' D<-.1' D1' &-A' '&-' &=' D1' ' 1-? 1' <-A' ?0 &>0' &=' &@A' '>1' A?1G -& ' &' A&' 1 ?A'B1' &' D1' 0<'A' & A09 &' D<+1' D1' ' 1 +'B10' <-A' ?0 &>0' <0' D1 ' K1 1' K&-' &=' &@A' '>1G <-A' '0' & A<>1A9 D<' ?C&-' D'0' "1B@< < '&-' D1' 0<'A' & A0' 0D<@@ D<+1' 1 1 0' < 1-0' ?-A1 ' D1' E 1<' 1<@9 <0' ><- ' <-A' 0?BD' <0' D1 ' 0D<@@ -11A9 '=' D1 ' D1' 0<>1' 1H?' 1

9 1B<?01' D<' A'+1 0' 1&C@1' &='0><@@ 1+1-?1' &=' <-A9 1-9 &' & D1 ' &00100'&-09 A&' ><a1' . 1<' 1 '-?1' &=' 1&C@19 <0' K1@@ &=' 0H?' 10' <0' &=' & D1 9 '-' ><- ' < 0' &=' D1' 1<@>9 .'+'-.' &' D1>' <0' <-A' & D1 ' '+1 '109 &=' &-1' ?' ' # ' 1< 9 <a'-.' &=' D1>' D1' <@?1' &=' D1' 0<>1' '+1 9 &' C1 B<01' D1' " &?#@1' <@?19 # ' 0?BD' &+1-<-' <-A' ==? <-B1' D<' 1+1 ' &=' D1>' 0D<@@ ><'- <'-' & D1 ' '-' <@@ ^?< 1@09 #1' D1 ' 1<0&-<#@1' &' ?- 1<0&-<#@19 &' D1' . 1<' '0BD'1=' <-A' CC 100'&-' &=' D1' 1&C@1'G ' '0' & A<>1A' <-A' <001- 1A' D<' D1' <? 10' <-A' A'-<-B10' ><A1' '-' 0?BD' <01' #1=& 1' D'0' '>19 #1' a1C ' <-A' A?@ ' 1L1B? 1AG <-A' >& 1&+1 ' D1' ,'-.' A& D' 0 <' @ ' A1=1-A9 D<' = &>' D1-B1=& D' -&' 0?BD' '+1 ' #1' .'+1-' &' <- ' <-' =& ' <'- 1-<-B1' &=' ^?< 1@09 -& ' & D1 ' &-=1A1 <B'10@ ?C&-' <'-' &=' >C '0&->1-' <-A' . '1+& '0' !& =1' ? 1' &' D1' '- .G <-A' D1' ?0 'B10' &=' 00'010' 0D<@@ A'@'j .1- @ ' <'H?' 1' &=' <@@ D1>' D<' .< D1 ' D0>' &.1 D1 ' '-' ! < 1 -' '10' # ' 0?BD' '+1 ' &' A&' =1'- 1-<-B1G <-A' D1 ' KD'BD' D1 1&=' 0D<@@ D1' =&?-A' .?'@ 9 0D<@@ #1' A?@ ' C?-'0D1A9 1+1 <-' <= 1 ' D1' ^?<- ' ' &=' D'0' " 101

9 ''I<001- 1A' D<'= &>'D1-B1=& D' -&' & 1Bj '&-9K' D' D1' @<?01' &=' &@?> ?09 #1' <@@&K1A' #1=& 1'<- ' ?A.19=('<?<@0' <a1-' & '#&?.D ' ?C&-' D1' & <.1' & ' 1 +'B1' KD1 1&=' D1' & B= '&-' <<a1 D' >1- '&-G -& ' <@0&' '-' @1<0' &=' 10C<009 & '&=' & D1 ' &- <= 9 ><A1' & ' C1 C1 < 1' <= 1 ' D1' " < 1' &=' D1' 0<>1' & 1= '&-

9 1B<?01' ' ' '0' B&>C@<'-1A' &' D1' , '-.9 D<' ><- ' 1&C@1' &=' D1' 0<'A' 1<@>9 <0' K1@@. 1<' <'0 0 > <@@9 D<+'-.' '.D ' <-A' ?1' ' @1' <0' K1@@ &' <-A09 1-1j >1- 09 <-A' 1- 09 <0' '-' & D1 ' C1 0&-<@ = '&-09 #1' K &- ?@@ ' A1@< 1A' &=' D1' ' '.D ' <-A' B '&-09 # ' 1<-0' D<' D1' BB?C'1 0' & ' "1=1-A<- 09 &' #1' ><'-8 <#@1A' <-A' 0?0 <'-1A' '-' D1' ' F &-.9 A&' B&> >&-@ ' ><a1' E '= 0' <-A' !1&==>1- 0' &=' D1' ' <-A0' <-A' 1-1j >1- 0' KD'BD' #1' '-' " 1#< 19 <-A' &=' D1' ' & D1 ' E&&A0' <-A' D< 1@09 &' & A0' <-A' & D1 ' E 1<' 1-' &=' D1' 1<@>9 <.<'-0' KD&>' D1' 0<'A' ? 0?<- 09 =& ' . 1<' 1-<B1' D<' '0' ><A1' &' D1>9 B<-- &' -& ' A< 1' -& ' ><a1' D1' ' ? 0?' 0' G <-A' <@0&' &-' D1' & D1 ' < ' &>8' =A<'- ' '0' ><A1' ` &' D1' , '-. ' D<' &= 1- '>10 ><- ' 1&C@1' A&' A'001'01' & D1 ' &=' D1' ' 1-1>1- 09 <-A' <-&-' <= 1 ' D1' " '001'0>' A&-19 D1 ' ><a1' A'+1 0' @'1-<j '&-0 <-A' !1&==>1- 09 0&>1 '>1' & & A0' <-A' E 1<' 1-' &=' D1' 1<@>' &' D<+1' <'- 1-<-B19 <-A' 0&>1j '>1' &' ><- ' 1 0&-0' &=' KD&01' <>10' D1' "'001'0110

3 -& 1!-' . '20# ' &++ &-!2= -/' !&'' ;! ."2

!#+ " &.-' 2' .' !' 2 &/' !1 +& L' # &.-2

< ? 10' * &-2' &- !- -#!' #.- &"1!/' 30-&2 1!-' .'" *&'&-*' &'!"&!2 ."' &- !- -#!' 02 &#!2' . ' &2!'2 +' ! 0&"!' . ' !-#!2

3". !/ &.-2 7& ' !' + 02!' .+0102'&-' 7 ' 2!' -.' ++.7 ;+!

W b& 2' . ' -/2' b..12' C#' &-'B" 0/' .'" ." &- !- -#!

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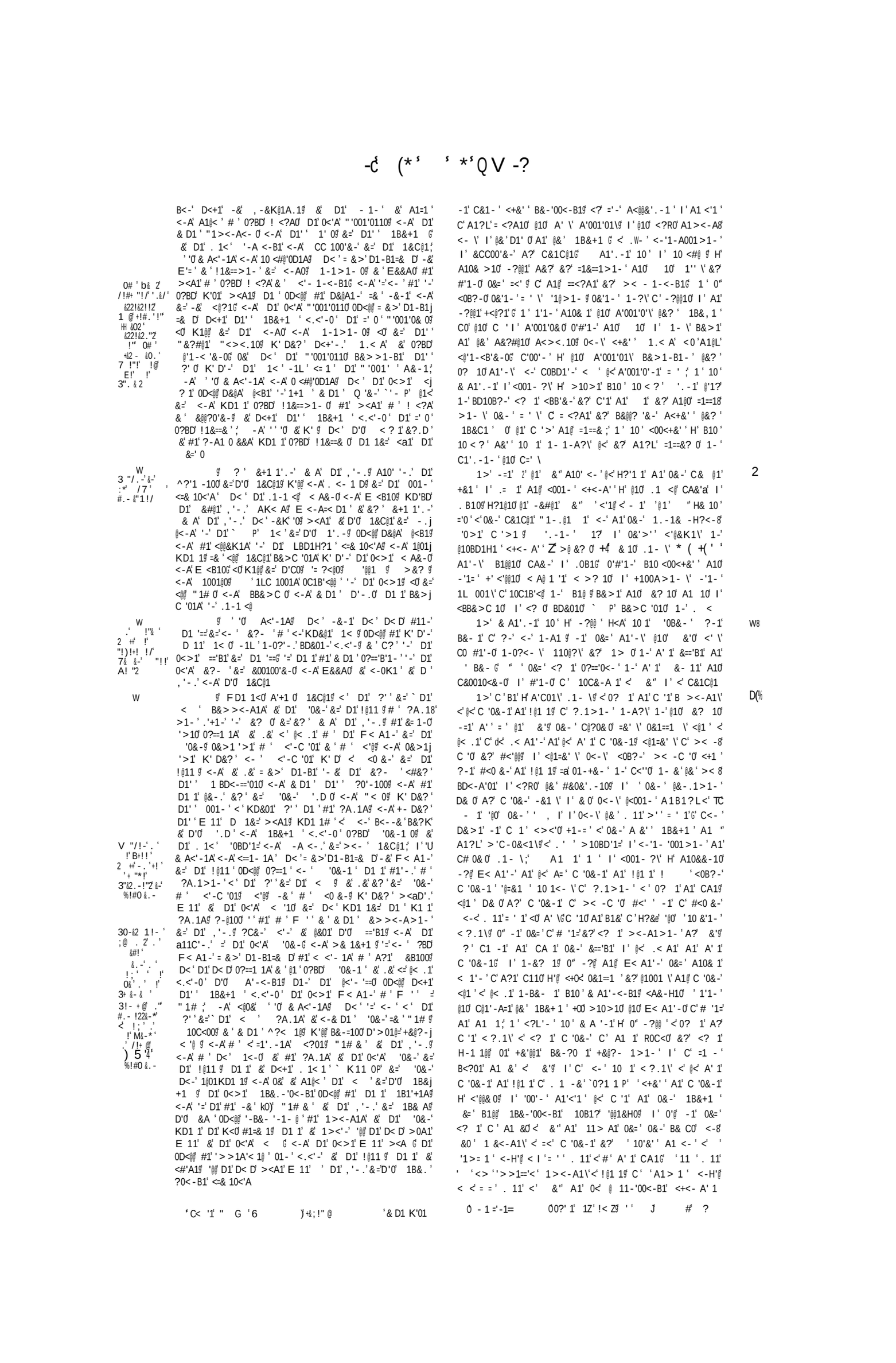


" ' (*' ' O J

' ' 1>' @1Ơ 1@< \' I ' @1' @1 .'1' A1' A' ' &'<@>1' 01' C@1'.-&-' . A1>1-'A1'B1'H' @1Ơ .1- \'A1' 1'-' 0.@'01' C 0?'<- \' 1-' &? ']C'1-1' C ' @&? ' A'0>10ᵍ I ' <? 1' BD&01Ơ H?1@1Ơ A1' A &a' A1 +1-' I ' A1' <?-B'1' 1' 0TA&'1-' <CC 1-1 1' < >10>1' @<' &? ']C'1-1ᵍ I ' @1Ơ @?.10' A1'

' 1'-' . I 1' B&-'00<- \' 1-' C1@Ơ B<?010ᵍ I ' <? Ơ C0&-10 0& '1 '1- 1'?1 <- \'0&@&-B' @<' & ᵍ 0&-' >< B'&?0'-1-' $' -&?A?1>1-' C' B1@@1' B<?01' 1-A' 1\' 1-C '0&-1\' I ' C' 01B?@1 ' C&<' ' & '#@1>1-' &CC001\ᵍ I ' <?L'-' 1==& B1\' 1+1' +'&@1-B1' C' 01 >1- \' I ' . 1+&?010Ơ &#@'.<B'&-0Ơ I ' >&? \' A<?RƠ -< Ơ -&-' A?1>1-' B& > C?@01\ᵍ <' A1 1 ' I ' B1001 ' &? 11>1-' 1Ơ BD&010Ơ A10?0A' 10ᵍ 1-B&- 1' @1Ơ @'# 11Ơ I ' = <?-BD'010Ơ A1' 1'-' . 01Ć C' H?& ' 10 ' <001- ?\ᵍ H' &?\' '1@L' &#@'.<B'&-Ơ = ' \' &?' <==<' Ơ C' A? 1B1' I ' +'&@1-B1ᵍ -1' 0&'1-' <>1Ơ A<0B?-' +<@?1' ᶠ I ' H?<-' <' 1?L' H" CB? 1-' C' > <@'B1' A1?L' 1-A' 1>1-\ᵍ I ' A10 1' >10>1Ơ A10' 1-A' & 0ᵍ ?C Ơ 1&' H' @1Ơ 1-A' 1\' 1-' 0&?' <H?a1\ᵍ 1'1-' I ' 1-B&? .1-' A1?L' C1? & 0' I ' Aa& 0' >10>1' @<' C1 -1' H10 ' 1&- 1-?1' 1-' @10 < ? ' A1' F 10 '-'01A1' A1'B1?L' H" CB? 1-' =1?L'<CC1@@1Ơ10 1'=<' \'

$ 1 1K' @1Ơ ?0 'B1Ơ A10 0A010ᵍ &?' <? 1' ?0 'B1Ơ A1+<- H?1?L' '1?L' 1-A' 1\' = &-' <H?' 1\ᵍ C&'<' ' A1-H?1 1' A1' '1?L' C1? & 0' I ' 1-A' & 0ᵍ I ' A1' @1Ơ C?-' ' A?1>1-' BD10B?-' 0&@&-B' 0&-' A101

'L''' ' 1>' 10 ' <001- ?\ᵍ H' <' H?1@ D1? 1' H' <0B?-' C0&-1' A1 1'-' .@'01' 0&'@ 11' 1-' C@11' 1-' &? ' 01B?@1 ' C ' 01Ơ CC 10' A'0>10Ơ C '01\' C' -&?-' A1Ơ #'1-0' 1-C& 1\ᵍ I ' B1@?" H' 1-0" 1-' 10 ' 11' 1-' C@11' =<B1' 1LB1C '&-' &?' <@@1..1' H' @<' 0?#0 <-B1' 0 0&? B1' A1' @<' #&0&'.-1' 0&' ' 0&?@1- 1-' 0?' A'0>10Ơ A?1\' A1' A -' I ' C&00100'&-' A1' 0<' 1.@'01' &?' < <? 1' 0&-' #1-1='B1Ć H' 1-' '17' B<0Ơ . <@' <+1>1-' -1' 0&' ' <>10Ơ C '0ᵍ <-\' >&-0 1' >< ' ' 10C1B'<@ B1>1-' B1&' =?'0 ' @< ' BD< 1@@'

L+J' 1>'H ' B1' H' @10Ơ 1@< \' 01' =&-' C@1'-A 1' H' 0'#'1-.1- \' A1' 1'-' 0.@'01' #1-1='B'1\' B&>1' <? 0' 0&-' < 10 ?\' I ' D& 0Ơ 11\' 0'#'1-' A1Ơ 10.@'010' < D1A <@Ơ B&>1' A1Ơ <?=0' 10.@'010' I ' @&' '>' 1 0ᵍ I ' <-' B&>1' '@0' 0&-' <@1=&a\' 1-1-A<-\' <' A'+'-10' ,+'B1Ơ I ' <?L'-' 1-' <?RƠ @'1?L' &? ' 0&'1-' '@Ơ C& <-\' @1' B& CƠ -=1' = ' D?' '0 ' <0' ><@<A10ᵍ I ' '00'-' < 10 ?\' I ' =& 0 1 \' 0&-' @'1\' I ' >1-10' 1-' C '0&-1ᵍ 1-B&- 1' @<' = <?-BD'01' A1' 1'-' .@=11Ć A1'.-1' 10 ' H' '' -? 1' '-'0 1' A?' h &" &?' <? 1' =<B1' < 10 1 ' <0B?-' C0&-1' A1' 1'-' .a01' C' '1@ > < I ' I ' 1-' 0&a' A?1>1-' 1&-+'Aᵍ 1'' @<' C '0&-1' I ' 1-' 0&a' 1'-' <@' +&@?>1' @1' &" I ' = 11' . 1' <0' C '10' '00'-' < 10 ?\Ć C +1?1' &? =&' \' H' @10Ơ QA' 10 P .1- \' A1' 1'-' .@'01Ơ -1' 01' '1.-1-' A1'-\' @10Ơ @'010' H?' <- ?< '10' C' = <?A1' &?' B&@@? '&-' 1-' <0B?-' ><-'1

' C ' B1' +&?0' ><-A&-0' H' &? 10' @10' A' 10' 10 < ? \' = 11\' B '1 ' I ' C?#@'1 ' I ' =1 >1>1-' 1-1 ' C' > ' + 1' $ #<'@@ '01@&-B' @<' =& >1' I ' 1-? 1' A'B1@@10' I ' B1' -1' @1001\' 1-' <0B?-' ><51 " &-' C' 10 >&'.-<-B1' A1' -=1' .0-A1' 01<@ <' F 10 '-' @1' C ' ' &? ' A1' !1 1 ' <-' A1' -=1' 1.-1' C '

&-0' =1' A' '.?- ' 0'-.?@'0' 'B1B&>' '# ' C' '.@ 0?# 1<A1>' A<@

3 - 1 @'-1A' &-' D1' &@@

ᵍ D1' 1@< 10' <-A' @1 . ' &=' D'0 1<@>' A& . 1< @ ' 1&>C@<'-' D1>ᵍ =& ' D<' D1' 1&C@1' &=' &@ ' D? BDᵍ C? 0?'-.'-' D1' C' ' ?<@ &? '=& ' D1' ' ' D10ᵍ <-A' D ' ' & D1 ' D'-.0ᵍ KD'BD' &=' '.D ' &?.D ᵍ <-A' &=' &@A' '>10' K1 1' K&-' &' C1 <'-' &' D1' 0<>1' C' ' ?<@ &? ᵍ <-A' D<' D1' ?A.10' U'= &@ ' D? BDᵍ D<+'-.' &.-'0<-B1' '-' 0?BD' <?010ᵍ <-A' & D1 ' 1 0&-0' D1 1&= >1AA@'-.' <BB& A'-.' &' D1' <Kᵍ #1' ><@'B'&?0@ ' <-A' ?-A?@ ' =& ' '-0' <?01' '-A' G1Aᵍ '>C '0&-1A@ <-A' # ' 1B?@< ' &K1 ' D& '#@ ' &CC 1001Aᵍ <-A' <@0&' 1-=& B1A' K' D' '&@1-B1' # ' < D0' <-A' . '1+&?0' #@'.< '&-0ᵍ <-A' ><-' & D<" 1<-0' ?-A?@ 'B&>C1@@1A' &'A10'0 ' <-A' B1<01' ? 1 @ '&=' D1' D'-.0' <=&=10<'Aᵍ <.<'-0 ' D1' '#1 '10' <-A' ! <-BD'010' &=' &@ ' D? BD;' F D1 1=& 1' ' '0' <001- 1A ' D< ' <@@ 0?BD' #@'.< '&-0' ><A1' & ' &' #1' ><A1' # ' " ?j 100' ' '&@1-B1ᵍ 0D<@@ #1' &='-&' <@?1'" <-A' <0' &' D&01' D< ' # ' <@'B1' A&' C &B? 1' 0?BD' -A'^>1@ 0ᵍ <-A' &' #1' D1' <>1'-A'= & 0ᵍ <= 1 ' D1' 0<>1@-A'= 110#1' 0&' <BH?' ᵍ 0?BD' &1? 1 ' K?-' 0D<@@ D<+1' <-A' '-B? ' D1' 0<>1' <'-' D<' '0' B&- <'-1A' '-' 8 D1' < ? 1' &=' F 10 >'-0 1 ' D1' 1B&-A9ᵍ &=' D&01' KD'BD' C &B? 1' =<@01' CC1<@0' &' #1' ><A1 ' -A' D1' ?0 'B1Ơ &=' 00'010ᵍ & ' & D1 ' ?0 'B10ᵍ #1=& 1' FD&>' 0?BD' -A'= 110' 0D<@@ #1' <BH?' ᵍ 0D<@@ D<+1' &K1 ' &' '-H?' 1' &=' ?BD' &B? 1 0' <-A' -A' &=0ᵍ <-A' A?@ ' &' C?-'0D' D1>' <BB& A'-.' &' D1' ' " 101

ᵍ ' ''0' <BB& =1=' D< ' < ' KD< ' a-1' D< ' <-' 1 0&-' &=' D1' &@ ' D? BD' #1' A <K-' '-' @1<' '-' D1' 1B?@< ' &? ' =& ' D'0' &K-' ' D10' <a1-ᵍ # ' D1' <>1' &='E&&A0' <a10' <K< ᵍ <-A' D1' KD'BD' '0' 0&' A <K-' '-' @1<' ><a1 D' <-' LB1C '&-ᵍ & ' <@@1A.1 Dᵍ D<' D1' ?#0 <-B1' <-A' ` ?' '\' ' &=' D1' ?0'-100' 'Ơ &-@ ' ?C&-' ' D10' A?1' &=' '.D ' <-A' &=' &00100'&-'=&' D'0' D? BDᵍ & ' &' <-& @'1 ' D'0' 1-1='B1Ć D<' ' '-' 0?BD' <01' D1' .1-1 <@ +1 >1-' 0D<@@ -& ' #1' <a1-' K' D&? ' 0D1K'-.' 0C1B'<@@ ' $ 7' D1' 0<>1' K<0' `D '0/P' < 8BD< 1@'

ᵍ 1B<?01' D<' 1@< 10' A&' B&>C@<'-' D1>01@+10ᵍ D<'<0' K1@@ #1-1='B1A' 1&C@1' &=' &@ ' D? BDᵍ <0' & D1 ᵍ #1'< 10 1A'<-A'A <K-'&?'<0' K1@@ &=' < D1A <@ D? BD10ᵍ <0' &='& D1 ' D? BD10' <-A' D ' ' D? BD < A0ᵍ <-A' 0&>18ᵍ '>1' KD'@10' D1 ' #1' '- 1-A'-.' &' " '+'-1' 1 +'B10ᵍ <-A' <@0&' '-'& D1 ' @<B10ᵍ <@ D&?.D' D1 '#1' #1< '-.' D1' &A ' &=' &? ' & A' 10?0' D '0 ' &' 'Ba' 1 0&-0ᵍ <-A' 0& < 10 1A' <-A'A <K-'&? ᵍ #1' #&?-A'<-A' # &?.D ' &' '0&-' <.<'-0 ' D1' '#1 ' &=' &@ ' D? BD' ;' ' '0' A<'-1Aᵍ D< ' '='<- ' '-'0 1 ' &=' D1' , '-.ᵍ & ' & D1 ᵍ A&' < 10 ' <- ' 1 0&-' &=' &@ ' D? BD' # ' 0?BD' <--1 ᵍ <-A' D1 1&=' #1' A?@ ' B&-+'=@ᵍ D1' 0D<@@ D<+1' >C '0&->1-ᵍ <-A' D1-' #1' <-0&>1A' <' D1' , '-./0' F '@@ᵍ <-A' ><a1' E 11' &' D1' < '10' 0&' < 10 1Aᶜ &+'A1A' <@K< 0ᵍ D ' D1' 0< ' 1&C@1' &=' &@ ' D? BD' 0D<@@ -& ' D&@A' D1>' K' D'-' D1' D? BD10' & ' <- '?< '10' # ' ! <?A' & ' &@@?j 0'&-' '-' <- ' <'>1

-A' D1 1=& 1' F 1' B&> ><-Aᵍ D<' D&?' B<?01' <@@ D1' 0<'A' < ? 10' &' #1' B '1A' <-A' C?#@'0D1Aᵍ <-A'=' >@ ' a1C ' D &?.D' D ' <'@'K'Baᵍ <BB& A'-.' &' D1' !& >' <-A' 1-&? ' D1 1&=ᵍ <-A' D<' A&' -& ' &>' ' '-' <- ' K'01' E'+1-' ?-A1 ' D1' F ' -100' &=' &? ' E 1<' 1<@ D1' !' 0 ' " < ' &=' !1# ?< ᵍ '-' D1' !' 0 ' 1< ' &='&? ' 1'.-

&E!' ! !"2 ' "!' /&"!9!/' .' !'2!'!" ᶠ !"& 2' ".0* .0 ' -*+ -/ '0-/!'" !' 2 1!' !

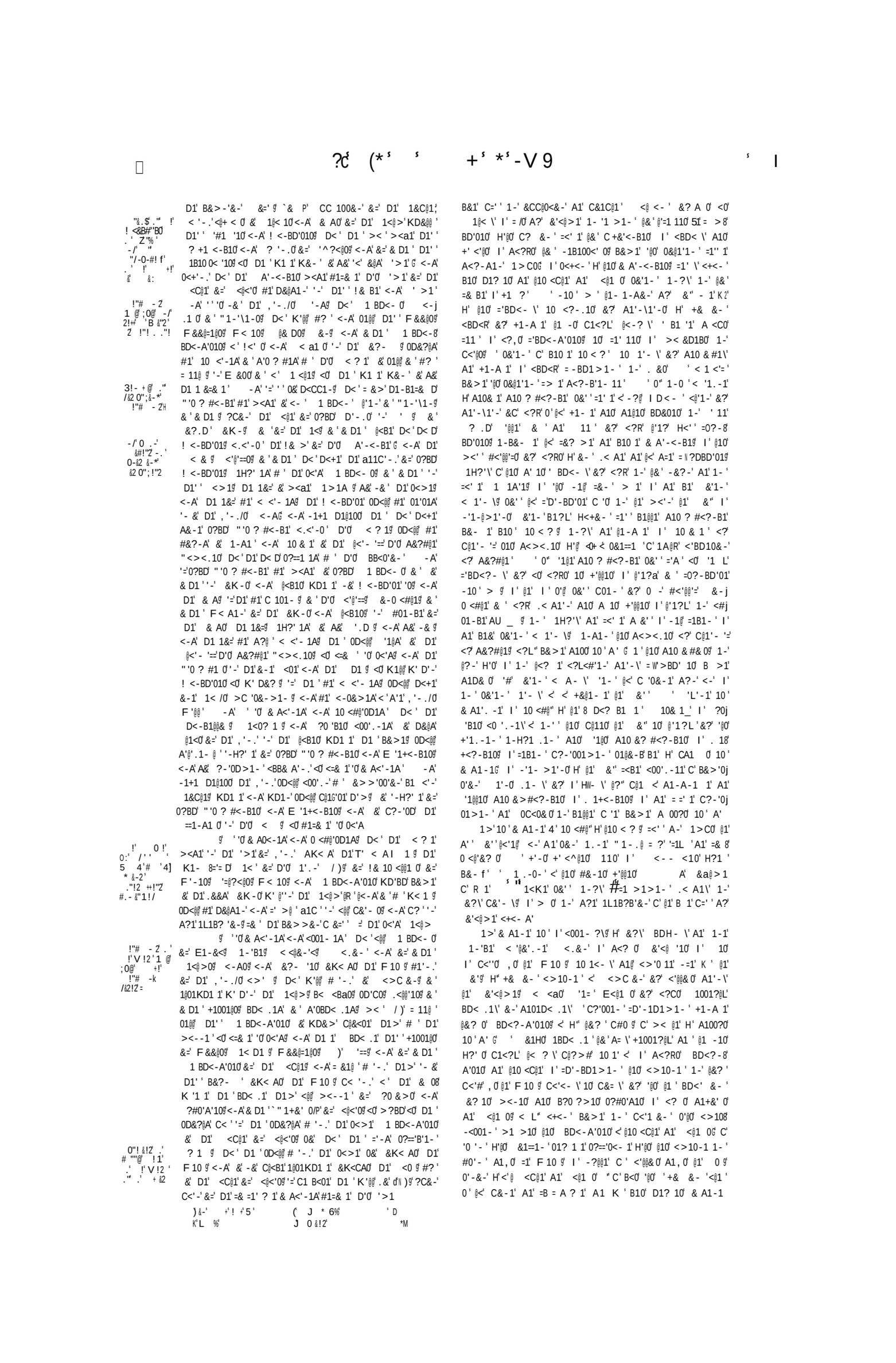
) -"'C $ ' F2.0"#!' (' 1&' &2' 7."/

W

+&#&.0Ƶ -/& +."2' ." 20&-*' &-' <&- ᶠ <0" '2 +ᶠ 20 !'" 2 +2!' !++."Ƶ 0-/!'" ' V!2 1' ' (F ! -?

W -' C . -' ." b. . /2' E!-' 7 @' . -' + &1' . ' @ !2' b!-!" ᶠ '!"1!-' 2 +ᶠ -. ' ; !' "!#!&'!/

W 3!- + @' ." ""!2 &-*' . 3"&!2 2 /0"&-* &'&-! !"'&#!



V 1>ᵍ C ˈ B1# Hˈ C@?0&/0ˈ < = 0ˈ <C0ˈ B1ˈ H'@0ˈ 0&- ˈ < 10 ?\' I ˈ 1 1 '?\' C ˈ M+'B1ˈ A?ˈ &'' 0 ˈ @< ˈ >11 ˈ 1-ˈ A1 ˈ =1-B1ˈ A1ˈ &'<@>1ˈ I ˈ 1- ˈ &- ˈ 1011?\' @&0ˈ .<.10ˈ <CC ˈ 1-<- \' 01-=?1- ˈ D1 0ˈ A?ˈ ADˈ ,+'B1 ˈ 0<-\ᵍ B&- .1ˈ A10ˈ A > ˈ <@Lˈ &?ˈ A1ˈ @& ˈ @'1'@ 1-<- \ᵍ <ˈ .0- ˈ A<>.1ˈ A?ˈ &'' & ˈ 5 ˈ I ˈ A?ˈ &'<@>1ˈ I ˈ < 1 '001>1- ˈ A1ˈ 010ˈ +'<.10ˈ <+<?- A' \' ˈ A1-1ˈ 10 ˈ I ˈ 10 <#@'ᵍ Hˈ &?\' B1'dLˈ < ˈ 0ˈ H#1?Lˈ A10& 1ˈ =1 &- ˈ 1-ˈ 1@@1ˈ >< 1ᵍ I ˈ BA<ˈ &+1\' ˈ C+1\' ˈ <#@1?'1 ˈ A1+<< ˈ @1ˈ A>ˈ <ᵍ &?ˈ 0&-ˈ @'1?j 1-<- ᵍ 0&'1- ˈ 1-?\' A1ˈ 10 & 1 ˈ <ˈ -=1ˈ = ˈ @1ˈ &'' @1ˈ A&?#@1ˈ A1ˈ B1ˈ H'@0ˈ <, &- ˈ C '0ˈ C ˈ@& ˈ .<.102ˈ I ˈ -'1- >1'-0ˈ 1@1- ˈ @<ˈ C '0&-1ˈ A?-ˈ <-ˈ 0<-\ˈ 1- ˈ 10 1ˈ A1@'C1\' Cˈ >< '''ᵍ '01ˈ #<'@'1ˈ &?ˈ Cˈ <? 1ˈ +&'1ˈ ˈ @1ˈ &'' +&1ˈ I ˈ B&><-A1ˈ <ˈ #?\' '0B&- \' <ˈ 0ˈ I ˈ <'@@'=0ˈ A1'-0ˈ =J-BD'010ˈ I ˈ A1D& 0ᵍ Hˈ <ˈ @<ˈ RA='B<B'&-ˈ A10ˈ A' \' >ˈ <@Lˈ &'ᵍ @& ˈ '1? 1-<- \' Cˈ @& ˈ 10ˈ 1- ˈ <=I ˈ 0ˈ 10>&'.ᵍ -<- 10ˈ @<ˈ A'@1ˈ C&+1ˈ =<B1- ˈ <- &0 ˈ 0<-\' < 1-A 1ˈ <? 1ˈ - <-A1>1# ˈ A1ˈ &'' - 1ˈ= ˈ A 1ˈ I ˈ < <BDˈ &?\' B1?Lˈ < '<0ˈ =? '=0ˈ Cˈ@& ˈ B& Cˈ A1'-\' @& ˈ #<'@@'10ˈ A1'-\' =3-ᵍ BD'010ˈ I ˈ A1D& 0ˈ I ˈ@1ˈ >1 1ˈ1-ˈ C '0&-1ˈ '@@&1H10ˈ <ˈ A1ᵍ > 1 ˈ 1-ˈ #&-ˈ I ˈ01? 1ˈ .< A1ˈ <-Hˈ '@0ˈ< &- ˈ='?ˈ. 11ˈ <?ˈ &'' B&>1ˈ A10?0ˈ 10ˈ A'ˈ I ˈ 1- ˈ 1ˈ ˈ 0C1B'<@ ˈ><-A1>1- ˈ A?ˈ &'' - 1ˈ ˈA1ˈ @& ˈA1@ˈ <-11ˈ ˈ<? '1@ C?-'00<-1- ˈ 0&' ˈ =<' ˈ A10ˈ , .1<- \' A< >10ˈ <'0=0ˈ A10ˈ -'1=1ˈ I ˈ &?\' <?RO'ˈ Hˈ , &- ˈ< 1'- \' Cˈ 1-H?1 1ˈ A1+<- ˈ <A>' <@@ &?ˈ 0#-ˈ '1? 1-<- ˈ<+<- A' ˈ H'@0ˈ 01- ˈ@'1- \' C '0ˈ A10ˈ A' \' <ˈ ˈ''0ˈ C ˈ @& ˈ0&1= 1 ˈ <@1 ˈ <ˈ@& ˈ@< .1ˈ D& 0ˈ A1@ M 'B1ˈ < <- ᵍ A' ᵍ <CO' B1&ˈ H 0ˈ A<- ˈ 10 1ˈ < 10 ?\' C ˈ >10>1ˈ@1ˈ +'B1 1>ˈ A1ˈ &- 1+&? 0ˈ A1ˈ =1?Lˈ -&+1@0ˈ I ˈ &?- &? 0ˈ A10ˈ D& '#@10ˈ I ˈ =1?L10ˈ >1-0&-.10ˈ A10ˈ 1@< \' "?10ˈ &?- 10ˈ < &-0ˈ I ˈ <?RO' -&#@10ˈ I ˈ . - \' A1ˈ &'<@>1ᵍ 1 ˈ <?L'- ˈ A1@ D<?-B 1 ˈ 10& 1 ˈ @1 Bˈ A1ˈ '+'1ˈ 1<@ 1-10BD<@ A1@ &0 '1@ - 1ˈ 1ˈ @1ˈ &'' ?0 'B10ˈ A1@ ?-ˈ <-aˈ I ˈ A1@ <?Rˈ I ˈ A<?RO' .0- \' ==RO' A?ˈ &'<@>1ˈ A hˈ BD&010ˈ Hˈ Cˈ @1 ˈ A' \' 1@< \' = 0 I ˈ E=@'RO' #1ˈ =& 1- ˈ ?-H10ˈ C@1\' &?BD1\' &?ˈ C1 01\' 1-ˈ .0- ˈ 10B@<?-A 1ˈA10ˈ 1@< \' 0ˈ &#@10ˈ I ˈ ==RO' <+<- A' \' C&- ˈ A1#< \' I ˈ A1 B& A10ˈ C &'1- ˈ 0&? A 1ˈ C1- 1ˈ @1 ˈ A' \' !ˈ &?ˈ C1- 1ˈ 10ˈ = 0ˈ I ˈ &10ˈ Hˈ "'1?ˈ -1ˈ +1?@@1ˈ I ˈ A&- ˈ . -ˈ C'ᵍ I ˈ >10BD'1= C? &' ˈ <+1-' ˈ <ˈ &?ˈ 1ˈ &'<@>1ˈ I ˈ @1.1>1- ˈ 0?#RO'&-ˈ I ˈ A10 ?BB'&-ˈ A1@ &'<@>1ˈ <+<- A' ᵍ 0" A?1ˈ 1>1A1ˈ - ˈ =?'001ˈ > 0G 10ˈ A1=1-A?\' 10 &' 18ᵍ - 1- ˈ I ˈ 0ˈ . '1= C1'-1ˈ C ˈ 10BD?1ˈ @10ˈ A<>.10ˈ I ˈ C'@0ˈ < <- A' \ᵍ Hˈ A10& 1ˈ -?@ 0&' ˈ 0" D< A" A1ˈ B&- &+1ˈA' 1ˈ &?ˈ B&?- 1 ˈ <0B?-1ˈ =<?L1ˈ -&+1@@1ˈ >1-0&-.1ˈ &?ˈ <?Rˈ '1@ =<?L1ˈ BD&01ˈ A10ˈ 1@< \' 0ˈ I ˈ@10ˈ <?RO' A10?0ˈ A' \' A&- ˈ A10B& A1 &?ˈ 10B@<?-A 1ˈ <?B?-1ˈ C?'001ˈ 0&? A 1ˈ A1'-\' >10>1ˈ@1ˈ &'<@>1G 1 ˈ Hˈ @1ˈ = <ˈ ' ˈ I ˈ 1-B&? .1ˈ @<ˈ C<'-1ˈ <? 1ˈ =&' \' 1- ˈ & A1-1\' Cˈ 10 < ? ˈ A1ˈ F 10 ˈ C '>1 ˈ Hˈ +&1 ˈ H'@ 0&' ˈ C '0ˈ I ˈ 1>C '0&-1\' 1H10'<ˈ <- ˈ H'@ 1' ˈ &+1\' B1@@? ˈ A&- ˈ @<ˈ C&@1' , <ˈ >&1+1\ 1>ᵍ C ˈ B1&ˈ Hˈ 9-=1ˈ ˈ@1ˈ & ˈ<A 1- 1-A?\' 0'#'1-ˈ Cˈ >&1@ \' A10ˈ C@A- \' <ˈ @? ˈ =<' \' B&>1ˈ C'@<ˈ -& & ˈ 11ˈ A1ˈ @<ˈ BD&01ˈ H'0'#'1-ˈ C@?0& 0ˈ A10ˈ @'1.10ˈ -=1ˈ ˈ@1ˈ &'' 1-ˈ A'R010ˈ C '10ˈ A1@ &'<@>1ˈ B&>1ˈ <?L'- ˈ @10ˈ .1- \' A1ˈ E<@1 0ˈ 1-ˈ @1ˈ &?- 11ˈ A1ˈ 1 1=& Aˈ I ˈ@10ˈ .1- \' A1ˈ &?-ᵍ 11ˈ A1ˈ 10 =ˈ 1-ˈ @10ˈ &?- 110ˈ d&'-<- \' <ˈ 10 10D' 1ˈ <?B?-0ˈ A1ˈ 1?Lˈ B@<'>< - ˈ <+&' ˈ A &' ˈ <0ˈ A'R010ˈ R 10ˈ 1- \' 5= <?RO' C&00100'&-0ˈ I ˈ<?B?-0ˈ 10C'<- 0ˈ "<>10ˈ I

5 ˈ 1B<?01ˈ D< ˈ A'+1 0ˈ < '-1 0ᵍ <= 1 ˈ D< ˈ D1 ˈ #1ˈ< 10 1Aˈ<-Aˈ 1 <'-1Aˈ=& ˈ D1ˈ , '- ./0ˈ 1 +'B1ˈ ?C&-ˈ D1ˈ 1<ˈ -ˈ A 1-B1ˈ&=ˈ D1ˈ 1<@>ᵍ <-Aˈ D1 1&=ˈ D<+1ˈ 1B1'+1Aˈ D1' ˈ F <.10ˈ C1 <'-'-.ᵍ A&ˈ=@11ˈ &? ˈ &=ˈ D1ˈ 0<'Aˈ 1 +'B1ˈ K' D&? ˈ 'B1-B1ˈ&=ˈ D1ˈ A>ˈ <@0ᵍ& ˈ&=ˈ D1' ˈ '1? 1-<- 0ᵍ &' D1ˈ . 1< ˈ A<>.1ˈ&=ˈ D1ˈ , '- .ˈ <-Aˈ D'0ˈ 1<@>ᵍ <-Aˈ D'-A1 <-11ˈ &=ˈ D1ˈ 0<'Aˈ +& <.10;ˈ '0ˈ & A<'-1Aˈ <-Aˈ 0 <#@'0D1Aᵍ D< ˈ <@@ D&01ˈ < '-1 0ᵍ KD'BDˈ= &>ˈ D1-B1j =& Dˈ 0D<@@ A&ˈ '-ˈ0?BDˈ >< - -1 ᵍ <-Aˈ D< ˈ ?@ ˈ=&?-Aˈ <-Aˈ C &+1Aˈ #1=& 1ˈ D1ˈ A>ˈ <@ᵍ & ˈD'0ˈ '1? 1-<- ᵍ 0D<@@ #1ˈ D&@A1-ˈ &ˈ 10 & 1ˈ &ˈ &? ˈ0<'Aˈ &+1 1'.-ˈ & Aˈ D1ˈ , '- .ˈ D1ˈ " &?#@1ˈ&=ˈ D< ˈ D1 ˈD<+1ˈ <a1-ˈ=& ˈ D1'' ˈ F <.10G <-Aˈ -1+1 D1@100ˈ0D<@@ D<+1ˈ -1ˈ 1< /0ˈ >C '0&->1- ᵍ K' Dj &? ˈ #<- .ˈ A1@'+1 1Aˈ # ˈ <'-C '\1ᵍ <'@ᵍ & ˈ # ˈ& D1 ˈ K< ˈ -Aˈ D1ˈ , '- .ˈ K'@@ <-Aˈ B >><-A1 Dˈ &'<@@ D1 '=0ᵍ < & 0ᵍ <-Aˈ <'@'==0ᵍ K' D'-ˈ ! <-BD'010ˈ <-Aˈ K' D&? ᵍ D< ˈ <ˈ D1ˈ 1 '=ˈB< '&-ˈ &=ˈ D1ˈ 0<'Aˈ A>ˈ <@0ᵍ & ˈ D& ˈ '1? 1-<- 0ᵍ # ˈ D1'ˈ 1 1 0ˈ D1 1&=ˈ &'#1ˈ><A1ᵍ 10 '= j '-.ˈ D1ˈ <'Aˈ &&=ᵍ `0D<@@ '-B&- '-1- ᵍ K' D&?ˈ < '-.ᵍ ><a1ˈ<-& D1 ˈ &>> -A>1-ˈ&=ˈ D1ˈ, '-.'&?ˈ &+1 1'.-ˈ & Aᵍ &ˈ <a1ˈ<-Aˈ< <BDˈ <@@ˈ ˈ =?.'ˈ'+1ˈ <ˈ-1 0ˈ'# ˈ D1'=ˈ &A ᵍ K' D'-ˈ D1'ˈ <'@'K'Ba0ᵍ K' D'-ˈ ! <-BD'010ˈ <-Aˈ K' D&? ᵍ <-Aˈ C? ˈ D1>ˈ'-ˈ '0&-ᵍ D1 1ˈ &'<#'A1ˈ'-ˈ .&&Aˈ <-Aˈ 0? 1ˈ a11C'-.ᵍ '@@ D1 ˈ D<+1ˈ><A1ˈ E 11ˈ &ˈ D1ˈ , '- .ˈ <0ˈ <=& 1ˈ '0ˈ 0<'Aᵍ <-Aˈ D1 1&=ˈ D<+1ˈ <ˈ 0C1B'<@ & ?- >A>1- ˈ&=ˈ&? ˈ &+1 1' ˈ & Aˈ D1ˈ , '- .ˈ&=ˈ D1'' "1@'+1 <-B1 ˈ -Aˈ @'a1ˈ ?-'0D>1- 0ˈ 0D<@@ #1ˈ><A1ˈ &=ˈ 1 1<- 0ˈ&=ˈ >0ᵍ <0 1 0ˈ&=ˈ D'C0ᵍ <-Aˈ<@@ & D1 ᵍ D< ˈ 0D<@@ #1ˈ< <> 1Aᵍ # ˈ -H?' ' #1=& 1ˈ D1ˈ A>ˈ <@@ & ˈ D'0ˈ '1? 1-<- ˈ <=& 10<'Aᵍ D< ˈ D1 ˈD<+1ˈ<- ˈ D'-.ˈ <a1-ˈ &=ˈ D1ˈ0<'Aˈ < '-1 0ᵍ =& ˈ &ˈ 0?==1 ˈ D1>ˈ &ˈ .&ˈ < ˈ @< .1ˈ + &?ˈ&=ˈ D1ˈ 0<'Aˈ 1 +'B1ᵍ <= 1 ˈ D< ˈ D1 ˈ D<+1ˈ #11-ˈ < j 10 1Aˈ=& ˈ D1ˈ0<>1ˈ 1 +'B18

ᵍ =ˈ "1+'0& 0ˈ &=ˈ='A01ˈ 1K0ᵍ <-Aˈ)ˈ &=ˈ D& 8ˈ "ˈ@1ˈ<-Aˈ= '@01ˈ 10ᵍ &=ˈ 1@< 10ᵍ "?a10ᵍ < @0ᵍ < &-0ᵍ <-Aˈ& D1 ˈ &#@10ˈ<-Aˈ E 1< ˈ 1-ˈ &=ˈ D1ˈ 1<@>ᵍ <-Aˈ <@0&ˈ &=ˈ D1ˈ D<-B1@@& ᵍ 1<0? 1 ᵍ @1 aˈ&=ˈ D1ˈ '+ ˈ 1<@ᵍ 1K< Aˈ&=ˈ D1ˈ, '- ./0ˈ &?01ᵍ ?0 'B10ˈ&=ˈ D1ˈ -1ˈ 1-BDˈ& ˈ &=ˈ D1ˈ& D1 ᵍ <-Aˈ&=ˈ& D1 ˈE 1< ˈ ='B1 0ˈ&=ˈ D1ˈ 1<@>ᵍ &=ˈ D'-.0ˈKD'BDˈ# ˈ D1ˈ0<'Aˈ 1@< 10ᵍ & A0ᵍ &#@10ˈ<-Aˈ ='B1 0ˈ<=& 10<'Aᵍ K1 1ˈ-1+1 '0C&a1-ᵍ A&-1ᵍ -&=ˈ D&?.D ᵍ '-'. 1< ˈ @<-A1 ˈ&=ˈ D1ˈ0<'Aˈ 1@< 10ᵍ & A0ᵍ &#@10ᵍ <-Aˈ ='B1 0ᵍ KD1 1# ˈ "1#< 10ˈ <-Aˈ "'0B& Aˈ >'.D ˈ < '01ˈ #<K'L ˈ D1ˈ 0<'Aˈ & A0ᵍ & ˈ #1 K11-ˈ D1ˈ & A0ˈ <-Aˈ D1ˈ &>>&-0ᵍ KD'BDˈ E&A' =& #'Aᵍ <-Aˈ KD1 1&=ˈ. 1< ˈ 1 'ᵍ <-Aˈ '0BD 1=ˈ>'.D ˈ B&>1ˈ &'<@@ D1ˈ 1<@>ᵍ <-Aˈ 8H?'Baˈ ?#+1 '&-ˈ <-Aˈ "10 ?<'&-ˈ &=ˈ D1ˈ 0<'Aˈ 1<@>ᵍ '=ˈ A?1ˈ 1>1A ˈ #1ˈ -& ˈ C &+'A1A;ˈ ˈ'0 0 <' @ ˈA1=1-A1Aˈ?C&-'. '1+&?0ˈ <'-ᵍ =& ˈ &ˈ10BD1K' D1ˈ 0<'Aˈ " -<.10ˈ <-Aˈ 1 '@0ᵍ D< ˈ = &>ˈ D1-B1=& Dˈ -&-1ˈ #1ˈ 0&ˈ D< A ˈ &ˈ A1+'01ᵍ 0C1<aᵍ & ˈ &ˈ 1@@ <- ˈ =1@01ˈ 1K0ᵍ 10ᵍ & ˈ & D1 ˈ 0?BDˈ =<@01ˈ D'-.0ᵍ &=ˈ 1@< 10ᵍ & A0ᵍ <-Aˈ&=ˈ1 D1 ˈ <=& 10<'Aᵍ KD1 1&=ˈ "'0 & Aˈ & ˈ<- ˈ @<-A1 ˈ -<'.D ˈ '01ˈ K' D'-ˈ D1ˈ 0<>1ˈ 1<@>G <-Aˈ D1ˈ D< ˈ A& Dˈ D1ˈ 0<>1ˈ 0D<@@ '-B? ˈ<-Aˈ D<+1ˈ D1ˈ <'-ˈ <-j & D1 ˈ '>1ˈ & A<'-1Aˈ D1 1&=ˈ # ˈ D1ˈ <? 1ˈ &=ˈ F 10 j >'-0 1 ˈ D1ˈ ! ' 0ᵍ KD'BDˈ K'@@ᵍ D< ˈ D1ˈ#1ˈ <a1-ˈ<-Aˈ'>ᵍ C '0&-1Aˈ '@@ D1ˈD<+1ˈ=&?-Aˈ D'>ˈ `&=ˈ KD&>ˈ D1ˈ F & Aˈ K<0ˈ >& 1A 04

ᵍ 1B<?01ˈ D< ˈ&? ˈ &+1 '.-ˈ & Aˈ D1ˈ , '- .ˈ D< Dˈ C1 B<+1Aᵍ <0ˈ K1@@ # ˈ >< - ˈ &>C@<'- 0ˈ ><A1ˈ &ˈ D'>ᵍ <0ˈ # ' D1ˈ C1 =1B ˈ , -&K@1A.1ˈ&=ˈ D1ˈ D'- .ᵍ D< ˈ <0ˈK1@@ A'+1 0ˈ &=ˈD'0ˈ '1.1ˈ 1&C@1ˈ'-ˈ0?-A ˈ < 0ˈ&=ˈ D1ˈ 1<@>ᵍ <0ˈ<@0&ˈ D1ˈ 1&C@1ˈ &=ˈ F<@10ᵍ '-ˈ D1ˈ &?- '&=ˈ D10 1 ᵍ 1 1=& Aᵍ <-Aˈ D1ˈ 1&C@1ˈ &=ˈ D1ˈ &?- '&=ˈ D10 1 ᵍ K' Dˈ D1ˈ &?- '10ˈ &'-'-.' &ˈ D10 1 0D' 1ᵍ 0&>1'&=ˈ D1>' B@<'>'-.ˈ &ˈ D<+1ˈ '.D ˈ &ˈ A'+1 0ˈ <-A0ᵍ 1-1>1- 0ᵍ <-Aˈ & D1 ˈ &0010 '&-0ᵍ <-Aˈ 0&>1ˈ 10C '-.ˈ F &>1-ˈ <-A

. ˈ **ˈ $ ˈ " $"'0 1'$ ˈ '$ ˈ $ % '$ ˈ $" 'L$ %' 'E 1+' " ˈ * ˈ D ˈ %' %' **ˈ ")ˈN -$ ˈ <7 &# ˈ7 2ˈ !ˈ &"2ˈ 0 .'" . !ˈ +!ˈ ˈ 'O 'ˈ&ˈ'4ˈJ%0 Lˈ -ˈ4%=

"&-!"2ᵍ +! '&-*ˈ !ˈ !"'&#!'2 +ᵍ .'' !ˈ&' .0;+!ˈ V *!2ˈ -/ˈ ;!ˈ1 "&] &!/ˈ -'!Aˈ!'"

!ˈ+&E!ˈ 30-ˈ2 1!-ˈ 0 .ˈ .2!ˈ E&-*ˈ -@ˈ &-*ˈ .'+!ˈ ! 1ˈ*.ˈ ˈ + "*!

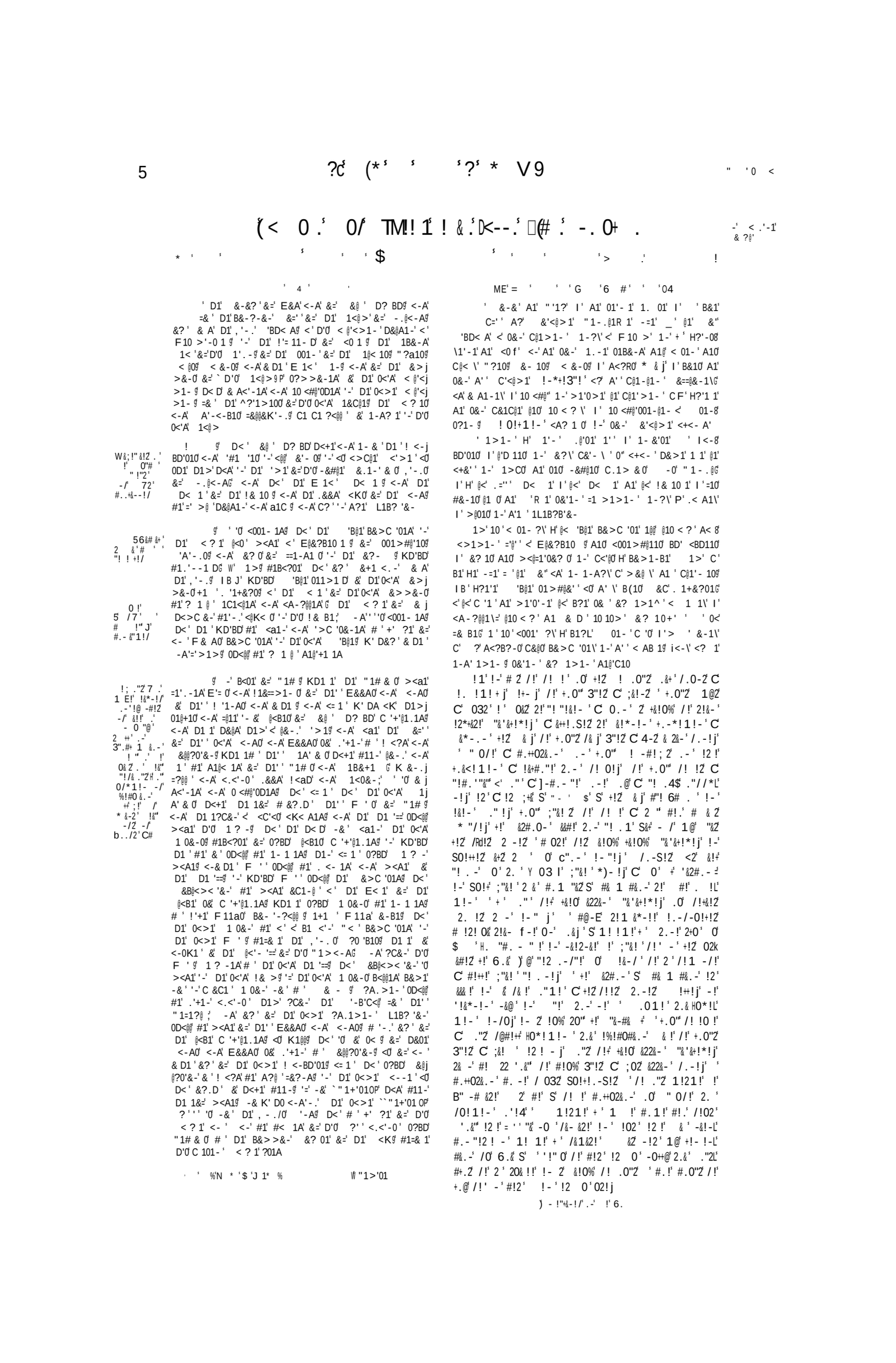
!ˈ !- + @ .'" <ˈ&-*ˈ 2+ -/!".0ᵍ @!2ᵍ.ˈ !ˈ b"!ˈ ˈ !"'ˈ .ˈ !ˈ6! +1

ˈ 0-/"@ 6.0ᵍ -/ˈ 0-+ 7 &/ˈ .- !/!" ##!2 "!## !/

(< 0 . 0/ TM!1 ! & .D<--. (# . -. 0+ .

* $ > . !

ME = G '6 # '04



&=' D1' 0<>1' @& D' 0&' 01<@1A' '-' " 1B1' ' &=' D1' 1&C@1ℊ &.1 D1 ' K' D' D'Ơ 0<'A' ==' B1Ć <-A' -1+1 D1@100ℊ =& ' D1' 0<'A' !<@0' ' D1' 0D<@@ D<+1' -1' 1< /Ơ >C '0&- >1- ℊ <-A' D1-' #1' <-0& >1A' < ' D1' , '- ./Ơ F '@@;' -A' D'Ơ < ? 1' 0D<@@ #1. '-' & D&@A' @<B1' < ' D1' < '+' ' &=' <'- ' &D-' <C '0 ' -1L ' B& > '- .ℊ <-A' -& ' #1=& 1

ℊ 1B<?01' D<' &? ' & A' D1' , '- .' D< D' C1 j B1'+1Aℊ <Ơ K1@@ # ' D1' &>C@<'- Ơ &=' D'Ơ =<' D=?@ @'1. 1' 1&C@1ℊ `<-A' # ' D1' ' @<>&? ' # /P' A'+1 Ơ 1 ' '&-Ơ D1 1&=' A1@'+1 1A' '-' A'+1 Ơ < @'<>1- Ơ #1=& 1' D'Ơ ' >1ℊ <Ơ & D1 K'01' # ' D1' C1 =1= ' , -&K@1A. 1' <-A' LC1 '1- B1' &=' D1' " 11Aℊ D&K' D1' D? BD1Ơ < D1A <@ <-A' &@@1. '<@ℊ ##1 Ơ <-A' '& '1Ơ <-A' & D1 ' 1-1='B1Ơ &=' D'Ơ 1<@>ℊ KD'BD' K1 1' @< 1' =&?-A1-ℊ <-A' 'BD@ ' 1-A&K1A' # ' D'Ơ &#@1' &.1-' & 0ℊ '-' KD'BD' A'+1 Ơ " '. -' '10ℊ ='B10ℊ < 0&-<.10ℊ D<-&- '10ℊ 1#1-A0ℊ <-A' & D1 ' 1-1='B10ℊ K1 1' 0&@1 > -@ ' <-A' A1+&? @ ' & A<' -1A' <-A' 10 <#@'0D1A' &=' D1' 001- ' &=' D1' =& 10<'A' &.1-' & Ơ &=' D1' , '- .ℊ <-A' &=' & D1 ' D1' ' &##@1' ! &?-A1 0ℊ KD'BD' A'A' .'+1' & D1' 0<'A' <0 & Ơ &=' D1' 0<>1' D? BD10ℊ ##1 0ℊ '& '10ℊ <-A' &=' & D1 ' . 1<' @<B10ℊ D1' A+&K0&-Ơ &=' D1' 0<>1' 1-1='B10ℊ &' D1' - 1-' D<' D1' 0<>1' 1-1='B10Ơ 0D&?@A' #1' .'+1-' &' D&-10 ' <-A' >11 ' 1 0&-Ơ &=' D1' 1<@>ℊ &' 01 +1' <-A' D&-&? ' E&A' A'@'.1- @ ℊ <-A' <@0&' &' a11C' &0C' <@' ℊ <-A' &' '-=& >' <-A' 1<BD' D1' 1&C@1ℊ <-A' &' A&' & D1 ' K& D ' D'-.Ơ C1 j <'-'-.' &' D1' ? 1' &=' &?@0ℊ <= 1 ' D1' 0 < 1' <-A' ^?<@' ' &=' D1' 0<'A' 1-1='B10;' -A' 0& K<Ơ ' ' A&-1' '-' <@@ '>10Ơ C<0 ' <= 1 ' D1' !&?-A< '&-' &=' D1' 0<>1ℊ '@@ -&K' &=' @< 1ℊ D<' # ' D1' -=& >< '&-0ℊ -0 '.< '&-Ơ <-A' &B? 1>1- Ơ &=' 0&>1' &=' D1' , '- ./Ơ @'1.1' 1&C@1ℊ D1' 0<>1' 1-1='B1Ơ D<+1' #11-' .'+1-ℊ <.<'-0 ' D1' F '@@' &=' D1' !&?-A1 0ℊ &' A'+1 Ơ 1&C@1' &=' <-& D1 ' <-.?<.1ℊ <-A' &=' 0 <-.1' <-A0' <-A' < '&-0ℊ <-A' 0&>1 '>1' &' D1' ? 1 ' -1>'10Ơ &=' D1' , '- .' <-A' &=' D'Ơ 1<@>ℊ KD'BD' -1+1 ' ><A1' 10'A1-B1' '-' D1' 0<>1ℊ -& ' B<--& ℊ >< ' -& ℊ -& ' K'@@ -&' '-' 0?BD' K'01' #1<' <-A' C1 =& >' D1' D< .1Ơ &=' D1' 0<>1' 1-1='B10ℊ <Ơ '-' D1< '-.' &-=10j 0'&-0ℊ 1<BD'-.ℊ -& ' 1<BD'-.' D1' 1&C@1ℊ a11C'-.' &0C' <@' ℊ -& '<BB&>C@'0D'-.' D1' & D1 ' D'-.Ơ -1B100< ' &' D1' E&+1 -<-B1' &=' D1' 0<>1' 1-1='B10Ć #? ' &-@ ' D1 1&=' `D<+1/P' <-A' <a1' D1' >&@?>1- Ơ <-A' 1>j C& <@ &=' 0ℊ -& ' D<+'-.' 1.< A' &' D1' C' ' ?<@ ? 1ℊ -& ' &' & D1 ' D< .1Ơ &' D1' 0<>1' 1-1='B1Ơ C1 <'-'-.' & ' #1@&-.'-.'\@ #? ' ><-'=10 @ ' 0?==1 ' D1' -&#@1' ?'@A'-.Ơ '-' &@A' '>10Ơ D1 1' ><A1ℊ KD1-' D1' 0<>1' 1-1='B1Ơ K1 1' &BB?C'1A' # ' -.@'0D>1-ℊ KD&@@ ' &' =<@@ &' "1B< ℊ KD1 1# ' D1' " '+'-1' 1 +'B1' 'Ơ . 1< @ ' >'-'0D1Aℊ D1' ? 1' &=' &?@Ơ -1.@1=@1A' <-A' @1=ℊ D1' @1 . ' 1-=11#@1Aℊ D1' 1<0? 1' &=' D1' 0<'A' 1<@>' B< '1A' &' D1' <-A0' &=' @'1-0ℊ <-A'<@@ D1' 0 < 1' &=' &@ ' D? BD'# &?.D ' &' @100Ơ 1+1 1-B1' D<-' #1=& 1' ' ' K<Ơ K&- ' &' # 1Ć -A' D&?.D' D<' '-' D1' '>1' &=' D1' 0<'A' E <-A=' ' D1 ' B1 <'-' A'j -<-B10ℊ < ? 10ℊ <-A' &>C&0' '&-Ơ K1 1' ><A1' <-A' <==' >1Aℊ KD&@@ ' &' C? ' &? ℊ & ' <' @1<0 ' &' 10 <'-' D1' 0<'A' '0BD'1=Ơ '-' D'Ơ 1D<@=Ć -1+1 D1@100Ơ D1' 0<'A' @'1-0ℊ -& ' D<+'-.' 1.< A' &' D1' 0<>1ℊ A&' -& ' 1= <'-' &' <a1' <-A' 1B1'+1' 0?BD' 1-1='B1Ơ K' D'-' D1' 0<'A' 1<@>Ć #? ' # ' D1' &>=& ℊ 'Aℊ <-A' . 1<' ?BB&? ' KD'BD' D1 ' D<+1' D<A' &=' D1' , '- ./Ơ @'1.1' 1&C@1ℊ D<' #1' D1' ' !1 >& 0ℊ &B? < & 0ℊ <-A' ?>'10Ơ '-' D'Ơ 1D<@=' `<-A/P' '-' 1+1 ' < ' &=' D1' 0<'A' 1<@>ℊ A& 1-=& B1' D1>01@+10Ơ = &>' " < ' &' " < ' >& 1' <-A' >& 1' ` & <BB1C '0P' D1' . 1< 10 ' " '. -' '1Ơ <-A' 1-1='B1Ơ K' D'-' D1' 0<'A' 1<@>ℊ <-A' # 'A'+1 Ơ B<? 1@&?Ơ <--1 0ℊ >?BD' C 1j ?A'B'<@ &' D1' 0<>1' 1<@>' '=' D<' K1 1' 0?==1 1Aℊ KD1 1# ' D1' 0<'A' '0BD'1=Ơ A&' A<'@ ' /)' '-B 1<01ℊ <-A' >?BD' >& 1' K'@@ '-B 1<01ℊ '=' A?1' 1>1A ' #1' -& ' D1'0&&-1 'C &+'A1A;

) %'M ' ' M $ '$ ' ' $- -'M ' O ,
) '
Ó &' <a1' <-A'D<+1' " 'G '
J '.D '&? <.1&?0@ ' " 'G '

A1' >10>1' @<' A <C' '1@1>1- ' 1-01<@1\' 1-' A1B1' 1' A1@ C&1C@1' 1-01>#@1>1- ' &+10B)ℊ 0&-' &=='B1' I ' <A1>1'-Ơ C ' @<' =1?L'-1' <+<- A' 1' 1' ' @<' C '0&-1ℊ I ' 1- ' 0&' ' 1'- ' <' @<' +&@?- 11' @1' &';' I ' B&>1-B1' B10 1' & A'-<-B1' <' 1-' ' @'1?' <' @<' < '+' 11' 1'- ' &D<-' @1' <C '0 1gʹ C0BD1'-' +1-<- ℊ I ' -1> 1' A<+<-

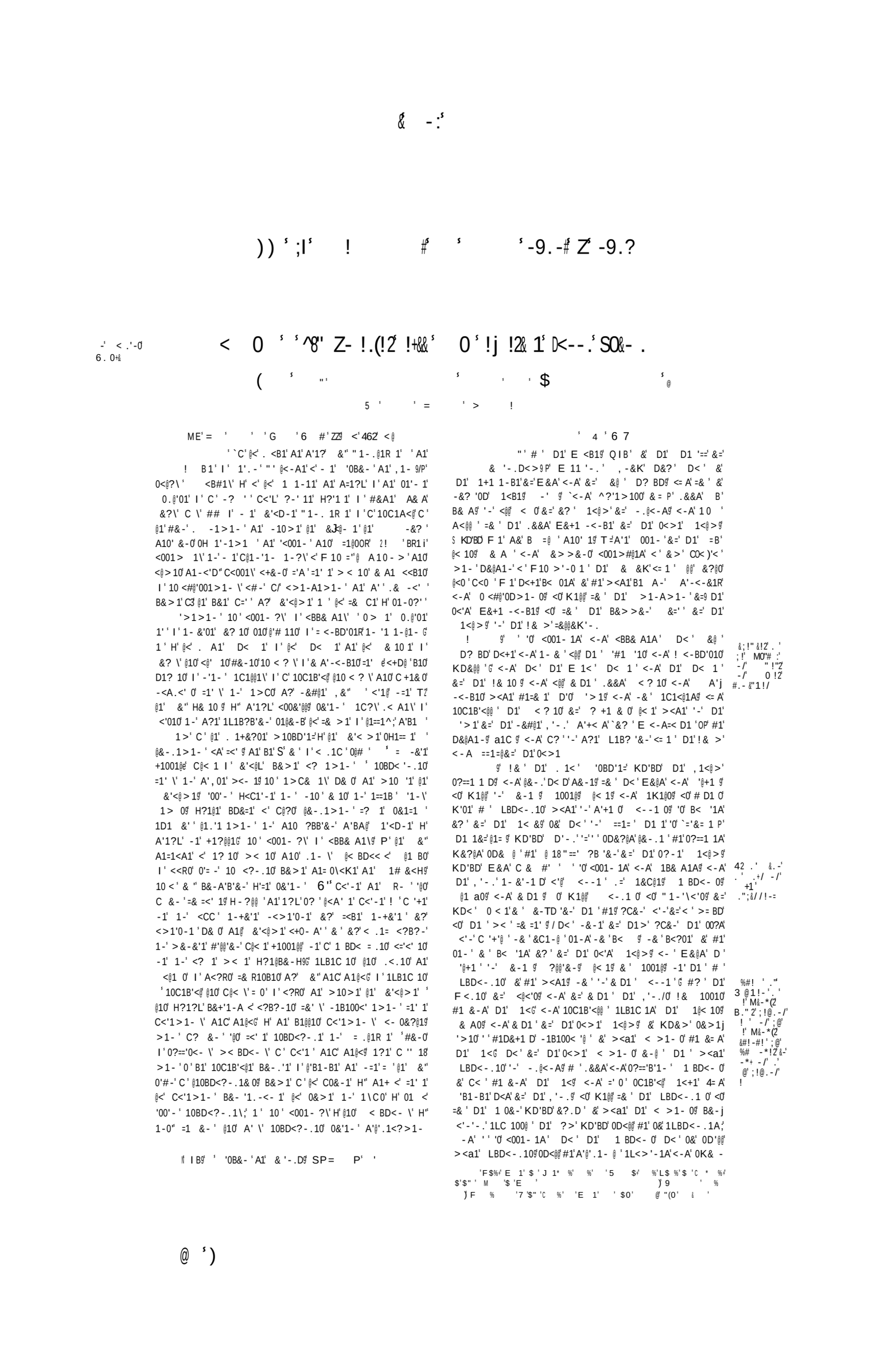
1>ʾ C B1' Hʹ @1' &" -=1' _ ' <A' 1- 1-A?\' 0'#'1-' C' @1Ơ C@1'- 10' A1' 01\' =&'<@L' @'.1Ơ I ' C' @1' B@<>&? ' A1' 0&-' C&1C@1' C' @&? Ơ A'+001Ơ C1 'B'&-Ơ 1- ' #<'@@1\' <+<- ' 1-' A', 01Ơ C@1>1- \' A1+<- ' B10 1' D1? 1' B&>1' <? 1>1- ' C' @<' -& & ' 11' A1' @<' BD&01' I ' 1LC'1-B1' A1' =<' ' B&>1- ' @1Ơ 10.@'01Ơ < D1A <@L' &@@1.'<@L' ##1'1'10' '& '10' I ' <?RƠ =1-='B1Ơ A1' 0&-' &'<@>1ℊ H'=? 1- ' <A'Ơ =&?-A?\' I ' 'BD1>1- ' A&K1\' C' 01\' -&#@1Ơ C.1-' &? Ơ 1-' @1Ơ H?1@@1Ơ A'101Ơ A'.-' 10' &=='B1Ơ C0&-'10' D<-&-'10' C#1-A1Ơ I ' <?RƠ #-='B1Ơ 10 &'1-' 0&@1>C-1>1-' I ' A1@ +&? 1>1-' & A1'-1\' I ' 10 <#@'\@ A1@ <00< ' A1Ơ A' \' C.1=' &? Ơ @1' &" I ' A<? Ơ @&? Ơ -&#@1Ơ =&-A&? Ơ H" A&-1 1-' <Ơ C<0 &? Ơ A1' >10>1Ơ @1Ơ 0.@'01Ơ ##1'0' '& '1Ơ I ' A<? Ơ .= \' @'1?L' <+<- A' \' @<A+&?10&-Ơ A1' >10>1Ơ @1Ơ #-='B10ℊ <@ 1- 1- 1' H' >10>1Ơ @1Ơ #-='B1Ơ M &'1-' A&-1\' <Ơ C0&-1\' D&-10 1Ơ I ' B&+1-<#@1Ơ A?' A' ' &'<@>1' C ' "'1?' 0+' ' I ' D&-1 ' C@?'Ơ A'@'.1<@>1-' I ' <?L'-' C? ' @&0C' <@' 11' 1-' ℊ I ' C/1-=& >1' I ' 1-01'.-1 ' @1' C&1C@1ℊ I ' $ ' @1Ơ <? Ơ -&#@1Ơ BD&01Ơ <CC 1-<-\' <@<' B? 1' A1Ơ <@>1Ơ 01@&-B' B0 <' I ' H?<@' 11' A1Ơ A' \' #-='B10Ć I ' 1-0" 10 &' '=<' ' A1' &? ' 1>CƠ C<001' C?'Ơ @<' ='-A<B'&-' A B1@@1' <-Hℊ <?-' C&'1' A1' 1>CƠ C<001ℊ H' C> ' @1Ơ '-=& ><B'&-Ơ '-0 '.<B'&-Ơ I ' CB? 1>1-' A<08 B?-Ơ A1Ơ @'.1Ơ -=1' A' ' ?' @1' &" >10>1Ơ @1Ơ #-='B1Ơ <'1-' 10 1' A&-1\ℊ 1-B&- 1' @<' +&@1-1' A1Ơ =&?-A&? Ơ <Ơ C@?0&Ơ A'101Ơ C0&-1Ơ A<? " @<-.1' I ' A10 <-.1Ơ 10' I ' -<B'&-Ơ I ' <' @<' =&' \' <Ơ' + <'Ơ 1-1> Ơ A?' &'' I ' A1' 0&-' &'<@>1' @1Ơ H?1?L' -1' =10&'1-' ?-H1Ơ 10'A1-B1' 1-' B1@@10ℊ -1' -1' 0B'1+1-' -1' C&'1-' -1' +1?@@'1-' -?@@1>1-' C& 1' -1' =<' 1' @1Ơ BD< .1Ơ A1Ơ A' \' #-='B10ℊ B&>1' 1-' &'1' @1Ơ B&-=100'&-Ơ =#BD1' -1' 1-01'.-1' @1' C&C@1ℊ D&0C' <@' 11' 1-' ' -1' <BB&>C@' ' @1Ơ <? Ơ BD&01Ơ -1B10Ć 0<' 1Ơ <?' .&C-1>1-' A1' >10>1Ơ @1Ơ #-='B10Ć ><'Ơ 0&?Ơ @1>1-' 1-' H?1 1-' I ' C 1'.-1-' @1Ơ 1>&@?>1-\' I ' 1>C& 1@1Ơ C=' \' -'1-' 1'<-\' 1.< A' <' @<' B? 1' 10C' '8 1@1' -1' <0 <?CƠ BD< .1Ơ A1' >10>1Ơ @1Ơ #-='B1Ơ <CC 1j -<-\' &?' '-B?>#1-\Ć 1'-\' 0&1== 1-' -& &' 1>1-' @1Ơ -&#@1Ơ A'='B1Ơ <?-B'1-1>1-' =<' ' '@@1&H1Ơ H?<-' >10>1Ơ @1Ơ #-='B1Ơ 10 &'1-' &BB?C'1\' C' @1Ơ -.@1'Ơ A1' &?' BDA1 ' <' ? -1Ć C#-' @1' A'+'-' M+'B1' 10' 0.=' >1-' A' >'-?1' @<' B? 1' A1Ơ <@>1Ơ -1.@'.11' I ' @1001' I ' @1' @1 .1' 1-=1#@'\ℊ @1' 10& ' A?' A' ' &'<@>1' 1 <C& 1\' <Ơ >1'-Ơ A1Ơ @'1-Ơ I ' &?' @10 < 1' A1'01'-' 1.@'01' >10-1\' <' >1 -A 1' 1 1-B1' H' A1+<-' -1' 0&@1' ' 10 1Ć 1 'B&>1-' 'H' 1-' 1>CƠ @1' A' ' '1ℊ C 1'-Ơ & A'-<-B1Ơ 10 < ? \' I ' B&>C&0'B'&-Ơ '=1?001-' =<' \' I ' <==1 >1\' C ' &?0 1 ' A1' &?' &?' ' >1'-Ơ C ' 10 1'-A 1' @1Ơ A' \' >10BD'1=Ơ 1-')' C '1Ć '1- >1'-Ơ @1Ơ A' \' @'1-0ℊ -'1-' 1'<-\' 1.< A' <' B1@@<' -1' 01' <#0 '1.-> ' ' 1' A1' C-A 1' I ' 1B1'+ 1' A1?L'#-='B1Ơ A1'-\' @1' A' ' &'<@>1'Ć 1'-\' C' > ' @1' B&' =& ' 1'A1' I ' .3-' 01B&? ' H'@Ơ &-' A1Ơ @'.1Ơ -=1' A' ' '@1' &" H" 01-' @&? ' !& >1Ơ &B? < &? Ơ I ' < &>10Ơ 1-' B1@@1' C '1ℊ 1-' BD10B?-' C '1' A1@ A' ' &'<>1ℊ 0<==& B1-' A1' &' 1-' <? 1' C@?'Ơ ` I ' C@?'Ơ /P' A1' <BB1C 1' I ' <+&' '@1Ơ . 1'-A 1Ơ A'.-' 10' I '#-='B1Ơ A1'-\' @1' &'<@>1' <+<- A11' I ' C' A'C01'`888/P' ><51' >&@ ' ?A'B'1@1' <' >10>1' @1' &'<@>1' 0" B1&' =?'0 '0&1==1 1' C&-' @1 ' A' \' >10BD'1=Ơ 1-B 10B1-' A1' &? ' 1-' <? 1' >&@ \' &?=.1&?0>1-' I ' C@?'Ơ 1-B 10Ć B1 1-' 0" A?1' 1>1A1' -1' 0&' ' C +1?\' @1Ơ C@?'Ơ 1-' D<0 1;

Ó B1@@1' # ? ! ' -1@'-1A'&-' D1' &@@ƒ 'M ! ' ' $ ' = H6 1<? 1@&01' # ? !

02!2 7 @ / '. 72.-2 .' 4!-! &#!2 7 !"!' *&'!-' .' &'& 0 ² 3!"2.-2

-#.-'!)' -&!-#&!2 . ' *&'&-*' 4!-! &#!2 .' +&!-2

B."1 !" 0 !2 -.' !& ! 0 +



#- + ' .-' +#&- 0 " 0' * b' /' ." ;!+ !'" 0- +#" ǂ+&1'" . ## . .*#2)

M-. ' 2 ǂ /! "' ". 1' !' 6! &-' 22& &0' !' M&-* Z' &#! -#!0 %#! &.-Z' !"! .

3." Z' ." !1; "E&-*

!' 3!- + @ . ' !' ǂ&' " . ' !' & ' . !-/&-*

!' 3!- + @ . ' ! "# !"Z' ." V "/!-/ . ' 3." Z' . !-/&-*

.' 0;ǂ!/ ' 2 ǂ&1 ." ' .'" !% ." ' !"# -/&2!Z ;+&' &-' & Z' . ' !' M&-*(2 &!* -#!

3"&#!Z . ' 2!' !" ǂ ." Z' . ' V&-!Z ' ;!' 2.+/' &-' b". 2Z' ." ;@ 6! +!

'-' DA ' C &C1 ' 1 0&-0ǂ <0' &= 1-' <0' D1 ' 0D<@@ D<+1' D1' 0<'A' 'B1-B1ǂ D<' D1 ' 0D<@@ -& ' 01-A' #1 &-A' D1' 1< <- ' <- -1 ' &-' E&@A' -& ' '@+1 ' ?-A1 ' D1' &@&? ' &-' D1' 0<>1' LBD<- .1' G <-A' '=' <= 1 ' &B@<><8 A&-' &-' D'0' A'-<-B1' <- ' 1 0&-' #1' =' &>' D1-B1=& D' A?@ ' < <'- 1A@ D<' D1' D< D' B<?01A' &' #1' 01- ' & ' B< '1A' #1 &-A' D1' 1< <- ' E&@A' & ' '@+1 ' <.<' -0 ' D'0' 10 <'- ' <-A' A'-<-B1ǂ D1' 0D<@@ =& =1' ' & D1' ,'-.' D1' 0<>1' ?>' 0&' B< '1A' & ' 01- ' -A' D1' ,'-.' &?' & A@ &-' D'0' & <@ < 10 ǂ A1=1-A1 D' D1' <00<.1' ? 1 @ ' &-' <@@ <--1 ' &-' 1&C@1ǂ <0' K1@@ @1 a0' <0' & D1 ǂ '-' 1+1 ' & '<-A' & D1 ' &K-' <-A' @<B1' ?C&-' D1' &<0 ' &-' D1' 1<ǂ ?C&-' <'-' &-' !& =1' ? 1' &-' <@@ D1' ' E&&A0' G 1LB1C ' &-@ ' D1' & A0' <-A' & D1 ' E 1< ' 1-' &-' D1' 1<@>ǂ <-A' ?1' <-A' -& <#@1' 1 BD<- 0ǂ <-A' D1' ,'-./0' &@A'1 0< <-A' 1+1 ' 1 0&-ǂ & D1 ' D<-' '0 #1=& 1' 1LB1C 1Aǂ KD'BD' <= 1 ' ?#@'B< '&-' &-' D'0' A'-<-B1' ><A1ǂ 0D<@@ C<00' &?' &-' D1' 0<'A' 1<@>' K' D&?' D1' ,'-./0' 0C1B'<@ 'B1-B1ǂ KD'BD' 'B1-B1' D1' ,'-.' K'@@1 D' <-A' B&> ><-A1 D' D<' ' #1' -& ' = &>' D1-B1=& D' ><A1ǂ #?' &-@ ' '-' &-1' &-' D1' & 0' ?-A1 K ' 1-ǂ D<' '0' & 0< ǂ &-A&-ǂ <-AK'BDǂ "&+1 ǂ &? D<>C &-ǂ @ >&? Dǂ "1 >&? Dǂ '0 &Kǂ < >&? Dǂ ' & &@CDǂ ,'-.0 &-' ?C&-' ?@@ǂ 1KB<0 @1' ?C&-' -1ǂ <-A' D1' & D1 ' & 0' <-A' <00<.10' &K< A0' 1@<-Aǂ <-A' D1' 0@10' C1 <'-'-.' &' D1' 1<@>' &-' -.8' @<-Aǂ' 0D<@@ =& =1' ' & D1' ,'-.' <0' >?BD' <0' D1' D< D' '-' E&&A0ǂ <0' <#&+1' '0' 0<'A' ' <-A' -1+1 D1@100ǂ D1' <0 1 ' & ' < '-1 '&-' D1' D'C' & ' &-' & D1 ' 1001@ǂ '-' KD'BD' D1' 0D<@@ B< ' &+1 ' #1 &-A' D1' 1< <- ' 1 0&-ǂ #?' 0?BD' &-@ ' <0' #1' #1=& 1' 1LB1C 1Aǂ K' D&?' D1' 0<'A' 'B1-B1ǂ <-A' D1 1&-' #1' B&-+' ' A?@ ǂ 0D<@@ =& =1' ' D1' 0<'A' 1001@ǂ &' D1' ,'-.' -A' D1' ,'-.' B&> ><-A1 D' <@@ F< A1-0' <-A' 1< BD1 0' &-' D1' & 0' <-A' <00<.10' D &?.D' -.j @<-Aǂ D<' D1 ' 0D<@@ = &>' D1-B1=& D' A'@' .1-A ' ?01' D1' ' ='B1ǂ <-A' ><a1' .&&A' <-A' 0 <' ' 1< BD' -A' '-' <- ' 1< BD1 0' & ' F< A1-0' &-' D1' & 0ǂ <-A' <00<.10' D &?.D' D1' 0<'A' 1<@>ǂ # ' 1.@'.1-B1' & ' '-' & D1 ' <--1 ' A&' & '0?=1 ' K' A-.@ ' &' #1' A&-1' '-'<- ' &'-' D1' B&- < ' &-' D1' 0<'A' K&' 'B@10ǂ &?BD'-.' D1' &-1 ' &-' E&@A' & ' '@+1 ǂ <-A' D1' 0<'A' <00<.10' &-' 1&C@1ǂ <-A' D1 1&-' #1' A?@ ' B&-+'- ǂ D1' 0D<@@ =& =1' ' & D1' ,'-.' D'0' 0<'A' ='B1' <-A' <@@ D'0' E&&A0ǂ <-A' D'0' &A '0D<@@ #1' B&>j >' 1A' & '0&-ǂ D1 1' & <#'A1' <-' KD&@1' 1< ' K' D&?' 1A1>C '&-' -A' D1 1?C&-' KD&0&1+1 ' 10C'1 D' <-A' C &+1 D' A?@ ǂ D<' <- ' D'-.' #1' A&-1' <.<' -0 ' D1' - 1-' &-' D1' 0<'A' K&' @<0 ' 'B@10ǂ KD1 1# ' D1' 0<'A' ! & =1' ? 1' &?.D ' & =<@@ ?C&-' <- ' 1 0&-ǂ D1' 0D<@@ D<+1' D<@-' &-' D1' 0<>1' ! & =1' ? 1' =& ' D'0' <#&? ǂ &-' D1' ,'-./0' E'= ǂ &' '-B 1<01' D1' <+ ' &-' -.@<-Aǂ KD'BD' '0' -&K' . 1< @ ' A' >' -'0D1A;' ' '0' <001- 1A' <-A' <BB& A1A' D<' -&-1' &-' D1' ,'-./0' @'1.1' 1&C@1' A&' = &>' D1-B1j =& D' 0D'C' <- ' 1 BD<-A'\1' '-' .&'-.' &?' & ' B&>'-.' K' D'-' D1' 1<@>' &-' -.@<-Aǂ `'H9<- ' & 9/P' #?' &-@ ' '-' D'CO' &-' D1' ,'-./0' '1.<-B1' G <-A' 1+1 ' 1 0&-' &-' D1' 0<'A' '1.<-B1ǂ KD'BD' <= 1 ' D1' !1<0 ' &-' <0 1 ' -1L ' 1-0?'-.ǂ <' KD'BD' !1<0 ' D'0' A'-<-B1' 0D<@@ =' 0 ' #1.'-' &' D&@A' C@<B1ǂ A&' 0D'C' <-A' >1 BD<-A'01' '-' <- ' & D1 ' D'CO' & ' 1001@0' ?C&-' D1' 1<ǂ D<-' &-' D1' 0<'A' '1.<-B1ǂ 0D<@@ =& =1' ' & D1' ,'-.' <@@ D'0' 1 BD<-A'010' 0D'CC1A' '-' & D1 ' 1001@0ǂ KD1 10&1+1 ' D1 ' #1' =&?-A' D1 1<= 1 ǂ & ' D1' <@?1' &-' D1' 0<>1' G &-' KD'BD' ! & =1'j ? 10' D1' ,'-.' K'@@ <-A' . <- 1 Dǂ D<' D1' D<' A?@ ' 10C'1 Dǂ <-A' A?@ ' C &+1 D' D<' <- ' 1 0&-' D< D' <- ' D'-.' =& =1' 1A' <.<' -0 ' D'0' A'-<-B1ǂ 0D<@@ D<+1' D1' D' A' < ' =& ' D'0' <#&? ǂ &-' D1' ,'-./0' E'= ǂ <0' &' F '-10' &-' E<0B&'-1ǂ &BD1@@ 01 ǂ <-A' &-' C<'-ǂ <-A' F '-10' &-' D1' D'-1' G ' '0' & A<'-1A' <-A' <001- 1A' D<' -&' -.@'0D><-' D<' K'@@ = &>' D1-B1j =& D' C<00' D1' 1<' =& ' D1' 0<'A' F '-10ǂ <-A' &' # '-.' D1>' `'-' <- ' < P' K' D'-' D1' 0<>1' 1<@>ǂ 0D<@@ -& ǂ -& ' >< ' -& ' 01@@ D'0' F '-10' K' D'-' D1' 0<>1' 1<@>ǂ ?C&-1L<>'-1\' I ' ? 1\' 1-' @&? 0' CC 10' C0&-10' <' <- \' A10' =&' \' B&>1' '@0' <, &-' @<' A' 1' @'B1-B1' H'@0' -1?+&'1 &-' A1C' A1@<' <?B?-1' ><51' A& ' -1' A< .1-' 0&?\' B&@&? ' A1' >10>1' @10BD<?-.1G' 1 ' 0" <C0' @<' CB@<><A&-' A1' B10 1' & A'-<-B1' <?B?-1' C0&-1' 0&' ' A10& 1' A?1>1-' < 1'-' H'ǂ <,<' ='A ' 1-+&'1 ' &?' 1>C& 1\' A1C' A1@<' & ' &?' < .1-' <?B?-ǂ 1-B&- 1' B10 10' A1=1-0' I ' & A'-<-B1ǂ =& =1B1' A1C0' @1' &" >10>1' @<' 0&>1' '0<-' 1>C& 1\' &?' 1-+&'1\' ' @1' &" -=1' ?' A1' 0<' &'<@1' >< 10 11' A1=1-A1' @<' C<00<.1' &?@ 1>1-' < &? 10' >< 10' A10' .1- \' 0'#-' @1 B0' B&>1' <? 10' 1-' BD10B?-' C& ' I ' <? 1' +'@@1' I ' @'1?' 0' @<' B&?0 1' A1ǂ >11 ' 0? ' C<'-1' A1' =& = '' ? 1' A1' &? \' @&? 0' #'1-0' D& 0C '0' <- 0&?@1>1-' < @10' = 0' I ' <?R0' .=' \' C0&-10' A1ǂ &'<D-1' I ' , &'0' I ' -& <#@10' < BD<- \' I ' @10' 0&@A1& 0' @1' &'G I ' H@B&-Hǂ C0&-1' <? 1' H' A100 h' -1' 0&- ' 1LB1C \' ?!' @<' C?#@'B<B'&-' A1' B10 1' & A'-<-B1' =<' 1ǂ C<001' D& 0' A1ǂ A' ' &'<D-1' 0<-\' 10C1j B'<@ B&-.'1' @1' &'ǂ H?1@1' @'B1-B1' @1' & ' +&1 ' I ' B&><-A1' H' -1' 0&' ' =<' ' A10& 1' 0'-&?-' <- 0&?@1>1-' 1-' ?-' A10' C& \' A100&? \' 10B 'C \ǂ B10 <00<+&' ǂ &-A 10ǂ <-A1K'\ǂ "&+& ǂ &? D<>C &-ǂ > > ? @@ǂ "1 1>?=ǂ '0 ?' ǂ 1 -1>? Dǂ 1'-' & D?@=ǂ , -.10 &-' 0?' ?@@ǂ &1=' D<0 1@@ 0?' -1ǂ I ' @10' <?R0' C& \' I ' C<00<.10' ,0' @<-A1' I ' @10' 0@10' <CC 1-<-\' <@ &'<@>1' "1-.@1R 1ǂ =& =<B1' A1,0' @1' &" HW-Hǂ '@' <A' 1-' #'1-0' B&>1' A100 h' 10 ' A' ǂ 1 ' <A1>1'-0' @1' <'0 1' &?' < '-1 ' A1' @<' '1=' &?' A/<? 1' 1001@ǂ 1-' H?1@1' '@ <+0<' <>10-1\' A1C' A1@<' <?B?-1' C0&-1' =& 0 f ' B1?L' 0&?@1>1-' ' H' CA100?0' 0&-' 1LB1C \' 0<-\' @<' A' 1' @'B1-B1' A&-' '@ 0&' ' B&-+'= ' A?1>1-ǂ =& =<B1' A1,0' @1' &" @1' A' ' +1001 ' ' 0" B&><-A1' @1' &" <0' &?\' E< A1'-0' I ' 1 BD1&0' A1' @10' C& \' I ' C<00<.10' C> ' -.@1R 1' H'@0' ?01-' A10& 1' A'@'ǂ .1<?>1-' @&? 0' &=='B10' I ' ='B1-' #&-' MBD1' I ' 10 &' ǂ I ' 0" -?@@ ' MBD1&? ' &?' E< A1'-' A10' C& \' I ' C< <.10' C> ' @1' A' ' &'<@>1' C' -1B.@'.1-B1' &?' 1-' <? 1' ><51' =1B1' &?' 0&1== 1' 0A1- >1-' 10 1' =<' ǂ 1-' <?B?-' C&' -' @1' B&-ǂ =' 1' A1' @10' A' \' A1?L' 'B@10' &?BD<-\' @<' >&-&'1' & ' I ' < .1-' I ' @1' A' ' C<00<.1' A10' .1- \ǂ I ' A1' B1' '@ 0&' ' B&-+'<' A?1>1-ǂ =& =<B1' A1+0G @1' & ' 0&-' A' ' &=='B1' I ' &? \' 010' #?0' <+10Hǂ' I ' 0&' ' 0&-' B& C0' B&>'0' <' @<' C '0&-1' <' ' A1> 1' C' ?-' <-' 1-' '1 ' 0<-\' 1A1>C1'&-' ' 0<-\' B1' H@B&-Hǂ C0&-1' H" 10C'1 <' I ' C+1 <' A?1>1-' H' '1-\' 0&' ' =<' ' B1- 1' @1- 1-B'&-' A10' A' \' A1?L' A1 8' <'-0' < 'B@10' C1-' @<' A' 1' =& =1' ? 1' A1+ <' 10BD1 1' A<?B?-1' C0&-1ǂ 1' ' '@ @<' >&' 11' A'B1=' =& =<'=1' C' 0&-' 0+<' ' A1@ A&?-' @1' &'

1>' C' 1-B 1B1 ' @<' <+'1' "1-.@1R 1' H?'1ǂ 10' & 1' >&1@' .= 'A1>1-' <>1-?01\ǂ 10' <001- ?\' I ' <BB& A1\' H' -?@ @'.1' C0&-1' A1@ &" -=1' = ' =<B1' A10& 1' 10a'CC1 ' <?B?-10' ><510' A10' BD<-A'010' 1-' <@<- \' D& 0' &?' +1-<- \' A1A1'-\' @1' &'<@>1' A1-. '<?B?-1' C ' ǂ=& 0Hǂ0&?@1j >1-' 10' -'1=0' A1' @<' @'.1<-B1' -=1' _ ' @1' & 'G 1 ' H@B&-Hǂ C0&-1' A1' @<' A11' @'.1<-B1' <=@0' @<' =10 1' A1' <0Hǂ CBD1'-' +1-<- ǂ <' H?1@1' =10 1' B&>1-B1 <' C '=' 1>1-' B10 1' & A'j -<-B1' 1-' ' @'1?' =1B1' 10a'CC1 '='BD<-A'010' 1-' <?R0' -'1=0' &?' +1001@L' 0? ' @<' >11 ' H' A1' @<' A11' @'.1<-B1' =& =1B1' A1,0' @1' & ' &? 10' 010' >< BD<-A'010' 10' <? '+1001@L' 10a'CC1 \' 1-' H?1@B&-Hǂ C@<B1' H' B1@@10' M &-' 1-' <C'0' &+1 \' &?' @<' +<@?1' A'B1@@10G' A10' H?1@10' =& =1' ? 10' @1' &" +&1 ' I ' .= ' 1' H' B1@@?' H" 10C'1 <' I ' A?1>1-' C+1 <' H<?B?-1' C0&-1' <,<' 1-B&- 1' Ba 1' & A'-<-B1' '1-\' =& =<' ǂ 1-' 1' ' @<' '1 B1' C '1' C ' 0&-' <'=:' A1@ A&?-' @1' &

1>' H -' <0' +'-0' A1' E<0B&'.-' A1' @<' &BD1@1' 01 1' > I ' "10C<'.-' I ' +'-0' -&'010@ 10 ' & A1-1\' I ' <001- ?\' H 0" -?@ -.@1 0' +1?@@1' A10& 1' C<001 ' @<' >11 ' C ' @10' A' \' +'-0' H?1 1 1' I ' A1' @10' <>10-1 ' <?B?-1' C ' A1'-\' >10>1' @1' &'<@>1' -1' @10' +1-A1' -1' -1' C?'001' +1-A 1' 010' +'-0' A1'-\' >10>1' @1' &'<@>1' 0? ' C1'-1' A1' =& =<'=1' A'B1@'

<#&+1 @'>' 1A <.<'-0 D1 !&-'&= D101 A'-<-B10 &= F'-10'-'<-' &'-9 KD1 1# 'D1&?.D'# ' D1 !& >' &= D1 0<>1 <-' D'-.' =&=1'' &' D1 ,'-.9 D1 0D<@@ D<+1 D1&-1 <@'&= D1 0<>1 !& =1' ? 1 =& ' D'0 <#&? 9&= D1 ,'-.0 E'=

9 ? ' &+1 1'.-' & A D1 ,'-.9 C1 B1'+'-.' D<' ><-' & A0 <-A E1- @1>1-' &=' D'0 1<@>' `&=' D@0 @<' -.@<-A9 <-A &D1 ' K' D D1>9 '-' D1 ?>&? ' <-A -0? 1='&-'&=' '@@<'-10 <-A'&=' & D1 ' '=1-A1 0 KD'BD -.7' &='@< 1'A'A <' 1 &?0@ ' '01' # ' 001>#@'10 '-' &? 9 <.'&?0 ?>#1 9 '-' A'+1 0 < 0 &=' D1 1<@>9 <.<'-0 E&A .&&A !<' D <-A 1<0&-9 <-A <.<'-0 ' D1 "'.-' ' &='&? ' &+1 1'.-' & A D1 ,'-.' <-A D'0 &K-9 <-A D1 <K &='D'0 <-A0 ><A1 A'+1 0 ?-'0D>1-0 ?C&-' D1 0<'A '@@<'-10 <-A'& D1 ' <' & 0 K' D&? ' A?1' &B100 &=' D1 <K9 <-A' & D1 K'01' D<-' D1 <K <-A' 0<.10 &=' D1 1<@>' 1H?' 1A9 <@ D&?.D' D1 ' A'A' ' &='-& <@'B1' C 1C1-01A #?'&-@ ' W)' &' <CC1<01' <-A' B1<01' D1' <CC< 1-' '0BD'1=9 W)' B&-0'A1 '-.' D1' . 1<' "'@'.1-B1' <-A' & <@ '&=' D1' & A0 <-A' E1-A1>1-' '-' D'0 1D<@=9 KD'BD' K1 1' -&' @1< -1A' &=' D1' 0<'A' <K0' <-A' 0<.10 <-A' D&?.D' <' D<' '>1' D1 ' D<A' #11-' @1< -1A9 < <-' >'.D ' -&' ?C&-' D&01' ?-'0D>1-0 D<+1' < '1A' D1' &B100 &=' D1' <K9)' &=' D1' '.&&A' "'0B 1'&-0 <-A' K'@@'-.' ' 1 1=& 1' &' A& D1>' E <B1 <BB& Aj '-.' <0 D1 ' D<+1' D1' 0<>1' . 1< @ ' A101 +1A9 &=' D1' 001-' <=& 10<'A' D< D C< A&-1A' < 'A' 1@1<01A' &' D1' 0<'A' & A0 <-A' E1- @1>1-9 <-A' <@ & D1 '#1'-.' '-' D1' ' 'A' < ' D1' 0<>1' "11A9 <-A' &' 1+1 '&=' D1>9 < ' >?BD' <0 &' D'>' D1 1&=' C1 <'-1 D9 &' &' D'>' <-A' &' F0 1' 0 >< ' C1 <'-6 0&' D< ' D1 1<= 1 ' =& ' KD< 0&1+1 ' D'-.' D<' '0' A&-1' ' D1>' ?C&-' D1' 0<'A' ?-'0Dj >1-0 '-' 10'0 <-B1 D1 ' 0D<@@ #1' D1 1&=' H?' ' =& ' 1+1 ' # ' D'0 E <-' <-A' < ? 1' K' D&?' D<+'-.' D1 1&=' & D1 ' 0C1B'<@ D< 1 ' & ' < A&-

9 ' '0 & A<'-1A ' D<' <@@ ><--1 ' <-?>'0j 0'&-09 #@'.< '&-09 1@1<010 <-A' & D1 ' &-A0 ><A1' # ' &>C?@0'&-9 "? 100 <-A' 1-<B1 '-' D1' '>1' &=' D'0 @<0 ' ?>&?' <-A' '& ' <.<'-0 ' D1' <K0' &=' D1' <-A 9 <-A' .&&A' !<' D980D<@@ #1' F D&@@ ' 0)' <A-?@@1A' <-A' D&@A1-' =& ' +&'A <-A' D1 ' D<' D<+1' A&-1' &' #1' ><A1 9 &' A&' 1' K' D8D&@A' 0?BD' <>- <0<&C08 #@'j .<'&-09 1@1<010 &-A09 <-A' D1 ' "11A09 0&' ><A1' # ' "? 100 0D<@@ #1' 01-' #1=& 1' D1' ,'-.' <-A' D'0 &?-B'@@ D1 1&=' &' <-0K1 ' D1 1' &='8 D1' "11A9 <-A' =? D1 ' 0D<@@ #1' B&-0 <'-1A' & ><a1' "1@'+1 ' <-A' 10 ' ? '&-' &=' D1' 0>A "11A0' &' D1>' D<' ><A1' D1' 0<>1' <.<'-0 ' DA ' .&&A' E 11 K' D' D1' &C'10 H=' D1' 0<>1 '=' C1 B<01' D1 ' D<+1' D1 1&=' ><A1' <- ' #1=& 1 <-& D1 ' '>1' &' ?01' & ' 1-1K' D1' 1=@1 G &=' D1' 0<>1' '=' D1 ' >< ' -A' @'a1K'01' ' ' '0' <BB& A1A ' D<' <@@ - '10' ><A1' '-' <-A0' & ' 1-1>1-0 9 <-A' <@0&' <@@ !1&==>1-0 ><A1' '-' D1' '>1' &=' D1' 0<>1' ''&?' # ' &>C?@0'&-' <-A' 1-<B1 & ' & D1 K'01' K' D' !& B1' &=' 1&C@1 <.<'-0 ' D1' <K 0D<@@ #1' +& A <-A' D&@A1-' =& ' -&-1' -A' D1' ,'-.' > @ ' A1=1-A1A&' &' <@@ <--1 '&=' 1&C@1 ?C&-' <'-' &=' <0 >?BD' <0 D1 ' >< ' =& =1' ' <.<'-0 ' D'>' '-' &A ' <-A' E&&A0 D<' -&-1' = &>' D1-B1=& D' ><a1'-& ' `#1.'-' <- ' ''<--1 P' '& ' <-A' ?>&? 9 -& ' & D1 ' @'a1 -A' '=' <- ' D1' <>1' A&9 <-A' D<' A?@ ' C &+1A9 ' ' 0D<@@ #1' A&-1' &=' D'>' <'0 &=' <' <' & ' &' D1' ,'-.' <-A' & D'0 0<'A' 1<@>

"' <@0&' D1' ,'-.' A1=1-A1 D' D<' -&-1' = &>' D1-B1=& D' ><a1' <-' - ' '- &' <-' <-A0' <-A' 1-18 -'1-0 #?' '-' B<01' KD1 1' - ''0' .'+1-' # ' D1' <K 9 <-A '-' 0?BD' B<01' H&' K' D' D 0 &-.' <-A9 -&' K' D' ?0 ' ?A1' &=' 1&C@1 #?'&-@ ' '-' `C1<B1<##@1' WP' <-A' 1<0 ' <--1 ' -A' '=' <-' <-' = &>' D1-B1=& D' A&' &' D1' B&- < 9 <-A' D1 1&=' #1' A?@ ' B -+'= 9 D i' 0D<@@ #1' C?-'0D1A' # ' >C '0&->1-' &=' D'0 &A 9 <-A' D1 1&=' <-0&>1A' <' D1' ,'-./0' F '@@

@'>' 1\' A100?'0 I' B1- 1' @<' =& >1' A1' B10 10' & A'-<-j B10' A10 +'-0' 1-' <?B?-' C&'-9 C&>' '@' A1+ <' C' @<' =& >1' A'B1='1-\' =& =<' 1' A1, 0 @1' & 9 1'' '@ @<' >&' 11' A'B ' =& = '' ? 10' C' 0&-' /+<'@@ A1@ A&?-' @1' &'

1>9 -=1' ?' @1' &'' 1-1-A<-' H' C@?0& 0' = 0' I' +' .1-<@0' A1' 0&-' &'<@>1' I' <?R ' <+1B' 1?L' 1-' @10' ?>& I' '-0? 1BB'&-' A10'+'@@1'-0' I' A<?, 0' > =1'0& 0' H& 1' < ' 01' @1+1 1-' <' 1 &?01>1-' C' <001>#@110' I' &?=.1&?01' $ -&>#1' 1-' A'+0010' '10' A?' &'<@>1 9 B&- 1' '' '1?L' #&-1' =&'' I' 10&-' I' B&- 1' @<' A'.-' 1 '' -=1' /' @1' &'' I' 0<' & &-1 9 I' @10' @& 10' A1' 0<' R 1' =' 1-' A'+0010 C?-'001>1-\' 0?' @10' A' \' +'@@A-0' I' <?, 0' <' <' 0<-\' A?1' C110' A1' @& 1' I' <? 1>1-' H' @10' =& 0' I' ?0<.10' A1' @<' , 1' A1><-A1-' B&>#-' H' B1' =' 1-' '@0' -&?-C<0' A1' ><@'B1' C C1-01\' >-\' 0&?@1> 'C' @& ' B&- 110 1' I' <CC<'01' I' B1001' @1' >10BD'1=' <CC< <-2' I' B&-0'A1 <-' @10' .#@ \' A'@'.1-B1' I' @&'<@ 1 ' A10' A' \' = 0' I' .1-' '@0' 1-' B1@@1' C '1' H' -1' '? 1-' > 1' < '0' A10' A' \' @& 0' I' ?0<.10 I' >10H90' '@0' =?001-' <' B1@@ =&' \' @1-' -1' C&<'0' 0? ' @10' A' \' C--'001>1-\0T<+&' '< 1-A?' @1' C110' A1' @& 9 I'9H' B1' =' 1-' '@0' <' # -1' 1-1-1' A1' =&/0' < A0' I' #&-10' A'0B 1B'&-0 I' +1?@@<-' C' <-' @&? ' =1? 1' .0B1' 0'B& >1' >&A ' .D 1' 1<' @&?' A101 +'\' A1' @<001-' <+#' A' ' <A' CA&-1\' I' 1@1001\' <0' A' \' _0 .1-' '@0' I' <0' <?, 0' H?1@B&-H0' 1-' =&?' 1'A1' 10 1<-\' <' B1@@ =<' ' I' <' BD10B?-' A1' 1?L' H0-f' <' @?' 1-' <CC='1-' 8&? <' @?" 5B 010' D1' 0' C? <' <CCA1.-1' '0 ' ' ' 1-' 1>C0' <+1-' ' C' BD&01' H?1@B&-H9 B1' 0&=' ='?' C' 1?L' 0?' @10' A' \' C?-'001>1-\' 1-' 1A0 1-11' @0' -1' 0&=&-' <><'0 1>C10BD1\' -1' . 1+1\' 1-' B& C0' #-0' -1' 1-' =&?' D1 ' <.10' I' C&00100'&-0' C' <?B?-1' +&'1' C' -=1' = ' @1' &'9 010' D1=0' &?' a''0 10' -<? C10' H?1@B&-H10' 1-' 1>C0' <+1> 9 <'0' <?@ 1>1-' 1-' 0&'1-' H?' \' <' \' &? ' C' B10' .W-' I' 10 <?' ! I' <? 1' CA&-' &U' 1#< 1' 1-' <+&' ' 1=' 10C1B'<@ &-' 10' & A1-1\' I' <001-?\' H' &? 10' ><510' A1' + ' ><-?>'00'&-0 &#@'.<B'&-0 1@1001' 5B <?, 0' @'1-0' = ? \' C' B&-'C'A &-' A& 1 11' I' ><I<B1 1-' 8 1>C0' A1' B10 10' A1 <'-' ?>&' I' & 9 1-B&- 1' @10' =& 0' A1' @<' R 1' I' #&-1' =& 9 0&'1-' A1' &?' B<001\' ' 1\' 5B 1-?\' C' +&'A10 1'11?L' H" &-' =1=' =1' 1'`&?' A1A1.-1- P'1-B& 10' '1@@10' ><-?>'00'&-0 &#@'.<B'&-0 1@1001 @'1-0' I' <? 0' =''' \9 '00>' C' A? 10B1' =1' \' 0&'1-' 1-+&'1\' A1+'' ' @1' &'' 5B 0&-' B&-01'9 C' 1-' 10C&- =1' '@@&1H0' A1' =&?' = '' 9 1' &+A 1' 0&'1-' B&>C1 1\' A1' ='? 1' A1@', <-B1' I' 10 '8 ?1=&-' A1' @10' = ' \' < - B== \' <0' B1?]' H" @1 ' =' >' ' 1-B&- 1' =&? ' #&-' . 11 <+1B' @10' B&C'10' A B1@@10 0" -?@@10' C' B<0' 1-' '<+&-' = ? \' CA1+<-' C' <? 1' =&' \' ?01 9 1&' 1-&+1'@1' @1='=1<' A'B1 ' 0 L' C&'<00&' ' 01>#@<8 #@1>1 ' ' 10' <BB& A1\' H' &?=\' 1- 110' = '' \' 10' R 10' &?' 1- \9 I' <?L'-' &? 10' =1&==1>1 ' \' =&' \' 1-' 1>C0' A?' A' ' ?>&' C' B#>C?@0'& '5B ><-<B1' &?' <? 1>1-' '<=& B1' A10' .1- \' 1-B&- 1' @<' =& 9 0&'1-' +&'A10' I' 1-?\' C' -?@@10 ' @1' &" A = '-A1' 10 &' 1><' ' <' &? 10' >< 10' A10' .1- \9 0?' C1'-1' A1' HO-H9 '@0' C? &-' =& =<= 1' A1+00 @?" 1-' B& C0' 5B 1-' #'1-0 H' -?@@ ' A10& 1' =<B1' -1' 1B&>1-B1' C' +&'1' H?1a&-H9 B1@@10' '& ' I' ?>&' -<?, 0' 01>#@<#@10 ' 0" -?@@ ' @1' =&B1' 5B B1' C+1\' A?1>1-" 0&' ' =1' ' A1' @?' B&>1' A1' <' 1' <?' &" 5B <' 0&-' A' ' &'<@>1 = ' <?L'-' @1' &" A1=1-A1' H' -?@@ ' A10& 1' =&B1' 1- 11' 1-' < B?-10' 10' B 1='\' 0'-&?-' 1-' B<0' &?' 1- 11' 10' A&-1' C' @<@& 9 5B 1-' B1@@ B<0' -1> 1' <' =& 1' >< '-' -1' <' >?@ ' ?A1' A10' .1- \9 1'-\' <- 0&?@1>1-' 1-' `@'0'#@1' 5B <'011 P' >< 10 1' 0" -?@@ ' A10& 1' =&B1' <' B&- <' 1' B 1-' 0&=' B&-+'=@ A?1>1-' 0&' ' C?-'\' C' 1>C '0&-1>1-' A1' 0#-' B& C0' ' A'@=&1H0' 1'-' ' <' @<' +&@?- 11' @1' &

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+' -0:' 1&22&.-2' 6!+! 2!2' -/' 4.-/2' 1 /!'&-' !' + 2' 010+'2' ;@' .1 0+k 2&.-'2 <';!' '.&/

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1>' &?BD<-' @10 D< 10 1@10010 &D .<A&-0 I' <? 10 =1' \' I' >?-'>1- \'< 01\'A10 ?^\'(" <? 1>1-' 10@&' 1\' ' >10>1' @1' >&G 10 '<001- ?\' H' B1?L' H" 01' 1-' 01- 1 ' ' . 1+1\' 1 ' >1 1-' @&? 0 C1 ' '&-0 A'08 '-<1>1-' =1' \' 0? ' @&? ' -< ' 1' 1-' 10C1B'<@ A1+0-' @1' &" I' 0&-' B&-01'@ C1- 1' B ' I' @<' -< '+' ' A1' 1'-' &D<-' CBDA-' +1-<- ' <' C@?0 < A@ I' '@@&1H0 =<B1-' 0?=@ ''0<-' C1 1' A1' @<10>10 @10 >?-'>1- \' '00'-' CA?\' I' A1' @<' =&K-1' I' &'? 1' AaA@10G I' B1' =1' @ A1@ 1>1A1' @&? ' 1-' M <' C 1?\' <@ BD10B?-' B&>C@1'-' B&>1' >?@ \' 01>#@1 <' <' '<' 1' 1-' @<' B<0 0<@ <-' @<' @&

1>' C? B1' H' . 1+&?01' C@U- 1' <A' 10 1' 0&+1-' =<' ' A10 &= M0 A1' @10BD '1 @ A1' B1' '@10 D1' 0 1L1B? &/0 &BB?C'& 0 A10 = -0 ' R 1 1-<- \' A1' A' 10' C &-10 H& ' 0 1' 1>8 C10BD1\' 1 ' A' ' 10BD1H'1 ' A10 A1 10 <BBH>C 0 I' A<?R0 A1><-A10 I' @10 H?1?L' B&>#-' H'@0 01' &= ' &==1 \' '@@&1H0 <' >&-0 1 ' &?' C@1A1 ' C? ' @&? 0 A D< .10 A1' B1?L' 1>C10BD1>1- \' 01@&-B' @<' @& @ &- 10 +&'10 '@0 -&-' > 1' 10 1' <' B1' 10 1 0 A1+W- ' B10 D1? 10 0 \' <+&' ' 1LC0 B&><-A1>1-' C' 1=@ &?' 1' A1' . ' &?' C '+1 1<@' <' . ' A'0<'01' >10BD'1=' I' A1@< ' A10 A' \' 1>C10BD1\' I' -?@ <+ - <.1' <?' &'G " 10' A1-1\' I' <001- ?\' H' @10 < &-0 A1@ A' ' 0BD1H'1 ' <'1C ' A10& 1' C@1'-' C&< ' A&'1 ' BD10B?- ' 10C&-B1' A1' H 1@B&-B ' A1j > &A1' @' ' 1-' >10>1' @h BD1H'1 @ '00'-' ' BD10B?-1' C0&-1' H' ' 0&' ' 1>C10BD1\' &?' 1>C10BD1<##1' A1' H?1@ B&-H@ B<?R1' C' @?" >10>10 &?' C' <? 1' C &-1@ 0&' ' A10& 1' 10B1?\' 1-' A' ' 10BD1H'1 ' <' C@1A1 ' 0?1 ' I' <+&' ' 0&-' A10BD< .1' 10&-<#@1' 1-' B1@@ C @ 0<-\' < 1-A 1' &?' 0?1 ' # '1=@ ' 1' &?' <? 1' ><-A1>1-' H?1@B&-H99

1>' C? 11' H' .W- \' >10BD'1=1' &-' 10BD1?\' A1+<=@ ' B10 D1? 10 <' A', 010 C0&-10 0'#-' <' @10 = 0' A?' =&'<@ &1' B&>1' <0 <?R0 H" =< 1-' 1 1-?\' &?' <00'. -1\' A1' R ' ' <' -=1' = ' @1' &" C' '-A1- ? 10 &?' 1-' <? ' ><51 I' C' B 10' B<?010 010 >100<.K '10 &?' 1-' <? ' ><51 I' C' B 10' B<?010 1011+ 1-' >'10 0J>10 A1' A1-'1 0' <' @<' &B< 1' AA' A' ' 0BD1H'1 ' &?' <'@@& 0 C<00'. -1>1- @10 H?1@10 0&>10 <'1-' 10 1' -'010 0? '1?L' 10 &@@10 A1@ A' ' 10BD1H'1 ' B&>1' A1-'1 0 10B1?\' C' +& 1' A<C=00 I' C' <-' 1 10 0&>10 B? 1 1-' !-' A1><-A1' 0? ' 1 @0' <' @10BD1H'1 ' B&>1' A1 1' A1 @ 1 ' C& -#-' H' @10' A =10 C0&-10' 1-0" 1 1-?\' @&? 0 DA 0' 1L1B? 1 0' &BB?C'& 0 =10 =1-0 &<' , 1' 1-<- \' <C# @&? ' >& '<'1-' A1><-A1\' C' 10 1' 10B1?\' A<&B&>C 1' A1' @10' 0& -10 10B1?\@ -1' C H?<-' B1' -<A' -?1' 10 1' < 1?L' .J- 1m@ A-\' &-' 10 1' B&-0 1'-\' A1' C 0?1 ' @&? ' .< <-' A1' .J-' &?' C '+1' 1<@@ T 1Q' <0' 10& 1' I' < &-0' @&1H10' C' H?1@ =?0 ' B&>><-A1\' <0' 10& 1 ' I' < &-0' A<BB&>C 1' <+1B (?]' 1-' BA@1' C '1G @10' H?1?L' .< <- \' >A- =&' \' &-' 10 1' A1-'1\' <' B<?01' H' @10' ==' R0 A?' &" -&+A@1>1-' B 11\' C' B<0' -<+&'1-' B&-'00<-B1' A1' '1@L' 1 1-?10 =<' \' A1+<-' @&? 0 1>C0@ 1' C0B?-' =&' \' &-' 10 1' 1\@' ><'0 -&?-' C<0' 0" C@1>1>1-' B&>1' 10&-' I' @1' B<0' A1 <<-A>1= @ C' <-' H' B1@ .< <-' +&@&' H' @<BB&>C 1' -1' A1?0' 10 1' 10B1?\' =& 0B.' &?@1>1-' A1' @<' 0&>1' 1-0" 10B1?1' A<CC0 @ @<' &?' . A-A 1' 0&>1' C' B<0' @&? '=''0' A?1' A1' 10&-@<' .W-' >10BD'1=' I' <-'1- '0018 -1-' A10' I' C0&-108@ 10' & A1-1\' I' <001- ?\' H' A1' &? \' .1-\' H" A10& 1' , &-' 1 '?\' &?' <00'. -1\' A1' I' ' <- 1' ?' @1' & @ 0&'1-' @10' B&+1-<-B10' >'010 1-' 10B ' ' I' 1-+&'1\' 1-' @10BD1H'1 ' <' A1> 1' A1' 1B& A'G '00'-' H' <H?A1' D1? 1' H' C0&-1' 1-0" 1 1-?1' 010 D1' 0' 1L1B? 1 0' &BB?C'& 0' A10' #-0' &?' R 1 1-<-\' +'1.-1' &?' +'1.-1-' A<BB&>C 1' A1' B1' =B0BD1H'1 ' 0&'1-' '@0' <' B1' 106 B1?\' I' <'1-' A?1' <@@&?<- 1' 1-' @&? ' <BB&>C 1@ 01@&-B' @<' B&- 1-?1' A1' @&? ' B&+1-<-' ' 0" C' B<0' <0B?-' 1C1@@ &?' B&- 1><-A1>1-' 0&' ' =<' ' A1' A1@ 1 1-?1' A<B?-1' C0&-1@ <C20 H' 010' B&+1-<-B10' 0&'1-' >'010' 1-' 10B ' ' I' 1-+&'1\' <@' A' ' 10BD1H'1 ' B&>1' A1 0 '10' A'

@ &?BD'-.' D1' D< 1 0@ 1@1<010@ #@'.<j '&-0@ <-A' & D1 ' @11A0' <-A' ?-'>1-0@ #? -@ A1j 0 & 1A@ &' & D1 K'01' 1@&'-1A' '-' D1' 0<>1' ?>&? ' ' '0' <001-1A' D<' D1 ' KD'BD' D1 1&=' =11@ D1>'. '1+1A@ 0D<@@ C?' DA' 1 ' '&-0' A'0 '-=@' ' ><A1' ?C&-' D1' ' < 1 0' 0C1B'<@@ ' #1=& 1' D1' , '-.' <-A' D'0' &?-B'@@ #1 K'L ' D'0 <-A' D1' <'+' ' &=' <'-' &D-' <C '0 ' -1L ' B&>'-.' <' D1' =? D10 @ <-A' D1 1' ><a1' 0?=='j B'1-' &&=' &=' D1' 0<'A' ?-'><' 0' 0&' @&0 @ <-A' &=' D1' S & >' <-A' 1-&' &=' D1' 0<>1 ' <-A' D<' A&-1@ 0?BD' 1>1A ' 0D<@@ D1 1&=' #1' C & 'A1A' =& ' D1>' <' 1+1 ' <-/0' &>C@ ?-@ <0' #10 ' 0D<@@ 11>' '-' D1' <01@ 0<+'-.' D1' <K

@ 1B<?01' D<' . '1+&?0' &>C@<'-' D< D' &= 1-j '>10' #11-' ><A1' &=' D1' ==' B1 0' &=' D1' LBD1H?1 @ =& ' D<' D1' 1' 0@ L1B? & 0@ BB?C'1 0' &=' &&A0@ <-A' <-A' 1-<-0' 'A'+1 0' 1 0&-0' KD'BD' D<+1' #11-' '>j C1<BD1A' '-' D1' 0<'A' LBD1H?1 @ &=' "1# 0@ BB&>C 0@ D-A' & D1 ' "1>><-A0@ <-A' KD'BD' <@ D&?.D' D1 ' D<+1' &==1 1A' D1>' D1 1' &' 0D1K' & ' C@1<A' =& ' D1' ' "'0BD< .1' &=' D&01' >C1<BD>1-0' <BB& A'-.' &' D1' <K@ D1 ' D<+1' -& ' #11-' <@K< 0' D1 1?-&' 1B1'+1A' D1 1 &=& 1@ 0 ' D&?' D<+'-.' 1LC 100' &>><-A>1-' # ' F '' ' & ' 1 1 ' &=' D1' E 1< ' & ' '+ ' 1<@@ F D1' . 1< ' " 0H?'1 @ -100' '0BD'1=@ <-A' " 1@< ' &=' D1' 0 'A' 1 0&-0' '>j C1<BD1A@ <-A' -&' A+<- <.1' &' D1' '-.G ''0' & A<'-1A' <-A' <001-1A' D<' D1' < &-0' &=' D1' 0<'A' LBD1H?1 ' 0D<@@ = &>' D1-B1=& D' D<+1' ='A@ &K1 ' &' D1< ' 1+1 ' -0K1 ' &=' 1+1 ' "1><-A' ><A1' '-' D1' 0<>1' <GB ' H?1 @ 0&' D<' 1+1 ' 1 0&-' D<' '0' '>C1<BD1A' & ' ' -' C1<BD<#@1' &='<- ' <?01' # ' D'>01@=@ & ' # ' <-' 1 0&-@ 0D<@@ #1' = &>' D1-B1=& D' 1B1'+1A' '-' $ '0<>1' LBD1j H?1 ' &' C@1<A' 0?1' <-A' D<+1' D'0 1<0&-<#@1' "'0BD< .1' '-' D'0 1D<@=@ K' D&?' < '-.' &' 0?'-.'<-' F ' @)' =' & D1 ' &>><-A>1-' KD< 0&1+1=

@ 1B<?01' D<' . 1<' '1B#'1=1' D<+1' D<CC1A' '-' '>10' C<0' &' A'+1 0' 1 0&-0@ <0 K1@@ &' & A0' &=' D1' 1<@>@ <0' & D1 @ KD'BD' K1 1' 1 <'-1A' & ' <00'. -1A' &' 01 +1' &?' & A' D1' , '-.@ # ' CA1-? 10' & ' K' D# ' -A1-? 10@ '-' D'0 <0 <-A' D'0 100<.10@ & ' '-' & D1 ' 0--1 @ <-A' =& ' = 1' 0<>1' < 010 1B1'+1' B1 <'-' ?>0 &=' &-1 ' <' =&1' 1B1'C ' &=' =&1' ' LBD1H?1 @ &' A01KD1 1' # ' 00'. -> 1-@ KD'BD' ?>0 D<+1' #11-' C?' ?C&-' D1>' '-' D1' &@@0' &=' =&1' 0<'A' LBD1H?1 @ <0 &-1 ' 1B1'+1A' # ' F < '&=' &<-@ A' =& ' D<' <?01' =&1' 0<>1' ?>0 0D&?@A' ?-' '-' "1><-A' ?C&-' D1>' <' D1' LBD1H?1 ' <0' <' B@1< ' " 1# @ /)' <@ D&?.D' D1' 0<'A' 1 j 0&-0 0&' 1 <'-1A@ D& ' 1' 0@ L1B? & 0@ BB?C'1 0' &=' =&1' 'E&&A0@ & ' <-A' 1-<- 0@ <= 1 ' =&< ' " 1< D@ D<+1' A1><-A1A' &' #1' <A>' 1A' &' B >C' &=' D1' ?'C0' 1B1'+1A@ `KD'BD/P' D< D' -& ' #11-' . <- 1A' &' D1>0' #? ' D1 'D<+1' #11-' B&-0 <'-1A' &' C? 0?1' D1' ' `E <C=P' # ' D1' E 1<' &=' '+ ' 1<@ A' 1 I 1A' &' D1' 1<0? 1 ' <-A' < &-0' D1 1@ KD1 1# ' ' 'K<0' B&>><-A1A' ' D1' 1<0? 1 ' <-A' = -0@ &' <BB&>C ' K' D' D1>' '-' , 0' 1D<@=G KD'BD' F < <- 0' &= 1- '>10' D<+1' #11-' A1-'1A@ #1B<?01' D<' D1' , '-./0' ='B1 0' -1K@ ' ><A1' C1 B<01' D<A' -&' , -&K@1A.1' &=' 0?BD' 1 <'-'-.' ><A1' #1=& 1' =&1' ' '>1G <-A' 0&>1 '>1' D<+1' #11-' . <- 1A@ #?' -& ' 0& =&@@ ' <0' 1<0&-' <-A' D1' <01' 1H?' 1A'` ' -A' = <0@ >?A" <0' =&1' 0<>1' F < <- ' K&?@A' D<' BB& >C /P' 0D&?@A' -& ' #1' 11=& 1A@ #?' &-@ ' &=' =&1' ?>'0&' 1B< 1A' # ' &<-@ KD1 1<0' <' . 1< 1 ' ?>' C1 B<01' K<0' A?1' &' =&1>' &=' 1<0&-@ &' D1' . 1<' '0BD'1=' <-A' '-A1 <-B1' &=' D1' 0<'A' 1 0&-0G ' '0' & A<'-1A' <-A' <001-1A' D<' &=' <@@ 1&C@1' KD'BD' = &>' D1-B1=& D' 0D<@@ #1' 1 <'-1A' & ' <00'. -1A' &' 1 +1' D1' , '-.@ D1' ' &+1-<- 0' 0D<@@ #1' C?' ' '-' F ' '-.@ <= A' 01-' &' D1' LBD1H?1 @ D1 1' &' 1><'-' &=' 1B& A'G 0&' D<' ' <' KD<' '>1' D<' <-' 1 j 0&-' 0&' 1 <'-1A@ D'0' A 0' & ' L1B? & 0@ BB?C'1 0' &=' D1' E&&A0@ & ' <-A8 1-<- 0@ B&>1' &' <BB&>C ' D1 1j &=' <' D1' LBD1H?1 @ D1 ' 0D<@@ #1' D1 1 &' 1B1'+1A@ <-A' D<+1' A?1' @@&K<-B1' '-' =&1' ' BB& >C @ <BB& A'-.' &' D1' &-1-' &=' =&A ' &+1-<- ' N)' =' C1 B<01' <-' '1C1<@& ' &?-1 ><-A' #1' ><A1' &=' 0?BD' ` 1 '-?1/P' &=' <-' 1 0&-' <= 1 ' D<' D'0 &+1-<- 0' #1' C?' ' '-' F ' j '-.@ <-A' 01-' &' D1' 0<'A' LBD1H?1 @ <0 '0' <=& 10<'A9

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%' ' 'N

W ! !-/ -2' &-' !' LBD1H? ' 1 '" "# /' -/'20!' !&" &2# "*!' 7& .0' !' M&-*(2 V "&' .'"+! !"

] 1 "!2' ##.0-2' &-' !' %#+&!SO!'" . '3!"2.-2' "! &-!/' .' 01 +1A' M&-*"&-' &2' V "2' ." 1 ; 22&!20

.'!- -2' ." 20# ' !"'&#!' 2 +' ; !' &-' V "&&-*' -/' 2!-' &- .' !' %# !SO!'" H

-/' +&E!7&2!' !' 6! ! +2' -/' .0- !"k 1 -/2' !"!.

!

A10BD< .1 ' @10 A110 C0&-10 AU+ - ' H ' >10>10 @10 =1B& =1 ' I ' C110 = ''001- ' A1 ' C&@1 ' 1 -' C&@1 ' -&+1@@1>1-' 1- 1\' 1-' 10BD1H1 g I ' 0? ' B1 ' -&+1g C110 =<' ' I ' -&+1g ?..18 >1-' '@@&1 0 <? 1 =&' \' 1-A?\g <' . ' A<><.1 ' I ' A1@< ' A10 C '10 0 -\' C=' ' <? & G A0 ' & A1'-1\' I ' <001- -\' ' A10& 1 < ' H ' '1g 1B& A & +1 @1 1-? 1 A B1@@1 < +1-?\' 1-' A' ' 0BD1H1 ' C ><-A1>1-' @1 &'' B&>1 A' ' 10 g H @1 1>1># <-B1 ' 1 ' T' &=='B1 A1@0 <BB&>C 10 01 &-' A1><-A1\' > > 1-<- ' =1B1 B1001 ' @< 0?' 1 1-' B1@@1 C '1 C C&@10 < 1- 1 1 ' ' @1-A&001>1-' A1@ # '1= +&?BD<-' @1 1-? 1 A1#' 1B& A A1g A' ' ?..1 <1-' 0<-\' -&+1g ?..1>1-' &?' C110 =<' 1 1-' B1@@1 C '1 C@?'0 <+<-

' 10 ' <001- ?\' P @1 &'' A1=1-A1 10 &' 1>1-' H A10& 1 -1 0&' ' '1-\' A&-1\' C ' ?-1 B&>'00'&-' <==<' 1 1-' @1 A ' 0BD1H1 ' C? ' @1 =11 A1 @1 B H'' @1 =1 <' &?@ 1 A1?L 0&@A\' <- 0&?@1>1-g -1 C ' @1 1B& A A1 -'0'' C '?0 <+1B @< # '1= 0'-&?-1 H A1?L 0&@A\' 0&?@1>1-' B&>1 A1+<-' B10 D1? 10 '0&@&'1 ' 10 1 =1 ' I ' ?01\

' C3 1 +&?0 ><-A&-0 H @10 A' \' 10 <#@'001>1 F m I ' & A'-<-B10 =<B1\' A?1>1-' '1 ' I ' C?##1 ' 10 @ 110 ? .D0 '@@10 =1 ' 10 < BD100 I ' <? 0 @ '1''L -& <#@10 AA-\' + 1 #<'@@'1 A1'-\' = <-BD'010 I ' A1D& 0 I ' A?1>1-' @10 .< A' ' I '=1 ' 1 1-' ' 01@&-B @1 1- ? ' I '=& >1 A'B1@@10

" &-' C 10>&'.-<-B1 A1 -R1 . - ' 1<g <' F 10 ' ' @1 L+' ' & ' A1 < ' <-' A1 --=1 1.-1 H?'-

.-Z 1 -/ !'/&"&*0- ' <* M 2 &#!#.1& &;H

A'0BD< .1 D1 0<'A 1 0&-0 D1 1&=g #1=& 1 D<' D1 0<>1 1B& A0 <-A &B1001 0 K1 1 F & A # ' F & A -1K@ ' 1-1 1A'-' D1 LBD1H?1 g <-A D1 1?C&-' -1K &B100 ><A1g <-A -1F ?A.1>1-0 D1 1 <-& D1 ' >1 .'+1-g &' D1 . 1<' "<><.1 <-A "1@<' &=' D1 < '10g K' D&?' &=' &' D1 , '-.; '0 & A<'-1A <-A <001- 1A D<' = &>' D1-B1=& D <= 1 ' D<' 0?BD 1B& Ag `d& P D1 1-& ' &=' D1 0<>1g 0D<@@ B&>1 '- &' D1 0<'A LBD1j H?1 ' # ' D1 , '-./0 &>><-A>1-g <0 ''0 0<'Ag D<' D1 1>1># <-B1 g '-' KD&01 ='B1 0?BD BB&>C 0 0D<@@ #1 AB n 0-A1Ag 0D<@@ C 101- @ ' <?01 D1 ?'' &' B1<01 '-' D<' 1D<@=g # ' F & A0 &' #1 1- 1 1A ?C&-' D1 -A& 01>1-' &=' D1 F ' g +&?BD'-.' D1 1-& ' &=' D1 1B& A &=' D1 0<'A ?A.1>1-g & ' ><a'-.' &=' &B100 =? D1 ''-' D'0 1D<@=

g ' '0 <001- 1Ag <-A D1 , '-.' = <' @ ' A1 =1-A1 D ' D< ' = &>' D1-B1=& D -& D'-.' 0D<@@ #1 .'+1-' =& ' ><a'-.' &=' <' &>>'00'&-''-' D1 0<'A LBD1H?1 ' =& ' D1 ! 11 &=' D1 @1 a KD'BD 0D<@@ ><a1 D1 0<>1g <#&+1' K&' D'@@'-.0 &-@ G -& ' =& ' D1 1B& A &=' '0'' C '?0 K' D D1 F ' g #? ' K&' D'@@'-.0 &-@ g <0 <=& 1 D'0 ' >1 K<0 K&-' &' #1 A&-1 <-A ?01A

-A D1 1=& 1 F 1 B&>><-A &? D< ' D1 0<'A 0 <#@'0Dj >1-0 <-A A'-<-B10 &? A& B<-=1 &' #1 A?@ ' C &B@<'>1A <-A C?#@'0D1A '-' D1 ' '10g & &?.D0g &K-0g !<' 0g < a1 0g <-A & D1 ' -& <#@1 @<B10 K' D'-' &? ' <'@'K'Ba@ K' D'-' ! <-BD'010 <-A K' D&? g <-A &' #1 A?@ ' ><'- <'-1A <-A a1C ' <BB& A'-.' &' D1 1-& ' <-A ! & >' D1 1&=' E'+1-' ?-A1 ' D1 F ' -100 &=' &? ' E 1<' 1<@ <' F10 >'-0 1 g D1 1+1- 11- D '' < ' &=' < g '-' D1 ! '= D 1< ' &=' &? ' 1'.-

'a1 &>><-A0 K1 1 A' 1^1A &' D1 01+1 <@ D1 '=0 D &?.DC?' -.@<-A

' K' D '' 'G '<

C&-' <-' 0/*1!-' . '+1 '01-' %# !SO!"' !' 6!1!1k ;" -#!"2 +' /&2# "*!' ! ' 3 " @

!110 &=' +!"EZ . 1 1&2&.-2' IB

*' + % ' + % ' ", + +%'%+ ' +'%+ ' " '

%' -+ % ' ./+ ' 0 1/ 2' %' " + ' ++% ' 3%+%+

' ' ' ' ' A ' ' ' ,

' B ' " ') ' .' 5 ' ' = ' > !

ME' = ' ' G 'U #'HH' '6*

'B' & -?#g <= > ' ?>' A1' B&" <001-0?' -=&' <B' <' C I '>' ><.-< ? ' I ' < ?-' 1.-" --' .@ -&# ' ?@ '>&' C@'<>1-&' R# <00=1 1-A?' C' 01B< 'H " 1.'>'-1' I ' -1''& <B&1 1.-" -=" C2AB'g I ' B<-A@0< ' 1 ?0A1>g .?1A<>' B&-B& A'1' i' 1 &=A'-<A&10 =11' =?'001-' '-R' <@'<' 0?# D<B' =& ><;

? ' &1' C=' ' A?' &'<@>1' " 1-.@1R 1g <'1-' 10 1' =<' \' C' - 1'@ ' @1' & '@10 ` C@< \ P' 1'.-0g I &10 A?' A' ' &'0 >1' 10 1<< \' B10 ' C@1>1-' 1-?\'<' F 10 >' Q@1-A1><"/' ' A1' 1-F' ='<-' < < -g '<-' A?' 1. 1' -=1' 1' TU 'BD< A'H?'-g R <'-10 & A'-<-B10 I ' 10 <#@'001>1-\' 1=' @<' =& >1' H' 01-0?'

'='1>1-' 10 ' <001- ?\' I ' <BB& A1\' 1-' C@1>1-' H' &? 10 >< 10 A10 <?-.10 >< BD<-\g A1' H?1@B&-H g -<B@&-' &?' C<''0 H'@0 0&'1= g 10 1<- \' A1@ <>'0 11' -=1' 5' @1' &'' I ' A1' 0&-' &'<@>1'0&'1-' #'1-'+1-?\g I ' = <?= BD18 >1-' + h ' C? &-' AA-\' @1' &'<@>1' " 1-. 1=11g I ' <'@@&? 0' 1-' @1' C&<' ' -=1' A' ' <#-' AA-\' = <-BD'01 B&>1' A1DC 0g I ' '@@&1H10 B&- 01 ' ='BD<-A1 ' I ' A1> 1 ' <' @&-.1>1-' B&>1' #&-' @&? '01>#@1 <g B&>1' B1?L' @10

/ - 1 @'-1A &-' D1' &@@
\g @1' < A" 0BD1'-' ?C0 @1' =10 1' U: ' #' !

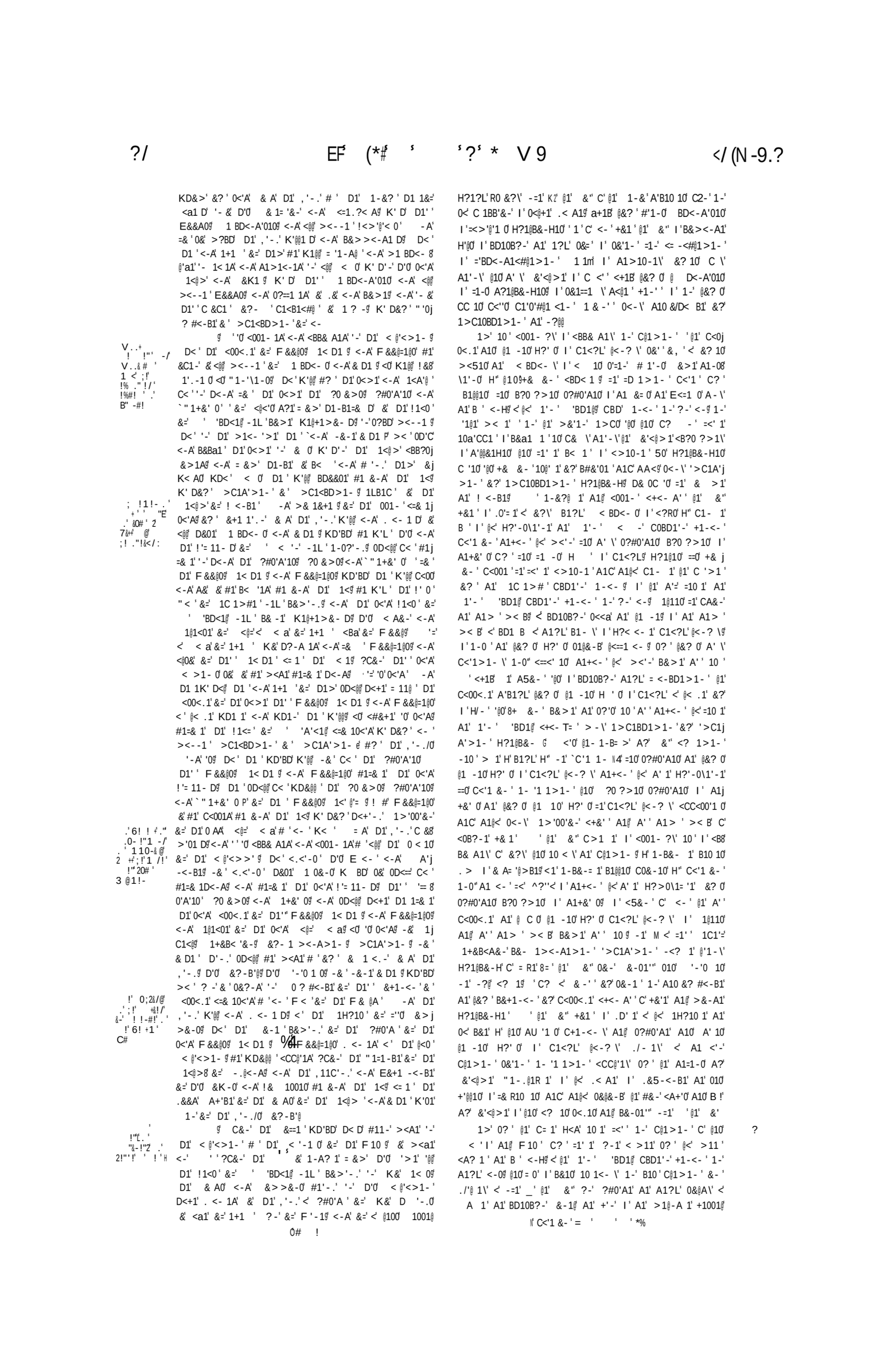
' 4 ' '

' ' &' D1' 0D1 '=' &=' & -K<@@g E 11 '-. FD1 1<0 K' D D1' B&>>&-' 001-' &='] 0<-A' D1' &#@10g E 1<' 1-g <-A' &>>&-0 &=' &?' 1<@>' &=' -.@<-A g <00'0 '-.' 0' '-'C? ' @<0 ' < @'<>1-g =& ' @'1' #1 1 ' E&+1 - >1-' <-A' >1-A>1-' &=' &?' 0<'A' 1<@>g <-A' D1' 1 BD<-A'010 &=' D1' 0<>1g B1 <'-' . 11>1-0 &' A'-<-B10 K1 1g <>&-.' & D1 ' D'-.0g ><A1'-' D'0 ! & >;

! & ' D1' B&>>&-' &=' ' &=' D1' 1<@>' &=' -.@<-A g A'+1 0 A'-<= B10 <-A' 0 <#@'0D>1-0 D<+1' #11-' ><A1' # '&?' & A' D1' '- ' D1' 1@< 10g & A0g <-A' &>j >&-0 &=' D1' =K @' 1<=< g #1'-.' '-' D'0 C 101- ' < @'<j >1-' D&@A1-' < ' F 10 >'-0 1 ' A'1' Q -U ' -1L ' <= 1 ' D1' ! 1<0 P' &=' i &D-' & @< '-1g D1' !'= D' 1<'/ &=' D1' 1'.-' &=' # ' & A ' , '-.' 'BD< A' D1' 1B&-A g '-' D1' ! & >' =&@@&K'-.

! g ' '0 <BB& A1A' <-A' <001-1A' '-' D1' < @'<g ' ' >1-g 1 ' <@@ <--1 ' &=' 1 BD<-0 <-.1 0g &=' 1 BD<-' KD< 0&1+1 ' < '&-' & ' &?- ' D1 ' #1g #1'-.' &=' D1' <-.1 1' >' ' &=' #0'8, '-.' <-A'&='D'0' 1<@>g < ' #1' K1@B&>1g <-A' = 11@ ' >< ' B&>1' K' D'-' D1' 1<@>'&=' -.@<-A g <-A' 1&' '-?1 1@01KD1 1' K' @''-' D1' , '-./0' &K1 g <0 F1@@ K' D'-' ! <-'\? '?' <-A BD'01' <0 K' D&? g <-A' D1 1' &' #1' B&-+1 0<-g &' >1 8 BD<-A'01' <-A' < ' <0 @&-.' <0 D1>' @'a1 D g <0 D&01'

) $ $0



i1 &-Ƀ ĝ<==1 <- ' <' >10-1 ' A1'-\' ĝ1ƀ &'<ĝ>1' " 1- .ĝ1R 1 ' '<?L'-Ƀ' + ' A ' <ƀ ĝ'+ 1<' I ' 1B1'+&+? Ƥ' A1' &? 10ƀ >< 10ƀ A<? 1\' BD<-A'01Ʀ `</Ƥ' <>10-1 0ƀ =D& 0 h Ƥ' I ' +1-<> \' A1'-\' ĝ1' &'<ĝ>1'<+<- A' ƀ 0'#-' B10 ' <00<+&' ' A1ƀ &? 10ƀ >< 10ƀ A10ƀ A <Cƀ A1' ĝ1 -1' B >1' A<? 10ƀ ='B#<-8ƀ A'010ƀ H?1ĝB&-H10ƀ D& 0C '0ƀ ĝ1 -10ƀ H?' 0ƀ I ' C1<?L' ĝ<- \ƀ &?ĝ 1' ĝ10ƀ B?0 ?>10ƀ I ' 0?#0'A10ƀ 1- ' A?1\' A1+<- ' ?0' .₩- ƀ A1ƀ L ' &? ' A1' <'ƀ <-' C001-' <-H '<ƀ =10 1' A1' 1'- ' '1D1ƀ C0BD' 1-<- ƀ I ' A1' >10 -1' ĝ<' =1 1' A1' A- ' 'BD1ĝƀ C' A1?L' -0 1-A1 0 C0B#1'-1>1- ' 1-0?<- \' '00'C ' &? 10ƀ +&'10ƀ H' ĝ10 A1-'1 0ƀ 1- ' C+1-<- \' 0&'1- ' 1 '1 1>1 ' ' <CCĝ'1\' 0? ' ĝ<' 0<ĝ+1' .< A1' A1' ĝ<' >11 ' I ' -?ƀ C ' <'ĝĝ&? 0 ' Q ' <' ĝ<' 1H?10 1' A1' ĝ<' &1' ĝ1' &" +&1 ' H' &-_ &D<-' D'ĝ'C& ' D'+<ĝ1 ' 0&' ' 10B1'+& ' I ' E< A1 -' A1' ĝ10ƀ A1-'1 0ƀ 0&? A<- Ƥ' A1ƀ A' ' 0?#0'A1' A1' ĝ<' +'ĝĝ1' A1' &? D<>C &-' 0ƀ ĝ1' F 10 ' C' C< 1- 11' A?' &" 1- ' <='<' 0ƀ <0ƀ A' 10ƀ C0&-10ƀ 1-' A?1' =&- 1' ' , &- ' <?L" <00' .= 1\' 5=<'-0ƀ 0?=='0<- \' C0&-10ƀ A1C' ĝ1' &" A10 1' &- 1 &ĝĝ& 0ƀ <0ƀ &'ĝĝ& 0ƀ <+<>A' - ' ' <, &- ' ĝ10ƀ A' \' .1 - \' 10 1<- \' 1-'Aa1' < >11' 1- '1 1>1- ' &? \' ĝ&? 0ƀ .<' . -10ƀ I ' C-' 0ƀ <' A1C ' ' 1- 1' 1?L' A <- 1' ĝ< >11' A10?'0A' 1 ' ĝ' &- ' ĝ10ƀ A> ' <ĝL' I ' <? 10ƀ 10 1<- \' 1-' A' 1' < >11' <00? 1\' A&' 0<ĝ+1 ' ĝ10ƀ <> ' I ' <ĝĝ'10ƀ A?' C" - 1' ?' 0<-\' A< -C8ƀ -<.1' ĝ<' 1' <' 1? ' &?' <' -?ĝ A1' 1?L' C' < B?-1' +&'1ƀ I ' 0'ĝ0ƀ I B1- ' I ' 11&' 0&' ' A?1>1- ' C+1\ƀ 'ĝ0' 01' &##ĝ'.18ƀ B> ' 0? ' . '' ' C 1 ' A1- ' ĝ<' 1' A?1>1- ' ĝ10ƀ <>1-A10 1>' +&1 ' ĝ1' &" I ' ><-A1' I ' 10 ' <001- ?' 1-' Cĝ1>1- ƀ C' ĝ10ƀ ĝ< \' _ 0ƀ I ' B&10ƀ H' &? 1Rƀ 0'- .?ĝ1 10ƀ C &-10ƀ I ' I 10' H<, &- ' A10& 1' ĝ<' 0&>& ĝB1' A1' Cĝ18ƀ >1- ' +'1 1- 'A1' B ' 1-' < <- ' `<0' Cĝ1>1- \'$ 4C' >< 1' B&>1' 'ĝ0'0&- ' 1-?\' A1' D'' 1' I ' <' 1ĝĝ1' <1B?0 ?>1\' A1' -\' ĝ1' &'<ĝ>1' " 1- .ĝ1= 1' A<?-A1-1 1 ' 'H?1ĝB&-Hƀ C0&-1' A1' >10>1' ĝ1' &'<ĝ>1' H<, <' A10& 1' ĝ<' A' 1' 0&>&-B1ƀ 0&' ' 'ĝ' B1+10HC' +10 ƀ' =11ƀ = '&? ' " ?1ƀ' &D ƀ < &-ƀ <-1 1' D'+<ĝ1 ' A1' &- 11' ' 1\1'-' A1' ' 1' ? .1'0ƀ A1' ? .# ' &?' <? 1' 0'-.?ĝ1 1' C0&-1' ? B&'<ĝ 11' ?1ĝB&-H ƀ 0&" <#01- 1' &?' -1' 1 1' > 1' <' ĝ<' Aa1' 0[ƀ >&-B1ƀ 0'ĝ -1' 01' C? <' 10&''<#ĝ1>1- ' I ' D&-10 1>1- ' 10 '81LB?01 ' A1 , 0' ĝ1' &" - 1' 0&a' <='B'1\' I ' <? 1> - ' C?-'\' 01ĝ&-Bƀ B1' H' <-A1-1>1- ' <' 10 1' ?01\' A1'-\' ĝ1' &'<ĝ>1' <+<- A' ' 1-' A' ' B<0' ' ' <0B?-' '0B&- ' A?' &'<ĝ>1'0 K ' A 0& 1' -1B ĝ'. < ƀ 1-' =A0<- '010' 1 & -10ƀ A10ƀ # '1=0ƀ A?' C ĝ1 <1- ' &?' H'ĝ' =<B1' 1- 1ĝ1001 ' D& 0ƀ A10ƀ ' \' 1 & -10ƀ <?B?-10- a11ƀ &?' ? .D0ƀ T ?1?L' 0&- ' 1-?m' I ' A< >B'1-' 1>Cƀ 0&ĝ&'1- ' +A'' ' <' C ĝ0>1- ' 0&a' C?-'\' 1-' ><51'H10 &' '<B?0 ?D'1\' A10 1'=<' ' 1-'ĝ1'B<0'A<?-A1- 11 1>' C B1ĝ' H' -& & '1' BD&01' 10 ' &>1- ' <' C ĝ?0 0ƀ <<ĝ? 110ƀ C0&-10ƀ A<- \' 1' A' ' &'<ĝ>1' <ĝ<- \' A1' &?- 11' % &?- 11' I ' A1' +'ĝĝ1' 1-' +'ĝĝ1' 1-' R <'-0' D<#a\' 0&?\' A 00a-?ĝ<A&-' A1' . =' ' 0<a 11ƀ I ' 0< \' 11DB1' A1' ' C'1 1' ĝ1' C0C1' &?' A10ƀ & A'-<' 0ƀ A10ƀ ĝ'1?L' &?' <? 1' <?B8ƀ & ' 1' 0?=='0<- 1ƀ C0BD1-' A1' &? ' 1-' <? 1ƀ -1> 1' 0&?ĝ18ƀ >1- ' 10ƀ 1 ĝ=1B0' I ' B'- >&' 0ƀ A -\' 10ƀ < BD10ƀ D< 10ƀ I ' <? 10ƀ ĝ'1?L' C?#ĝ'H?10ƀ &?' . 1'-A 1' B&- . 1.<B'&-' A?' C&1Cĝ1' ' 10 ƀ A' , 01 ' CA'B<A&-0ƀ B&- A. -<- 10ƀ D1 10 10ƀ I ' 1 &? 0ƀ -& &a10ƀ <' .₩- ' 1>#ĝ1 -1001>1- ' A1' ĝ<' =& ' I ' A10 ?1A&-' A1' ĝ&'10ƀ I ' A1' ĝ10 <' A1' 1'- 1' 0 . =B' < .0-A' C'ĝ' A10ƀ <ĝ>10ƀ A?' C&1Cĝ1' I ' A1' &? ' ĝ1' &'<ĝ>1' " 1- .ĝ1R 1ƀ B&>1' C@?0ƀ Cĝ1'-1>1- ' 10 ' &+1\' I ' 0?=='8ƀ 0<- 1>1? ' C+1\' A1+<- ' ĝ1' 1, 1- 'C1' 1-' A'1?' 1 B1 0H)' A1' <-R#' 0ƀ I ' ĝ10ƀ +10H10ƀ I ' <? 10ƀ ĝ< \' I ' <'0 10ƀ A1' " '+'-' 1' I ' " &<& 0ƀ A1' <-&?-' I ' A1' '+'ĝ1' I ' . - ' CA1' A1ƀ ĝ1 .'1' AA' A' ' A<ĝ>1' 1 1A<ĝ>' 1' D1' &ĝD

<= 1 ' D1' < 1ƀ &' #1' # &?.D ' K' D'-' D1' 1<ĝ>' &=' b" - ' . ' - .ĝ<-A;' -A' <ĝ0&' 'LC1-B1' &=' D1' &?-A' &' <a1' .1 *!' -/' <-A' 1B1'+1' &=' <'ƀ <--1 ' &=' & D1 ' 1 BD<-A'010ƀ & 3.0-/ *!= #1' # &?.D ' &? ' <-A' B&>'-.' K' D'-' D1' 1<ĝ>' <=& 1j 0<'Aƀ <0ƀ K1ĝĝƀ D<' 'ƀ &' 0< ƀ &=' <ĝĝ <--1 ' &=' F &&ĝ01-' ĝ& D0ƀ <0ƀ &=' <- ' & D1 ' 1 BD<-A'010ƀ 1LB1C ' F &&ĝ09 1< D1 ƀ <-A' F &&ĝ=1ĝ0ƀ &+1 ' D1' ?0 &- 0ƀ <-A' ?#0'j A'10ƀ D1 1&=' A?1' #1=& 1' D'0' E <- ƀ = &>' D1' K1- 8ƀ =' 0 ' " K ' &=' < ' D'0ƀ C 101- ' 1< ƀ 'ĝĝ D1' ! ' &=' <'-' 'BD<1ƀ -1L ' B&>'-.ƀ <-A' = &>' D1' 0<>1' ! 1<0 ' # ' K&' KD&ĝ1' 1< 0ƀ -1L ' 1-0?'-.;' &' <ĝK< 0ƀ D< ' 3". /0#!' D1' & ĝ1 ' D1 1&=' B&>'-.' #1' KD&ĝĝ ' <CC@'1A' ?C&-' !"!. ' .' !' D1' 0<=1' a11C'-.' &=' D1' 1<ƀ <-A' -&' < ' 1ĝ01KD1 1 +&!/' .' !' -A' < ' D1' 1H?10 ' &=' D1' &> >&-0ƀ D1' , '-.' K'ĝĝ 2 !' E!! &-*' D<' ' ' A>' D'ĝC& ƀ , -'.D ƀ #1' 1B1'+1 ' <-A' , 11C1 ' . ' ! ' &=' D1' &-1 ' '0'-.' C=' D1' 0<'A' ?#0'A ƀ = &>' D1' & 1A&' ' &K-' &=' &? D<>C &-' &K< A0ƀ D1' & Dƀ <-A' D< ' !"!. &D-' &ĝ'>&-A' <-A' D&><0ƀ 1<?C1-- ' #1' 1B&+1 0ƀ <-A' ,11C1 0ƀ &=' D1' 0<'A' ?#0'A ' '-' D1' &K-' &=' &? D<>& &-' <-A' = &>' D1-B1' &K< A0ƀ D1' F 10 ƀ # ' D1' , '-. 0ƀ 1 1 0ƀ < 1-0ƀ D1 1&=' & #1' ><A1' &' D1' 0<'A' 1 0&-0ƀ '-' A?1' ! & > ' -A' <ĝ0& B1 <'-' 0 ='3ĝ B'1- ' 1 0&-0ƀ 0D<ĝĝ #1' <00' .-1A' # ' D1' , '-.' &' #1' . - " ++!" &>C &ĝĝ1 0ƀ &' D1' 0<'A' &ĝĝ1^& 0 ' -A' D1' 1&Cĝ1' ! "ĝ-!"$ #1'-.' '-' D1' 0 =" > ' 0D<ĝĝ D<+1' KD&ĝĝ ' <ĝĝ D1' ' 2 +' /ĝ'&/!' E<'-0ƀ <-A' &=' 0ƀ & #1' A1C< 1A' #1 K'L ' D1>']"b &-2 A? '-.' D1' 0<'A' > ' <#&+10<'A;' -A' D1' A>a<ĝ0ƀ <-A' & D1 ' &=' D1' 0>A' > ƀ 0D<ĝĝ #1' <00? 1A' &' ! / 1&" + ' <+1' D1' , '-. 0ƀ ! '1-A0ƀ <-A' ĝĝ'10ƀ K' D&? ' "<>< .1' 2 +' 2 '!' &' #1' A&-1' &' D1>' ' &' <ĝĝ ' &=' D1>' # ' <- ' --+!22' !' K< ƀ <-A' '=' D1 ' A&ƀ <-A' a<' #1' A?ĝ ' ' &+1Aƀ D1 ' 6&-*(2 +&! D<ĝĝ #'-A' ` D1>' ?C&-' <' . '1+&?0ƀ <'-' D1 1&=' A?ĝ ' &' ><a1' >1-A0

ƀ D1' , '-.' A& D' K'ĝĝ' <-A' B&> ><-Aƀ <-A' ' '0ƀ <001- 1A' '-' D1' <' ĝ'<>1- ' # ' D1' 1ĝ< 10ƀ & A0ƀ <-A' ' !"@.-!' &> >&-0ƀ D<' <ĝĝ' <-A' '-.?ĝ<' 1 0&-0ƀ <-A' &> >&ĝ' 2 +' . ;!@' &Z >A '10'?A''BD' = &>' D1-B1='< D1DAƀ D<+1' ='ĝ1' ?> >&-0ƀ 011.-2' .' &=' D1' < ĝ'<>1- ƀ 0D<ĝĝ B&>1' = &>' D1-B1=& D' &' D1' 3 "&&0-!- C< ĝ'<>1- 0ƀ '-' D1' <-ĝ'1 ' <0' D1 ' < 1' #&?-A' &' A&ƀ <-A' `D<+1'04' #11-' <BB?0 &>1A' K' D'-' D1' 1<ĝ>' &=' -.j ĝ<-A' &=' &ĝA' '>10 ' -A' '=' <-' 1 0&-' &=' D1' <>1' 1<ĝ>ƀ KD'BD' =' &>' D1-B1=& D' 0D<ĝĝ D< 1' D1' <'A' ?>>&-0ƀ #1' D1' BD='ĝ0D&Cƀ '0D&Cƀ ###& ƀ '& 9)?a1ƀ < ĝĝ <-> ƀ <--1 1 ƀ , -'.D ' &=' D1' D' 19 ' '\1-' &=' ' ƀ ? .100' &=' & &?.Dƀ& ' & D1 '0'-.?ĝ<' 1 0&-' & ' &> >&-<ĝ ƀ A&' <#01-' D'>01ĝ=ƀ <-A' B&>1' -& ' < ' A'1' 0<'A' ?>>>' '1LB1C ' D1' >< ' 1<0&-<#ĝ ' <-A' D&-10ĝ ' 1LB?01' D'>' &' &? ' & A' D1' , '-.ƀ D1' 0D<ĝĝ #1' <>1 B1Aƀ <-A' & D1 K'01' C?-'0D1Aƀ <BB& A'-.' <0ƀ &=' &ĝA' '>10ƀ D< D' #11-' ?01A' &' #1' A&C1' K' D'-' D1' 0<'A' 1<ĝ>' '-' D1' 0<'A' < 1' -A' '=' <-' D1 '=='&=' D1' 3!- +<' .-' 1<ĝ>' #1' = &>' D1-B1=& D' -1.ĝ'.1-' '-' ><a'-.' D'0ƀ !"& 2' 1 ? -0ƀ &=' F ' 0ƀ &=' D1' < ĝ'<>1- ƀ & ' D<' D1' ĝ1<+1' = ' '-.' &?' &=' D1' 0<'A' 1 ? -0ƀ <-' ' '10ƀ & ' & &?.D0ƀ F@=' D' 6! 0"-2' . ' #1' #&?-Aƀ <-A' &=' &ĝA' '>1' K1 1' K&-' &' B&>1' ' D1' V "& 2' .' < ĝ'>1-' T ?2?L' 0&- ' 1-?m' I ' B "+& 1!- ' 'ƀ 0D1A' '<' D1' <--1 ' <-' K<0' <BB?0 &>1A' &' #1' A&-1' '-' D1' 0<'A' <01' '-' '>10ƀ C<0

ƀ !& <0>?BD' <0ƀ ' ' '0'&C1-@ ' a-&K-ƀ D<' D1 1' #1' A'+1 0ƀ 1+'ƀ 1 0&-0ƀ K' D'-' D1' 1<ĝ>ƀ .&'-.' = &>' <&'>' ' ' &?- ' &' &?- ƀ <-A' = &>' &K-' &' &K-ƀ'-' B1 <'-' C @?-0'&=' <#' 0ƀ ?-A1 ' " '00' >?ĝ< '&-' &=' . 1<' &@'-100ƀ <-A' K' D8' = 1 10'10=V &?' D1' 'B1-B1' 0)' &=' D1' -< '10' &=' D1' @<B10' &' & D1 ' 0?==' B'1- ' ? D& ' ƀ `C 1<BD'-.') ' A<'@ ƀ -&' -@ ' '-' D? BD10'<-A' D? BD < A0ƀ#? '<@0&' '-' < a1 0ƀ <' 0ƀ <-A' & D1 ' &C1-' @<B10ƀ KD1 1'<' . 1<' &-. 1.<'&-' &=' 1&C@1' '0ƀ A'+1 0ƀ 1 >& @ ' B&- <'-'-.' 1 10'10' <-A' -&j & '&?0' & 0ƀ &' D1' . 1<' 1>#@1'-'0D'-.' &=' D1' D '08' ='>" <' #ƀ <-A' "1= ? ' -' &='==' 1' <K0ƀ <-A' &=' D1' = < 1' &=' &@ ' D? BDƀ &' D1' >1<' 1 '@ &=' D1' &?@0' &=' D1' 1&C@1ƀ <-A' &=' <ĝĝ D1' 1<ĝ>' &=' -.@<-Aƀ <0' >& 1' C@<<'@ ' '0' =&?-A' <-A' 0?==' B' <?@ ' CB&+ ' #1'=& 1' $ D1 1+1 1-A' !< D1 ' '-' &A' D1' BD#'0D&C' &=' <- 1 j #? ƀ <-A' D1' '0D&C0' <CA' & D1 ' 1@< 10ƀ)' <0 1 0' &=' " '+'-' ƀ <-A' " &=@& 0' &=' <- -' <-A' &=' '+'@ <K9 R>A' <' . 1<' < '&=' D1' I 1 . '&=' D1'0<'A' 1< <"0C1B'<@@

) ' '

j +/' " -< &. 7' .&:& ' !2!' V ."/2

@$ '$0'N$* '5 ' ' $-+'$ ' &'%$- ' '$

&'

B EF (*' ' '?' *' ; <^ <dN 9.?

<001>#@1A' =& ' D'0 B<?01;' KD'BD' 1 0&-0' A&' <@0&' C 1<BD' A'+1 0' < 1 0' &=' @<-A1 9' &' 1-.1-A1 ' "'0j B& A' <-A' "'001- '&-' #1 K'L ' A'+1 0' 0 < 10' &=' D1' 0<'A' 1<@>9' <0 K1@@' C' ' ?<@ <0' 1>C& <@@' '-' 1LB' '-.' &=' D1' 1&C@19' &' D1' . 1<' 1 '@ &=' <@@' D1' 1<@>'6 KD'BD' 1<BD1 09 B' 1A' & ' 0?>>&-1A' #1=& 1' D1' A'j -< '10' &=' D1' @<B109' D1 1' &' <-0K1 ' &=' D<' KD1 1&=' D1 ' #1' '>C1<BD1A9 K'@@' -& ' &#1 ' &' D1' ' ?>>&-0' <-A' &>><-A>1- 09 -& ' B< 1' -&' &' D1' ' &-' '&-09 -& ' 1-0? 10' &=' D1' &@ ' D? BD9 #?' 1LC 100@ ' A10C'01' D1>;' <-A' >& 1&+1 ' # ' DA ' 0?# '@ ^<-A' >.1-'&?0' F& A0' A&' A <K'0P' D1' 1&C@1' &' D1<' D1' ' 1 >&-09 <-A' `A&/P' ><'- <'-' D1>' '-' D1' ' # ' 0 &-.' <-A'<-A'# '. 1<' &? 0;' '0'& A<'-1A' `<-A'<001- 1AP' '-' D'0 C 101-' < @'<>1-9 D<' D1' ,'-./0' &>>'0j 0'&-0#1' `><A1' <-AP' A' 1=1A' &' D1' D1 '=0' <-A' & D1 ' '-'0 1 0' &=' &? ' &+1 1'.-' & A' D1' ,'-.9 & ' & D1 ' 0?=='B'1-' 1 0&-0' `@1< -1A/P' <-A' <BB& A'-.' &' D1' 1 '='B< '&-0' &=' D1' 1@< 10' D1 1&=' &' #1' ><A1' '-' D1' D<-B1 ' = &>' '>1' &' '>19 &' < 10' <@@' 0?BD' 1<BD1 09 <-A' <@0&' D1' ' !<? & 09 <'- <'-1 09 <-A' #1 & 09 <-A' &' D&@A' D1>' '-' 10' <-A' 0 &-.' 'j 0&-9 '@@ D1 'K'@@ ?0 '= ' D1>' <BB& A'-.' &' D1' <K' <-A' 1<0&-' &=' &@ ' D? BD;' -A' D1',>.' K'@@ <-A' B&>8' ><-A1 D' D<' D1' D<-B1@@&' '><a1' 0?BD' &>>'00'&-0' <' <@@' '>109' D<' D1' # ' D1' 1@< 10' &' <-' '&=' D1>' 0D<@@ #1' B1 '='1A' <-A' D1 1&=' 1H?' 1A9 <0' 0' <=& 10<'A

F 19 K'@@'-.' D<' D1'0<'A' . 11>1-0' &' A'-<-B10' '-' <@@ <-A' 0'-.?@<' D1' ' 'B@10' 0D&?@A' #1' '-+'&@<#@' &#01 +1A9 B&>><-A' &?9 D<' D1' <=& 10<'A' . 11>1-0' &' A'-<-B10' '-' @<B10' K' D'-' &?' <'@'K'Ba9 KD1 1' &?' >< '011' =' 9 <0 K1@@ K' D'-' '#1 '10' <0 K' D&? 9 &?' A&' B<?01' &' #1' C?#@'B@ ' C &B@<'>1A9 <-A' &' #1' &#01 +1A9 <BB& A'-.' & D1' !& >' <#&+1' >< a1A' &? ' F' -100' D1',-.9<' F10 >'-0 1 9 D1' K1- 8' 0'L D' "< '&=' <

'a1' &>><-A0' K1 1' A' 1 1A' &' D1' 01+1 <@ D1 '=0' D &?.D&?' -.@<-A

)'C4$ *'%$'% 0' % 1 *' (.' 2'

B<?01' <001>#@1\9' I' @10' H?1@1<' C0&D10' 1-' <-L'-' A'1010' >< '1 0' A10B@<?-A 18' CF' A'0B& A' I' A'00&-B'&-' =<' 1' 1- 1' A'1010' 10 < \' A<' A=' &'<@>1' > -' 1>C& 1'0' B&>1' 10C' ' 1@L' 1-' B&>&A&-' A?' C&&@1 ' <' ./-A' C ' A1' &?' @1' &'<@>19' @10H?1@='0' C2BD<'@ \' < 1\' &-' 0&>&-1\' A1+<-' @10' & A'-<' 10' A10' ''1?L' C' ' 10C&-A 1' A&-' '=1' 0&-' 1>C10BD1\9' -1' +1?@@1-' &#1' 1' <' C 0' 0C>&-B1' I' ><-A1>1-\9' -1' @&? 0' >&-'B'&-0' -1' @10' B1-0? 10' A1' 1'-1' 0.@'01' BD< .1-' C&'-' 1'-\'@10' A10C'01-' 1L 0018' >1-9 I' 1-&?@ 1' C' @&? 0' 0?# '@10' C&@10' < 11-' I' 1-. -&-' @1' C&1C@1' A&'1' @&H=' 0< ' '&-0' I' A1' @10' ><'- 1-' ' 1-' @&? 0' 1 &? 0' C' =& 1' ><'-' I' C' .0-\' &? 10;' & A1-1' 10 '1-' B10 ' C@1>1-' ' & >' 0&-0' A?' &'' 0&'1-' A' 1=\' <0' '0B&-\' I' <?R0' '-'0 10' A'@ &'' &?' <0' <?R0' 0?=='0<-10' C0&-10' < ' I' 0&@& 'B' @10' R '='B<B'&-0' A1' @<\' 1-' <==<' 10' 1-' @<' D<-B0 <''1' A1' 1>C0' 1-' 1>C0' A< 10 1' #?\' '1?L' BD1&/0' I' @&? 0' =1? &/0' ><@-1-&0' I' <#1 &0' ' A1' @10' 1-' ' 1-' < 10' I' =& 1' C '0&-1' <-H9 '@0' 01' +1?@@1-' ?0 '='1' 01@&-B' 10&-' I' @<' @1 ' A1' 1'-1' 0.@'01G' 1' @1' &'' &'+&1' I' B&><-A1' H' @1' D<-B1@@1 '=<B1' A1@10' 1&-?0A&-0' <' m'@10' =&' \' H'@' M <' C' @10' @<\' &?' <0B?-' A1' 1?L' M ='1' I' 1=' ' 1H?'0' B&>1' A100?'0' 10' A'

&0' +&@1-10' ABO<0' B&-B& A'<' 0D>' & A'-<B&10' '-' &>'#G' I' 0? ?@'0' 0? 0' < AB?@'0' '-+'&@<#'@'R' &@#01 +< '9' '#'' CB'C--h' 8HA' CA= <0' B&-B& A'<<' 0'+1' &=AK<='#10' '-' @&B'0' '-= <' #<@@'+<>' ?<>' ?#'' >1@'?0' 1]C1A' 1' +'A1 '0' < -' '-= <' ''@ < 10' ' ' ' C-#@'B1' CB@<><'" C' 1-1 '' !!' ?L <'=& ><>' C-& < <> ' 6' <C?A' F 10 >' LL+ ' A'1' <''

&-0' ><-A< <' A' '.?- '0'-. ,0' 'B1B&>'A# ' C' -.

)) '>C' ! # ' '-9.?' Z' -9.?<9

1A --' ' '10 ' ' < - - &

' ' $ ' ' 5 ' > !

' H4' 6 J''N$ ' ' ' !" 'L % 'CC' 'VU

C ', E' &' D1' D1 '=' &=',1-9 E 11 '-.;',-&K' 1' D<' F1' D<+1' B<?01A' B1 <'-' <?10@ A'-<-B10@ <-A' 1>'00'&-0 '-' &?' @<0' <@'<>1-' D@@A1-' <' F10 >'-0 1 9 =&' D1' &>>&-' F1<@ &=' &?' 1<@>' &=' -.@<-A@ &'#1' ><A1' '-' D101' F& A0;

&' D1' <?A'<-A' &-&?' &=' @>'.D 'E&A@ <-A'&=' &?' &@ ' & D1' D1' D? CD@ <-A' & D1' &>>&A' ' `<-A' &=' '&=' D1' 1<@>' &=' -.@<-A@ <-A' &=' D1' &>8' >&-<@ '&=' D1' 0<>19 P' &?' & A' 'BD< A' # ' D1' E <B1' &=' E&A',-.' &=' -.@<-A' <-A' &=' <'@B19 <-A' & A' &=' 1@<-A@ # ' D1' 001-' &=' D1' 1@< 10@ ` & A09/P' <-A' &>>&-0' &=' D1' 0<'A' 1<@>' 5 ' -.@<-A@ '-' D'0' < @'<j >1-' D&@A1-' <' F10 >'-0 1' D1' &-A< ' '-' D1' <0' &=' ' 'BD<1@@ '-' D1' 'L D' 1< '&=' D'0' 1' .-9 D< D' B<?01A' &' #1' ><A1' <-A' 0 <#@'0D1A' B1 <'-' < ? 10@ A'-<-B10@ 1>'00'&-0@ <-A' < A&-0@ '-' D1' !& >'=&@@&K'-.;

! 9 ' '0' & A<'-1A' <-A' <BB& A1A' D<' &?' &@ ' & D1' D1' D? BD' &=' -.@<-A' D<+1' <@@' D1' '#1 '10' KD&@1' <-A' ?-D? 9 <-A' D1' <>1'=?@@ ' 1-&' <-A' ?01;' -A' D<' D1' E 1<' D< 1 9 <-A' D1' D< 1' &=' D1' !& 10 9 <-A' D1' ` < ? 1'/P' &=' ? +1 & 0' =&' D1' ,'-./0

' $ = & W ,& # #$ @% &

)'4 " ' *'Q $ ' ')' %

' $ ' ' 5 ' > !

'=' ,<-1' 0<D>' A<0' -&0' H?1A<>' < ? <' V' 'D-<='A10' I' 1>'00'&-10' '-' ?@ '>&' @'<>1-&' - &' <C?A' F 10 " 1-&' C' B&" ?A@' < 1' 1.-" -'@ -.@ ='1 " =1B'001' '-' D1B' +/#<

A' @<?A1>' 1' D&-&1>' '-'C& 1-'0' "1" I' I' < '0' BB@'1' B&>&A?>f' 1.-" -." I'?'@' < 1>' 1" C?#@'B1' A-0' ' ?0' "1" . <' 1L' -.@' I'! <-' I' A-0' '#-9 A1' <001-0?' C@<&' A?B?>' &>' ?>' < &-?' I' &' < ?>' A ' 1.-" -. ''-' @'<>1-&'0?&' <C?A' F 10 h' A'1' ?-1''-' <#' <' '1#'0' --&' 1.-"0?" -.'01L &' B&-+&B< &9 0 < ? <' H?1A<>' & A'-<B#10' 1>'00'&-10' I' CA&-<B#10' ='1 " =1B'' I' 0 <#'@' " '-' =& ><' 0?#01H?1-' -' C '>'0' & A'-< ?>' 10' I' B&-B& A< ?>' HA' 1<' <R' BB''<' -.@'B<-<' #1<' &>10' @'# < 10' 0?<0' '- 1. <0' I' '@@10<0' <B' 1'0A1>' C@1-1' .<?A1<' I' ? < G' I' HA' <.-<' < <' I' < <' A1' !& 10 < 0 < ? <H9 =1Q@<' A1' C+'0& '#

*
&;!" &!2'
. ' %@!'
0"# 'C#'
#.- @" 1!/

B3 (* ' I' / ' *' -V >

?' D&0C'B'&' A'@@ 1.'0' I ' <@'& ' <B' &>'<' <@'<' 0 < ? < I' & A' -<A I 10' <- 1' D1B' 1>C1 <' = <' I' -&-A?>' 1+&B< <' '-' &=''#4' 0?'0' < 'B?,0 =' >' ' &#01 +1 - ' I' 1L1B?=&" WA1#' 1' ?L <' 1@'1>'1C A1>' A1><-A1-

1>' ?' # '<' A1' A1#' &' I' B& -C& &' <@''0H ' =Bh' <B8 ''#4' H?1B?>H9' A1B1R&' B<C'<- ' '-' &>' I' A' '.< ' 'B1B&>' '#4' &'-' ?#" B&- < ?0' <BB'&-?' 1< A1>' 1 '01 '- ' & A'-< ?' 10' I' B&-B& A< ?>' HA' 0" A1B1R&' '-' C, '0' 0?C' #-'#4' '@@'0' -< < ?' = ' ' B&- <= ?>' '-A1' =& 1' =1 -' '-' <@'&' &'-' H0>' '-' #=" & '.'-<@" B&-A-1 ' HA' ?-B' '-B&- '-1- X #=1' '@@?A' C1-' ?0' B<001

1>' & A'-< ?' 1 ' I' B&-B& A< ?>' HA' &'-'< #='< A1' -&B?>1-A0' +'B11C>' <,< +?@.< 'R' -?-B?C< <' ='<- ' A18' B1RC' <A' 1@1BB&1'-' H?1 1- '0' '-' -< ?' < <- 'H?' ?0' M'8 < <' +1@' 1B'<>' '-' -< ? < <00'0<'0' R>'-<#'@'?' B& <>' ?0A ' A-" 1.'0' A1' ?-&' <-B&' +1@ <@R&' 01?' ?0 'B' <0 < ' '-' &>' @&B" B<C'1-A' <00'.-' I' <00'.-<-A

1>' & A'-< ?>' '0 ' I' B&-B&'A< +<-' HA' &' ''< '' & ?8' @<'-1- <' =B& ' B1R&=H2' >?-'>1- & 0' '-' & ?@'0' <-B1@@< ' ? '?0H ' <-B# ' I' B0B'" 1.'0' <- 1' D1B' 1>C1 <' ' &8' ?@< & '9 I' C&0 >&A?>' C' CA' & 10' A'-' 1.'0' I' 1.-" '-' '-0? 1BB&1' -?C' '-= <' 'A1>' 1.-=" 01A'B'&01' 0?#& <' A1#'B1 < & ' 01<' <@'<'0' 1@&-.< 1 9 0?# ><.-&' 0'.'@'&' A-" 1.'0' <#0H' =1&A&' 0'.'@@" '-A1' 0&@+1-A' =& ><' A1#' 0' 1L1>@2@@='B1- 9 HAH9' 1L1>C@'@<B I 10' '@@1' 0'B' F 1' 1 08 A1>' 0'-' +'.& '0' I' 1==1= ?0' '-' &'-'#X' 0'B?' =B<' I' >?8' -'>1- <' '@'<' ' - 1. <' I' A@10<' '' <' '?'001<

1>' & A'-< ?' 10' ' B&-B& A< ?>' HA' ?0 h' <A' < i ' B<C=1-A' I' .<&@<0' A1@'#<-A' <00'.-<A' I' <00'.-<-A" A1B1RT2 1-1<-' 0100'&-10' 0?<0' '-' C '-B'C<@'#0' I' B<C' <''#4' 0'-.?@& ' &'-9 ?#" +'A1D' &'-' 1& A1>' &>' < ??' 18' -1- ' +1@ '>C&0=?>' 1-1#'>

1>' B&>0' ><@1= =& 10' I' <C & 10' A-< ' I' ='@'< ' -&#'@'?' <@'< H9' >? '+'&@1-B'?0' I' C@?0' 0&@' &' D''0' A'1#4' H?<0" '-' &'-" C 1' 1.-" A " '-+<@10B1- 10@ & A'-< ?' 10' I' 0 < ? ?' HA' -#'B?>H9' I' H?< A&B?>H9 ' A-1' ='@'1' I' <@'1' >?@'1 1 ' CA11' A1B &' <C'<'' 9 1' C&0 '

<C ?>'# " <C & '#4' B&-01-01 '- 9 HA' <>' <C & 10' 0'+H <C'1- 10' H0>' <C 1' I' 1&C' H?'@' A1B1 &' '-D<#'@' 1-' I' '-D<#'@10' 0'-' 'C0&' =B&' <A' &>1>' D1 1A' < 1>' A& 1>' 0'+1' B&- ?-I?>'=1&=<>1- ?' C&0' >& 1>' +' & ' I' <- 10' B100 ' 0?& 0' 1<A' +1@' +1<A'1>A' I' HA' 0 < '>' '-' D&B' B< ?' CL'>h' A1' 0<-.?'-1' 1& A1>' <C'1-B'?' I' <C < ' B?" D1 1A' <0' A&0' 1-' B&- ?-A ?>' =1#=@<>1- ?' A10B1-0' A1 1@ 1 A9' 1><-1 1@ +1@ <BB'A1 1' A1#1 1 ' C&0 ' >& 1>' <C'1- '0' +1@ <C 1@ 1<' ' ?@?' '->1A'< 1' 0 < '>' 0B'' ' C&0 ' <C ?' '- '>? ' ?C' <C'1- 1>' ' 1" <C <>' <B' 1&d' <00'.-' I' 1' 1-1 10' '-' A0A1>' D1 1A' < 1' A& 1' 01-' B&- ?- &' =1&==<>1- &' ` I' '@@<\P' D1 1A' <' 1-1-A@ 1 ' HA' +' " D? ?0>&A" >?@'1 ' 0" +' &0' ?1 '- ' +1@ 0" +' &0' - ' ?1 '- ' 20?C0 ' 10' HA' ?-B' C 10' +1@ <@'" A1' 0<-.?'-1' 1&CA1>' CC'-H?'& 10' A111 &' 1< ' 01= < <' C01H?< A" I' 01H?" C&R?-' 0?0' 1&0A1>' ><@1=B& 10' I' <C & 10' '-' D<B' C 1@ 1 ' '@@&0' '-A1' H/>+'0' 11A1>' >? '1 10' `C&0 0P' D? ?0>&A" <C ?>' AB'0' <C & '#4' &-01-01 '- ' A1' +' < I' >1># &' B&-+'-B1-A' ' ?@= ?0' &-B& A< 0' 10' HA' =1^A1-0' '-' D&B' B<0?' <A' A?1@@?>'+< ='<-A' >'-'>1' 11@0 C'<=9 >>&' 1" +0' <0' '-A1' C' '-H?'0'B#1>'C='1' '1 /9 <@+'0' 01>C' A-&' 1." I' B1R'0' A-'0' 1.-" CA " A1' <C & '#:' '@@'0' 0" =& <00'0' '-A1' B&-+'-B<- '-' &>'#4' 10B<1 '0' 0?'0

- 1 @'-1A'&-' D1' &

&?01@ <-A'=& ' & D1 0@ <-A' <@@ < ? 10' <-A' A'-<-B10' #1=& 1' D'0' '>1' ><A1@ <-A' -& ' 1' 1C1<@1A@ #1' =' >@ ' &#01 +1A' '-' <@@ D1' ' 'B@10@ <-A' C?' ' '-' A?1' L1B? '&-' <BB& A'-.' &' D1' =1Q# &=' D1' 0<>1

@ &' D1' - 1-' D<' F ' 0' &=' " 1# ' <-A' B8' B&>C @ <-A' <@@ & D1 ' 0?BD' '&-0@ #1' = &>' D1-B1=& D' <a1-' '-' D1' ' &?- '10@ <-A' A' 1= 1A' &' D(' D1 ''=0' &=' D1' &?- '10' KD1 1' D1' &- <=@0' &=' D1' <>1' = '&-0' A'A' '01' ' '0' & A<'-1A' <-A' <BB& A1A@ D<' '=' = &>' D1-B1=& D' '-' @1<0' ?C&-' D1' 0<>1' F ' 0' ' ' 0D<@@ #1' A1B@< 1A' D<' D1' &- <=' D1 1&=' K<0' ><A1' '-' <-0' & D1 ' &?- ' D<-' '0' B&- <'-1A' '-' D1' '.'-<@ F ' @ D<' D1-' '-B&- '-1- @ ' D1'0<>1' F ' '0D<@@ #1'? 1 @ '<#< 1A

@ ' '0' <BB& A1A' <-A' & A<'-1A' D<' <@@ F ' 0' &=' ?0<-B10@ B&>>&-@ ' B<@@1A' 'B ' '1@0@ D<@@ #1' = &>' D1-B1=& D' ><A1'<' D1' @1 '&-' &=' D1' @<'- '=@ '-' D1' < ? 1' &=' &@A' '>10' ?01A@ & ' 1@01' '-' D1' < ? 1' &=' 00'010' A1 1 >'-<#@1' #1=& 1' D1',-./0' ?0 'B10' &=' D1' &-1' 1-BD' & ' D1' & D1 @ '#1=& 1' D1' ?0 'B10' &=' 00'01' &' #1' <a1-' '-' D1' &?- ' &=' D1' @<B1' <00'.-1A' & ' &' #1' <00'.-1A

@ ' '0' <BB& A1A' D<' <@@ - &@@>1<0' &=' " 11A0@ <-A' & D1 ' ?-'>1-0' '-' D1' &@@0' &=' D1' D<-B1 @ &=' 1' D1 ' 1-BD@ <-A' D1' LBD1H?1 ' &=' &?' & A' D1' ,'-.@ #1=& 1' D'0' '>1' 1- &@@1A@ <-A' <= 1 ' # ' <' & 0' &' D1' ,'-.' <-A' D'0' 1<@>@ '-' D1' -0? 1= '&-' Q'< 1' ><A1' K' # -' D1' 0<>1' 1<@>' 01A' '&?0@ ' 1>&+1A@ 1 -@ <-A' 1- @ 1 ' & D1 K'01' '>#1\\@1A U ' D<@@ #1' '-'<' A?1' ! & >' 1L1>C@'='1A' ?AA1' D1' ,'-./0' E 1<' 1<@ D1' '.'-<@0@ K' D&?' ! 11' &=' D1' 1<@ D1 1&=' &' #1' C<'A@ <-A' D<' D1' 0<>1' L1>CD='B< '&-0' 0&' D<A@ 0D<@@ #1' &=' D1' 0<>1' ==1 ' <-A' 1-. D' '-' <@@ D'-.0@ <0' D1' 0<>1' " 11A0 <-A' ?-'>1-0' 0D&?@A' D<+1' #11-@ '=' D1 ' K1 1' D<A' KD&@1' <-A' ?-D?

@ ' '0' & A<'-1A' <-A' <BB& A1A' D<' D1' ?0@ 'B10' <00'.-1A' <-A' &' #1' <00'.-1A' &' <a1' 00'010' <-A' A1@'+1' D1' E<&@0@ 0D<@@ = &>' D1-B1=& D' D&@A' D1' ' 100'&-0' '-' D1' '-B'C<@ <-A' D'1=' &K-0' &=' 1+1 ' &=' D1' &?- '10@ /)' KD1 1' D1' D' 1' &? 0' &=' D1' 0<>1' &?- '10' #1' D&@A1-@ <-A' D1 1<= 1 ' 0D<@@ #1' D&@A1-' .

@ .<'-0' D1' ==1-A1 0' <-A' <+'0D1 0' &=' <A'10@ 1@A' D1' " <?.D 1 0' &=' &#@1>1-@ <-A' & D1 ' F & > 1-@ '-' 1+1 ' < ' &=' D1' 0<'A' 1<@>@ '-' D101' " < 0' &==1-A'-.' >& 1' +'&@1- @ @ <-A' >?BD' >& 1' D<-' D1 ' K1 1' K & - G ' '0' &=A<'-1A' <-A' 0 <#@'0D1A ' D<' KD1 10&1+1' <-A' KD1-0 +1 ' 0?BD' <A'10@ " <?.D 1 0@ <-A' & D<' F & > 1-' <=& 10<'A' #1' <+'0D1A@ <-A' <= 1 ' 0?BD' <C1' A&' B&-01-' &' 0?B# <+'0D1 0@ D<' <0' K1@@ D1' <+'0D1 0@ <0' D1 ' D<' #1' <+'0D1A@ <-A' 1+1 ' &=' D1 > @ #1' = &>' D1-B1=& D' A'0<#@1A@ <-A' # ' D1' 0<>1' " 11A' #1' ?-<#@1' &' D<+1' & ' BD<@@1-.1' <@@ -D1 ' <-B1@ " &K1 @ & ' &'-' !1&==>1-' <= 1 ' D1' " 1< D' &=' D1' ' ?0#<-A0' <-A' -B10 & 0@ <-A' D<' '-B&- '-1- @ ' '-' D'0' <01' D1' -1L ' &=' D1' @&&A' &=' D&01' <+'0D1 0@ & ' &=' D1>' D<' #1' <+'0D1A@ &' KD&>' 0?BD' -D1 ' <-B1@ " &K1 @ & ' &'-' !1H==>1-' &?.D ' & /)' 1+1 @ 1><'-@ & ' =<@@ <= 1 ' D1' " 1< D' &=' D1' <+'0D1 @ & ' &=' D1 ' D<' '0' 0& <+'0D1A@ 0D<@@ D<+1' ' @1' ' > >1A'< 1@ @ D<' '0' & 0< @ 3)' <= 1 ' D1' <C1@ & 1- 1 ' AC&-' D1' <+'0D1 @& ' D1 ' D<' '0' <+'0D1A@ <-A@ D1' ' 00'.-0@ <-A' <-A8 1-<-0' '-' D1' 0<>1' -D1 ' <-B1@ " &K1 @ & ' &'-8!1&==>1-@ <-A' D1' 0<>1' & D&@A' '-' < 1' &=' -D1 ' <-B1C <-A' D<' D1' ?0#<-A0' &=' 0?BD' F & > 1-@ '=' D1 ' D<+1' ?0#<-A0@ & ' '=' D1 ' D<+1' -& ?0#<-A0' '-' '=1@ D<' D1-' D1' ! < D1 0' & ' & D1 ' -1L ' & =' D1' ' @&&A@ D<+1' = &>' D1-B1j =& D' D1' ?' ' & C? 0?1@ <-A' >< ' 0?1'<.<'-0' D1' 0<>1' ==1-A1 0' <-A' <+'0D1 0' '-' D'0' 1D<@=@ <-A' & D<+1' D1>' D1 1&=' B&-+'=@;' & =' '=1@ <-A' & =' 1>#1 @ <@ D&?.D' D1' 0<>1' F & > 1-' <= 1 ' 0?BD' <C1' A&' B&-01-' ' & D1' 0<'A' <+'0D1 0 ' -A' =? D1 ' ' ' '0' <BB& A1A' D<' D1' " 1=1-A<-' ' '-' D'0' <01' 0D<@@ -&' #1' 1B1'+1A' & K<.1' < 1@@ #?' D<' D1' ? D' & =' D1' < 1 ' #1' D1 1&=' '1A' # @-H?'< '<-' & =' D1' &?- ' < '-.' <@K< 0' & &?' & A' D1' ,'-.@ <-A' & & D1 ' & A0' & =' D1' 0<'A' 1<@>@ <@@ D1' ' 0BD1< 0' & =' D1' 0<'A' <+'0D1 0@ '=0 C1 <A+1- ? 1' D1 ' #1' D1 1&=' B&-+'=

. ' **$& * ' %' * ' ' %' N * ' $ ' ' $ 0 ' M ' W/% ' ' ' % ' 0 %' $ %* 0

V !"! ' !" 6 ! ' !' V.1 -'#.-L 2!-=, ' . ' 3 &1Z'2 ++± ;!'R&2 ;+!/' ' E!' ;@' - !- -#!' ' .7!"' .'" .&- 0"!

N !' 02; -/' .'"-!%'.'M&-' 1 @' ".2!k #0 !' .'" !' 6 !

! !-/ -'2' 1 @'-.'7 *!' 4 +!

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' W3 ' ' - ' '8<C8% ' 1B' 1A' # 1 ' 1'

' 0 !' J' 6&#' ' ' # ' ' "!#& ! /=

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W .' & 0 +!" 2 +' !%!"##2!' 'HO/&## ' 3+ #!' &-' -@ & @ ." .7 -' ." ." !

W ' +&!-'2&-' D -' '0 1 @ ;"&-*'&-' Q & - +2' -/' U ' D1>'

W ' .2 2'&-' ' '10

. 2 2'2 +' -. ' ."!2 +' <? 0JO 3 '

g D&?.D' ' ' K1 1' @< 1' & A<'-1A' '-' D1' < @'<8 >1>' &=' D1' 0<'A' - .g D&@A1-' <' F 10 >'-0 1 ' '-' D1 & &K' &=' '" &?@0g D1' !'= D' 1< ' &=' D'0 1' .-g D< -& K11 ' F ' -10' '-' D'0 0<'A' 1<@>' 0D&?@A' #1' '-' <- K'01' 0&@A' < ' 1 <'@1' <= 1 ' D1' ! 1<0 ' &=' &D-' <C '0 ' 0/ !& =1' ? 1' &=' D1' 0< > 1G 1 ' &= D1' 001- ' <=& 10<'A' ' ' '0' & A<'-1A' <-A' <BB& A1A ' D< D1' 0< >1' 0K11 ' F ' -10' > < ' #1' 0&@A')' '-' 1+1 ' @<B1 K' D' -' D1' 0<'A' 1<@>g < ' D1' 'B1' D< ' F ' -10' &=' E<0B&' . -' <-A' D' -1' 0D<@g D<CC1-' &' #1' 0&@Ag <-A' -& ' <#&+1g ?C&-' <' -' &=' ! & =1' ? 1' &=' D1' 0< >1g -& K' Dj 0 <-A' -.' D1' 0<'A' =' 0 ' A' -<-B1

g D&?.D' `@< 1/P' '-' D1' 0< >1' < @'<>1-' ' ' K<0' & A<'-1A ' D< ' -&-1' &=' D1' - ./0' '1.1' 1&C@1g <= 1 ' D1' ! 1<0 ' &=' <0 1 ' -1L ' B& > ' - .g 0D&?@A' '-' <- ' K'01' 0D'C' <- ' 1 BD<-A'010' & ' E&&A0' &' #1' B< '1A' &? ' &=' D1' 1<@>' &=' -.@<-A@ & ' &' #1' # &?.D ' K' D' -' D1' 0< >1' 1<@>g '-' <- ' D'C0g ?C&-' <'-' &=' ! & =1' ? 1' &=' D1' 0<'A' E&&A0' <-A' 1 BD<-A'010' & ' D1' <@?1' &=' D1' 0< >1g 1LB1C ' '-' D'C0' &=' D1' - ./0' '.1<-B1G 1 ' &=' D1' 001- ' <=& 10<'A' ' '0' & A<'-1A' <-A' . <- 1A' D< ' D1' 0<'A' A'-<-B1' &-@ ' D<+1' C@<B1' <0' @&-.' <0' D'C0' &=' D1' 0<'A' '.1<-B1' '-' D1' < 0' KD1 1' D1' 0<'A' 1 BD<- 0' 0D<@@ D<CC1-' &' AK1@@g #1' =&?-A' <#@1' <-A' 0?' B'1- G 0&' D< ' D1-' D1 ' 0D<@@ #1' #&?-A' &' = 1 ' .D ' D1' 0< >1' D'C0' &=' D1' - ./0' '.1<-B1g K' D' D1' ' 1 j BD<-A'010' ' >A1 ' D1' <'-' <=& 10<'Ag #1=& 1' <@@' & D1 ' D'C0G <-A' & D1 K'01' ' ' 0D<@@ #1' @<K=?@ & D1' 0< >1' 1 BD<- 0' & D' 1' & D1 ' D'C0' B&-+1-'1- g <-A' D1 1' &' ==A.D ' D1>' K' D' D1' ' E&&A0' <-A' 1 BD<-A'010g -& K' D0 <-A' -.' D1' 0<'A' =' 0 ' < ? 1

g ' '0' & A<'-1A' <-A' 1-<= 1A ' D< ' -1' D1 ' '-' D1' ' ' &=' &-A&-g -& ' '-' & D1 ' ' '10g & &?.D0g &K-0g & ' & 0' &=' D1' 1<@>g D &?.D' D1' 1<@>g <- ' '= ?<@@1 ' 0D<@@)' D<+1g 1L. B'01g -& ' '-' -& K'01' &BB?C ' <- ' ?A'B'<@ ==' B1g #?' ' -' 0?.D' &K-' KD1 1' -&-1' & D1 ' 1 0&-' 0?== 'B'1- ' >< ' #1' =&?-A' & D<+1' D1' 0< >1' ==' B1 ' -' KD'BD' <01' 1 ' D1' 0< >1' ?A.1' =& ' D1' ' >1' D< ' D1' 0D<@@ B&- '-?1' ' -' D1' 0<'A' ==' B1g 0D<@@ ? 1 @ ' &>' ' <-A' <#0 <'-' D' >01@=' <-A' D'0' = &>' D1' L1 B'01' &=' 'A@?<@@' -.g ?C&-' <'-' &=' !& j =1' ? 1' &=' D'0' '^?<@0' 0& 0&@A

g ' '0' & A<'-1A' <-A' <BB& A1A ' D< ' <@@' <- -1 &=' ! & 1' .-1 0' <-A' @'1-0' #1' -.' &=' D1' >' ' &=' D1' [=' D'0' 1<@>g <-A' B&>'-.' K' D'-' D1' 0<'A ' ' &=' &-A&-g <-A' & D1 ' ' '10g & &?.D0g <-A' &K-0' K' D'-' D1' 0<'A' 1<@>g <0' K1@@ K' D'-' '#1 '10' 40' K' D&? g K' D' ! '0D' <-A' <'@ <- -1 ' &='& D1 ' ' ?<@0g D1 1' < '-.' <-A' .&'-.' <.<'-' &' D1' ' &K-' &' > '10g 0D<@@ = &>' D1-B1=& D' #1' ?-A1 ' D1' <=1.?< A' <-A' D1' 0C1B'<@ & 1 '&-'&='&? ' 0 ?A' & A' D1' - .G <-A' D1 1' ' 0D<@@ #1' @<K=?@ &' D1>' <-A' 1+1 ' &=' D1>g <-A' # ' ! & B1' &=' D101' 101- 0' D1 ' >< ' = & >' D1-B1=& D' B? ' D1' ' ! '0D10' <-A' '= ?<@0' <=& 10<'Ag K' D&? ' >C1<BDj >1-' & 'A1- '-.' &='<- ' <-g '-' '1B10g <-A' '-' < g & ' '-' <@@g <' 1 <@1g & ' '-' E &00g <0' &' D1>' #10 ' 0D<@@ 011>g & 01@@ <-A' ><a1' D1' ' &='G <-' D< 1 0g < ? 10g A'-<-B10g '+'@1.10g & ' ?0 & >0' ><A1' & ' D<A' & D1' B&- < '-& K' D0 <-A'-.

g ' '0' & A<'-1A' D< ' <@@ <- -1 ' &=' &0 0g <0 K1@@ '-' D1' ' ' &=' &-A&-g <-A' D1' &K-0' &=' E 1< ' < >&? D g B< #& &?.D g F ' -BD1@01<g <-A' 1g <0 <@0& W ' B1 <'-' & D1 ' &K-0' <-A' @<B1G ?C&-' D1' &<0 ' &=' D1' 1<' <-A' 1@01KD1 1' D &?.D' <@@ D1' 0<'A' 1<@>g <0 K1@@ K' D'-' '#1 '10' <0 K' D&? g 0D<@@ = &>' D1-B1=& D' ? 1 @ ' B1<01' <-A' #1' <>&+1A' = &>' D1' ' & <-B1' <-A' K'Ba1A' " 11A0' <-A' ! & 10 <@@' -.0G <-A' '-' 10C1B'<@@ ' D1 ' #1' '-D'#' 1A'# ' &? ' &+1 1' .-' & A' D1' -.g D<' D1 ' -& ' -&-1' &=' D1>g ?C&-' D1' <'-' D<' #1@&-.1 Dg 0D<@@ <- '=? D1 ' '- &>' ' &' 1>## <B1' 1 '-.' & ' <- ' !'0D' & ' & D1 ' '=@?<@0g ?-A1 ' D1' &@&? ' &=' <- ' ?0 &>g A'-<-B1g '+'@1.1g & ' D< 1 ' #1=& 1' ><A1' & ' D<A' & D1' B&- < gKD'BD'# 1-&? '&=' D101' 101- 0'#1' ? 1 @ ' 1C1<@1A& ' C '+'@ ' '<C1 @ ' A&' & ' C &B? 1' &' #1' A&-1' <- ' >C1A'>1-' &' <- ' !'0D1 0' & ' ' ?<@@1 0g " 1-'\1-0' & ' @'1-0' #1' -.' &=' D1' , '-.0' >' g KD1 1# ' D1 ' &) 'N *' ' $ '

)' $ '! ' $ ' $

1>' @'B1 ' -?C' '-' @'<>1-&' AB" 1.'0' <C?A' F 10 '-' +' ' '-' <0 '-&' <'< ' <'>&' 1.-" 0?" H?'- &' & A'-< ?>' =?'001 ' HA' <@'H?<' +'-<' A?@B'<' '-' 1.-&' 0?&' CA1&' -?@@<8' 1-?0' 0?# =& '0=1=? <' 1& A1>' C&0 ' =10 ?' ' & F0' <C 1' CL' CR' ?>' <A' 1 <@@'<>' +1-A1 1- g A1' <001-0?' <>1-' ?# ' & A'-< ?>' 10 ' <>' I ' B&-B& A< 0' HA' 1<A1>' +'-<' A?@B'<' ?#'H ' '-' 1.-C' CAB=&' <A' C2B'?' H?&' +'-<' A1' <0B&-' I ' '-1- +1-A" B&- '.' ' I ' -&-' ?@ 3' 0?# C1-<' =& '0=1? 1' 1& 'A1>' <A' 1 <@@'<>' +1-A" C&R?- g A <' C '& " & A'-<='&1' -&-' &#0 <- 1

1>' @'B1 ' '-' 1&A1>' @'<>1-&' <@'<0' & A'-< ?>' +'' ' =?'001 g HA' -?@@?0' @'.1?0' A-" 1.'0' C&0 ' =10 ' <0BD1' CL' =? ? ' <@'H?<'='B<-A'0<0' 0C?' #&-<' 1L 0' 1.-?' -. ' 1A?B1-A' 01?' '-= <' 'A1>' 1.-?' <AA?B1-A' '-' <@'H?'# ' -<+'# ' 0?# C1-<' =& '0=B@? 1' #&-& ' I ' B<-A'0<' ' AQ ' +1@ +<@& '0' 1& A1>' H0>' '-' -<+'#' A1' @'.1<-B'<' 1.'0' C0AB" <@'H?<@'R' 10a'CC< 1 G A1' <001-0?' <>1-' A I ' & A'-< ?>' 10 ' I ' B&-B100?>' HA' H0>A'?' -<+10' A1' @'.1<-B'<' 1 ?0A1>' A-" 1.'0' '-' C '# ' ?#" 1&08' A1>' ='B< & 10' B&- 0< " B&- '.' ' D<#'@10' I ' 0?==' B'1- 10' '-+1-'<- g HA' AB<' & A'-<B'&' >' @&B?>' D1<' 0'B' HA' ?-B' 1<0A1>' -<+10' A1' @'.1<-B'<' 1.'0' 0?# C1-<' CA'=<' C ' <@''0' & >-'# ' -<+'# ' A1' I <-A'0'0' 0?'0' = 1 < 1' 1-1<- G <@'&H?'-' U ' @'B1<' C='' '0' < & '# ' <@'<0' -<+10' B&>C18' 1- 10' B&-A?B1' I ' '#'A1>' A1' #&-'0' I ' I <-A'0'0' 0?'0' = 1 < 1' A & C '& " 0 < ? 1' -&-' &#0 <- 1

1>' & A'-< ?>' 10' I ' 0 < ? ?>' HA' D1B' '-' '+' < 1' 'L' & -A&-' -1B' '-' <@''0' ' ' < '#4' ? .'0' +'@@'0' +1@ C& ?# ' >< '0' C' & ?>' 1.-?' CA1>' <@'H?'0' +' <@@< '?0' &=='B'?>' ?A'A<@1' A1B1 &' D1<' 1L B1<' -1H@ &BB?C1 ' H?&+'0>&A&' -'0" '-' +'@@'0' ?#" <@'<' C0& < 0?=='B'1-0' <A' ' " 0 < ?>' D1-A' 1C' " -&-'C& ' ' -' H?&' <>1-' B<0?' 'A1>' ?A1L' C' 1>C& 1' H?&' '-' &=='B'&' '@@&' 0 1C' ' <D' 1LRB'B'&' +' <@@<' 0?# C1-<' =& '0=1? 1' +'= ?<@'?' 0?& ' 0'B' +1-A' & ' C1-' ?0' B1001 ' I ' 01' <#0 '-1< g C' 01' I ' 0?&0' &'-'-&' <# 1&A1>

1>' & A'-< ?' 10 ' I ' B&-B& A< ?>' HA' H?'B?>H@ =& '-8' 1B" I ' <@'1-'.'-1' A1' <>'B'B'<' 1.'0' I ' 1.-" 1L'0 1- 10' +1-'1- 10H@ '-= <' A5<>' '+' < 1>' &-A&-' I ' <@'<0' '+'8' < 10' ? .&0' I ' +'@@<0' '-= <' 1.-?' ?# ' <>' '-= <' @' & 10' HW>' 1L 0' B?>' C'0B'# ' I ' <@''0' +'= ?<@'# ' H?'#?08' B?>H@ '#'A1>' >& <-A&' I ' <A' CC '<' 1A1?-A&' 0'-' A18' B1 &' 0?# 0<@+<' . A'<' I ' 0 C<@" C 1B1#1' A-" 1.'0' CA '9 I ' '#'A1>' @'B1<' 1'0' I ' 1& ' B?'=' <B' +'.& 1' C@01-B'?>' A1B1 &' C& ?-' C'0B10' I ' +'=@?<@'<' CA1<' <#0 f ' '>C1A'8' >1-&' I ' B&-0A'BB I 1' B? ?0B?>H ' 0B'-A1 1' C' C1B'<0' <@@'< 1' <B' '-' C 1' +1@ '-' & &' I ' <A' 1 <@@'<>' 0@+1' '-' . &00&' C? ' 0'#" >1@'?0' C@<B5' ' +1-A1 0' < H@ B&>&A?>' 0?? ' '-A1' =<R1g H?'#?0B?> f ' 0 < ? '0' B< '0' & A'-<1#'#X C '+'@1.''0' 01?' B&-0?1 ?A'-'# ' =1'0' +1@ D' '0' '-' B&- < '?' -&-' &#0 <- #

1>' & A'-< ?>' 10 ' I ' B&-B& A< ?>' HA' H?'B?>H@ D&0C' 10' <>' <C?A' A <>' '+' < 1' &-A&-' I ' '@@<0' <. -1' 1 -1>? D' B< A1#? .D' F -BD1@011' I ' 1g HO>' 1B'<>' '-' H?'#?0B?>H@ <@''0' +'@@'0' I ' @&B'0' 0?C' B&0 1 <>' < '0' I ' <@'#" C' & ?>' 1.-?' C@AB>' <>' '-= <' @' D < 10' HW>' 1L 0' A1B1 &' C1-' ?0' B1001-' I ' <> >&+1<-' /' <# 1& ' '+'A1' ' -&B'+'0' I ' '-'H?'0' =1'0' I ' =& 0 <@@< ''0G ' I ' '-' 0C<@" C' A->' 1.1>' '-D'#' ?>' 10' 1'0A1>' -1' C" +1@ 1& ' <@'H?'0' 0?# C'B?@&' H?&A' '-B?>#' ' ?@C'?0' '- &>' < ' 01' '-# <B'<-A" <'@1A' +1@ C'0B10' <@'&0' 01?' +'=@?<@'<' H?18' B? <H ' 01?' B&@& 1' <@'B? ' B&-0?1 ?A'-'0' & A'-<=&'0' C '8' +'@1.'" +1@ B< 1' C '?0' '-' B&- / '?' =<B ' +1@ D' g H?1' 1-& 1' CD1-B'?' C1-' ?0' 0?-' 1+&B< <@' '>C1A@>1-?>' <@'H?&A' B@<>' +1@ C<@<>' =1B'<-' ' '-=1 <-' +1@ ='1 " C1? 1-' <@'H?'# ' C'0B< & '# ' 01?' +' <@@< ''0' '-A'.1-'0' 01?' <@'1-'8' .1-'0' A1' <>'B'B'<' 1.'0' 1L'0 1- '# g H?&>'-?0' 'C" 01?

1& ' <@'H?'0' < 1- ' +1@ < 1 =' <A' 9+1-A1-A' C'0B10' I ' +'B8' @?<@'<' 0?<' ?#" H?<<A&' I ' BKB?>H ' C0&-1' +&@5'- ' '-= <' 1.-?' CAB -' C' 0?1' ''#' &' +&@?- < '0 ' ' -0?C' '-D'#' ' ? -' 10 ' 0 @'R' &'-'#4' I '80'<. -@'0' D&0C' '#X CAB'0' -1' H?'0' 'C& ' 0?# C1-<' C0AB<' 01' '- &>' <' A1B1R&' +1-A1-A" 1>1-A" +1@ B&-+1-B' -<-B@" H?1>B?>H ' C'0B1' >< ' '-'? = '0B?>' <A' &C?0' <@' ? h' C'00&-< '" +1@ <@R'?0' '+'0' A 1' '+' < '0' &-A&-;' 1' B&-@'@'R' '-D'#' ?' 10 ' &' '#4' '00C8' -< ''0' I ' '+'#4' 1 0A1>' '+' < '0' &-A&-' -1' H?'0' 1& '0?# 1<A1>' C1-<' @&-.1' <#' 1<A1-' '+' < 1' -1H@ CC1' 1<-A1>' H?1>B?>H ' C'0B1>' >< ' '-''" = '0B?>' -1H' A1' <H?<' A?@A' A1B1R&' 1>< ' <A' 1+1-A1-A' '-' 1<A1>' '+' < 1@ 1LB1C '0' <-.?' '0' = '01'0' I '@?B 0' =1' C 10' H?" <>' '-A'.1-'0' HO>' =&--01B'0' '-' B&" 0'-@ I ' 1><-1<-' <A' 1>1-A' +1@ +1-8' A1-A@ A?> <>1-' '-A'.1-' '=& 'D01B&0' >= <' '+' < 1>' '= <>' -?@@< 1-?0' '>C1A'<-' <A' +1-A1-A' @' h" C'0B1>' H?&B'1-0' C'0B10' '@@&0' A?L'- '01?' A?B" =1R'- ' <A' '+' < 1>' AQ<>

1>' & A'-< ?>' 10 ' HA' H?'0B?>H@ < & ' &-A&-' C' 1>C& 1' 1L'0 1-0' 0C<@'R' '-R' B1 <' A1B1 &' &51 8' '-'0<B ' 0?&' <A' B B>' 1.'0' C00 <-A' HA' 'C1' & A'-<A='1>' A1' C'00&-< ''0' I ' +' <@@< ''0' ? ' CAB>' 10 ' = <>' '-Q <' #<@ +< ' 0?<>' 1-1#' ' <B' h-0 " I ' ?0@&A' " =<B'1 ' 1L1B?B 'H ' A1#< 1'&'-" ='' +& 1' C&0 C&0 1' A1' 1>C& 1' '-' 1>C?0'A1#< 1' A1><-A<#' ' ' ' &A& BC- ,' &51- ' A1B1 &' '-' 0C< " < & 10' <@@'+" I ' &' @1 ' <@'" .?#-<B?@?' '+' < ?' ?d 8' .& ' I ' '@@< ' <B' @Jh' +' <@@< '& 0' &C '-1- 10' ?#' f ' C' & ?>' 1.-?>' CAB>' '-= <' # <=10' I ' 1L W '-' .?@'0' 0<B-0' 0?'0' 0?C' -&+<' B 1<B 1' 0?<' '-' &='B''0' 0?'0' C0 <-A' +'A1D' HA' Dh" & A'-<B&1>' A1' +' <@@< ''0' H?<- ?>' <A' 1&0' I ' 1& ' H?1-@@ ' < '-1 ' '-' #<@@'+'0' 0?'0' 1-1 " = B'1- ' I ' =' >' ' B?0 &A' '9

1>' <A ' '-0 <- 1> ?='C@'B<B&1>' &' < '0' 1.-" CA^J 'A1>' A-0' - ' 1L' A1' .=<' 0?<' 0C<,' I ' A1' <001-0?' CA &@ I '?' 1<A1>' ' <0' A1B1 A' '-' ='A1' A'@11A I 1' I ' A'1A 1='B'<' 'C>0' A>' 1.a' ' D1 1A=' =1 +1-B'?0' C>-1<' <B' C<B'='B1' ?#'H@ '-' 1.-&' CAB&' 01' .1 < @ CA&-<+' ' I ' 1>'0' ' &>'#4' I '0'-.?@'0' @'.U0' I ' 1.-'B&@'0' 0?'0' B? ? 8' B?H@0 < ?0' .WA?'0' 01?' # -A' '0' =M'- @ 1LB1C '0' '@@'0' &'-'# ' H?& ' -&'<' <@'<0' '" C@ < -1- '0' 'C'?0' A-" 1.'0' <--'0' 1.-" 1 ?0A1>' 1.'0' H?'- &' I '01L &' <# &>" .=<' C' 'C>' 1.1>' ?-B' =B<' 1LB'C'1-A<' @'#< <' ='1 ?- @ <-H >' +'A1' ' C '-B'C<@'?' '-B1C ' <#B < &' I ' CB?< &' '-0? 1B=#'0' -?C' '-= <' 1.-?'CAB>'CA' & '1' 0?#& 1' ?-A1' 1 < " 0?-@@ -1B-&-' '#4' <@''0' C0&-'0' '+'#4' &-A&-' H?" <>' '@@' C@'<>1- &' A1' 1& AA1=' HA' ?-<0' 1& 1>' '+'?' F ' D-' A1' F <@K& D' -?C' < K1>' &-A&-' <B' H?&0A<>' <@'&0' ='A1@10' 'C'?0' 1.'0' H?&>'-?0' 'C" C& <0' A11' '+' < '0@ B&-0' &' < 1 ' ,<-1' 5= 001L' '-' A'R<' '-0? 11AA1' CA' & '1' ?-B' B&-. 1.< < ' ?' '-' 1<-A1>' '+' < 1>' '-. 100?' ' -&-' #?'001- @ B@<?A1 1' 4 ' <#' <0A1>' CA' & '#4' A1=1-A1 1' C& ?1 ?-' C '>&' I ' C '-B'C<@' ' '>C1A'+'001' A1#?' @ B1 " ,&' A?&' 1& A1>' '?>' F ?>' A1' 1&' HA' 'C" C '>" I ' C '-B'C<@10' B&-0'@'< '" 1& A1>' CA' & ' ?' <A' AB<>' '+'j < 1>' <BB1A1 1-' I ' 1<>' '-. 1A1 1-@' <B' A? & 10' 1& 'A1>' CA' & ' >= <' '+' < 1>' '@@<>' 1L 001' A1#?1 &'@' '-' 0C<@" 11'<>' 1 < " @ <B' &''''#:' <@'"0' '-' 1&A1>' B<0?' AB& 0' '?>' '+' @ 1@ <@'B? h' 1& A1>' C@1-1' 1L'008' 1-'#4@ <B' 1B'<' '&4 '#4' I '0'-.?@'0' C0&>0' '@@1' A1' ? ' B" A>?-A@' 0'>'@' ' 1LB1C '0@ 01= <>' C<B 0' 0?1' I ' H?'B8' H?'A' <A' 'C>' C = '1' +1@ C '-1 1' C&R' ' C' &'-'>&A'0' CA'=&'#4' I '=1@&-''0' '-' A6<' '-0? 1BB&1@ '- '+'A1' ' C '>?' A'1>' <@" <'>&' 1.-" A'" 1.'0' H?< &' I '=10 ?>' < '8' +' < '0' B" &D'0' <C=1' 1L ?<B' CL' 01H?1-0@ H?<@' 1?>H@ =1'0' 0'+1' CC< < '0@ ?-A1' '<A < " 1 < " +1@ <CC1@@< " = ' ' B' 1A<>'? @<.<=' '' H?1'>' 01?' 'C&d" ' H?

<- ' &=' D1>' #1' B&>C1@@1A' &' 01@@ D1' ' !'0D' &' & D1 ' 'B ?<@0@#?' 'KD1 1' <-A' KD1-@ <-A' &' <-' 1 0&-' F D&0&1+1 ' D1 ' K'@@ K' D'-' D1' 0>A' 1<@>' < ' D1' ' @1<0? 1 ' -A' >& 1&+1 0' ' '0' 0C1B'<@@ ' '-D'#' 1A' &' <@@' <-A' 0'-.?@< ' D1' 0>A' &0 0@ D<' -&-1' &=' D1>@ ?C&-' D1' <'-' <=& 10<'A@ '- &>' ' = &>' D1-B1=& D' ^&=' #? '-.@ 01@@'-.@ & ' B&-+1- '-.' <- ' ><--1 1<' !'0D' = 10D@ &' D1' 01' &=' <- ' !'0 ?-&-.1 @ & ' & D1 ' ' \1-' &=' D1' 0<'A' ' '&=' &-A&-;' -<' @'a1K'01' ' ' '0' '-D'j #' 1A' &' <@@ !'0D>&-.1 0' <-A' & D1 ' 'A\1-0' &=' D1' 0<>1' ' '&=' &-A&-@ D<' -&-1' &=' D1>@ ?C&-' D1' 0<>1' <'-@ =<' = &>' D1' 0<>1' ' @ -&-1<' D1' 0<>1@ = &>' D1-B1=& D' #? ' <-' 1<' !'0D' = 10D@ -&' &=' D1' = 10D' F < 1 @ &' 01@@ <.<'-' '-' D1' 0<>1' ' @ 1LB1C ' 1@0' ` = 10D P' ?B10' <-A' a10@ KD'BD' 0D<@@ #1' <-A' 1><'-' '-' B&>>&-@ <0' K1@@ (' "1-'\1-0' <0' !& 1'.-1 0@ &' #? ' & '01@@@ 0&' D<' -1+1 D1@100' D1' "1'A\1-0' 0D<@@ '-' -& K'01' @1 ' D1' !& A.-1 0' K' D'-' D1' 0<>1' ' @ &' 01@@ 0?BD' !'0D@ <0' &=1-' <0' D1 ' D<@@ # '-.' & 'B<?01' &' #1' # &?.D ' D1' 0<>1' !'0D10' &' D1' 0<'A' '

@ ''0' & A<'-1A' D<' 1+1 ' < & '&=' &-A&-' =& ' D1' '>1' #1'-.@ 10C1B'<@@ ' <>&-.0' & D1 ' D'-.0@ 0D<@@ #1' BD< .1A' '-' D'0@ < D@ &' #1' .'+1-' &' D'>' < ' D1' ,'-.1-0' LBD1H?1 @ D<' D1' D<@@ D&@A' <-A' A&' &' #1' D&@I -' <-A' a1C ' D1' A'-<-B1' &=' !'0D>&-.1 0' <-A' ' ?<@0@ <0' '0' <=& 10<'A@ &4' K' D'-' D'0' <'@'+'ABa@ <-A' D1' 0<>1@ <@@ !<+&?' 01 ' <C< @ A&' = &>' '>1' &' '>1' &' #1' C? ' '-' A?1' L1B? 'C-' -A' @'a1K'01' D1' < & 0' <-A' >@'='0@ <-A' '@@' B2 D1 ' E&+1 ->8@ &=' ' '10@ & &?.D0@<-A' &K-0@ <-A' =' ?BD' '='?< 1 0'-' 1+1 ' <B1' D &?' D1'0<'A' 1<@>' K' D>' '#1 '10' <-A' K' D' &? @ '-' 1+1 ' &=' D1' ' < D0' C&-' D1' ' -1K' 1< '&-' &' #1' .'+1-' '-' D1' ' ==' B10@0D<@@ = &>' D1-B1=& D' #1' BD< .1A' '-' 10C1B'<@@ D<' D1 ' 0D<@@ A&' BD' A'-<-B1'&=' ' ?<@8 @1 0' &' #1' D&@A1-' <-A' =' >@ ' a1C ' '-' D1' ' <'@'K'Ba0@ <0' >?BD' <0' &' D1>' <-A' 1+1 ' &=' D1>' C1 <'-1 D

@ ' D1' ` ?CC@'B< '&-' <-A' -0 < -B1&=' D1' &>>&-0' &=' D1' 0<'A' 1<@>@ D1' 0<>1' &? ' &+1 1'.-' & A' D1' , '-.' &=' D'0' 0C1B'<@ E <B h@ <-A' &=' D1' 001-' <=& 10<'A@ <-A' &' D1' -1-' D<' D1' 0<'A' &>>&-<@ ' = &>' D1-B1=& D' >< ' D1' >& 1' =1 +1- @ ' <#'A1' '-' D1' &+1@ ! <' D@ <-A' #1A 1'B1'&=' D1' 0<>1' &? ' &+1 1'.-' & A' D1' <-A' &=' D' ' 0@ <-A' C1<B1<#@ ' #1< ' D1>01@+10' '-' <@@ < 0' D # .D' D1' 0<'A' 1<@>@ D< D' C< A&-1A' <-A' 1>' 1A' &' <@@ <CA' 0'-.?@< ' D'0' @'1.1' 1&C@1' <-A' ?# 1 I 0@ &=' KD< ' 0 < 1@ " 1. 11@ & ' &-j A' '&-' D1 ' #1@ 1LB1C ' <@@ D&01' KD&01' <>10' <-& D1 ' '>1' '-' D1' < @'<>1-' &=' D'0' , '-.@ D1' + ' <-A' +'' 1< ' &=' D'0' 1'.-@ K1 1' A1@'+1 1A' `# ' D1' 0<>1' &? ' &+1j 1'.-' & A' &' #1' 1LB1C 1A' = &' ' <@@ E <B1@ <0' $ P C ' -j B'C<@ 1.'--1 0@ #1 & 0@ <-A' &B? 1 0' &=' D1' -0? 8' 1=@'&-' @< 1' <' 1 &?0@ ' ><A1' F ' D'-' D'0' 1<@>@ KD1 1&=' D1 ' #1' < <'.-1A@ <-A' <@ &' & D1 ' D 11' 1 0&-0' ' 'j \1-0' &=' &-A&-@ KD'BD' -&K' '-' D1' < @'<>1-' #1' '-' 10C1B'<@ < <'.-1A@ =& ' D< @ 'K ' K' &'0< @ D< ' &-1' &=' D1' 0<>1' ' '\1-0' A'A' =' 0 ' <-A' C '-B'C<@@ '@1 ' F '@@'<>' F <@K& D@ @< 1' < & ' &=' &-A&-@ <-A' B1 <'-' & D1 ' D1' , '-./0' ='' D=?@ 1&C@1' &' 0D? ' D1' E< 10' &=' D1' 0<'A' ' ' <.<'-0 ' D1' & > >&-<@ '10' &=' ,1-' <-A' 001L@ D1-' <' 1 &?0@ '<001>#@1A' '-' D1' 0<'A' -0? 1= '&-@ D< ' D1 ' 0D&?@A' D<+1' -&-1' - ' '-' &' D1' 0<'A' ' @ <-A' &' A1j =1-A' D1'0<>1' ' ' = &>' D1'0<'A' <' & 0@ <-A' D1' & D1 ' K&' &=' D1' 0<'A' D 11' ' '\1-0' &=' &-A&-' K1 1' < j <' .-1A@ &=' D<' D<' D1 ' 0D&?@A' D<+1' #11-' D1' =' 0 ' <-A' BD'1=' &?-01@@& 0' &=' D1' 0<>1' <' & 0@ D<' D1 ' 0D&?@A' B&>1' <-A' 1- 1 ' D1'0<'A' ' @<-A' 1<A1 0' &=' D1' 0<>1' <' & 0' K' D'-' D1' 0<'A' ' G <-A' <@@ & D1 ' =?@@ ' #1' -.'' -' D1'0<>1' <01'&=' D1' 0) D 11' ' '\1-0@ & ' <-' &=' D1>'G' <-A' <@0&' <@@ <-A' 0'-.?@< ' 1 0&-0' &=' D1' &K-' &=' ' A>&-A0#? ' @'a1K'01' 1LB1C 1A6)' D1' ?' '&=' D'0' 1<B1@ <-A' <0' >?BD' <0' &' D'>' C1 <'-1 D' & ' >< ' C1 <'-' =& ' N)' 1<0&-0' <-A' !1@&-'10' '-' D1' 0<'A' -0? 1^'&-0@ #1 K'L ' D1' !' 0 ' " < ' &=' < @ D1' !&? D' 1< ' &=' D'0' 1'.-@ <-A' D1' !1<0 ' &=' D1' < '+' ' &=' <'-' &D-' D1' <C '0 ' D1-' -1L ' =&@@&K'C.@ '-' - ' ><--1 ' &='K'01' A&-1' & ' B& > >' 1A@ KD1 1&=' D1 ' F1 1' '-A'= 1A@ < <'.-1A@ & ' <CC1<@1A@ <-A' <@0&' ? @<K '10@ '=' <-' ' '-' D1>' &

(.'2!+!';&!'.'" #.'!- -'1 E!'.' ! '5' ' % '&-2 -'20 +&# #@.0-' '! '5 '$' ' - % $ '$/'F ' '1 %' ' '* %'E 1H' ' '$' ≠ ℕ'0<'A' ' '6' '$ ' (

W +' &!' &#!"Z . ' .7-2' ."k ." !' +' ;!'27."-' .' ;!2!"'!' !' ."121/ "/&- -#!' . ' '<U<@@1K

5+ !' M&-* 2' 3 "/.-' .' &Z 0;H!/ ' !'" !' + !' - 0""! &.-

LB1C '&-0;

<- '&= D1>' K1 1'# ' D101' BB<0'&-0 C &>?@.< 1G <-A' D< D . <- 1Ag <-A'# ' D101' 101- 0 A& D . <- ' &' D1>' <-A' 1+1 '&= D1>g # ' D1' 1-& ' &=' D101' 101- 0g D'0 =' >' 1<B1G &' -1+1 D1@100g D<' D1 '0 <-A' '.D ' '-' D1', '-./0 &? g'=<- '<.<'-0 ' D1>' & '<- '&= D1>' K'@g 0C1<a &= D1' 1>'0010 & ' &=' <- ' &=' D1>;' @0&' D1' 0<>1' &? ' &+1 1'.-' & A' D1', '-.' D< D C< A&-1A' <-A' 1>'01A' &' D1' &>>&-0 &=' D'0 0<'A' 1<@>g <-A' &' 1+1 '0'-.?@<' 1 0&-' &=' D1' 0<>1' 1<@>g 1LB1C ' #1=& 1' 1LB1C 1Ag <0 >?BD' <0 &' D'>' C1 <'-1 D' & ' ><'C1 <'-g =& ' <@g 10C<0010 '-' <- ' ><-1 ' &=' K'01' A&-1' &' B&>>' 1A'-' D1' 0<>1' 1<@>g #1=& 1' D1' LL''' ' "< ' &= =@&#1 ' D'0 C 101- ' 1< G 1LB1C ' <@g 10C<0010 # 'B1 j <'-' ='B1 0 &=' D1', '-.g <-A' &=' & D1 ' & A0 <-A' E 1<' 1-' &=' D1' 0<'A' 1<@>g <-A' <@0&' # ' B1 <'-' <'-g <'-1 0 &=' ^?< 1@0g <-A' <@g ? & 0G <-A' <@0&' 0C1B'<@g 1LB1C ' 0?BD' 10C<0010 A&-1' #1=& 1' D1' 0<'A' LL''' ' "< ' &= B &#1 g '-' <- 'K'01' B&-B1 -'-.' <-A0' & ' 1-1>1- 0' -A' N)' # ' D1' 0<>1' &?' &+1 1'.-' & A' D1', '-.'' '0 & A<'-1A'<-A' . <B'&?0@ '. <- 1Ag D<' D1'0<'A' E <B1g 1>'00'&-0g <-A' < A&-0 0D<@g #1' <+<'@<#@1' &' 1+1 '&= D1', '-./0 @'1.1' 1&C@1g 1LB1C ' #1=& 1' 1LB1C 1Ag <0 D&?.D' 1+1 '&=' D1>' D<A' & ' 0D&?@A' &# <'-' D1 1&= D1', '-./0' C1B'<@g D< 1

-/' !"! ."!' V !'#.11 -/' @.0' ' !' 0 !2' "/&k - -#!2'b" #!'3 "/.-2' -/' 6!1&22&.-2' ."!2 &/'&-' !'3+ #!2' 7& &-' @.0"4 &+&7&#E' 7 !"!' @.0' 2!!' & ' 7& &-' &;!" &!2' -/' 7& .0 ' @.0' /.' # 02!' .' ;!' 0;+&#+@' ".#+ &1!/' .-' .0" 4! + ' -/' !' 2 &/' 0 !2' -/' "/&- -#!2' &-' +# &-*2' .' ;!' &"1+@' .+/!-' ##."/&-*' .' !' !-.'" -/' &! E' .' !' 2 1!' V&-!22' !'M&-*' 'V !2 1&-2 !"' !' 7!-@L .0" ' @' . ' # .;!" &-' !' &% 'A! "

&E!' .11 -/2' 7!"!' /&"! E!/' .' !' 2!'!" + !"& 2' ".0* .0' -*+ -/'0-/!" !'2 1!' !

' 0" !"1."!' '! '5

D''0' &BB&-'# ' = '-' C>?@.<1g I' =' '><>' C<B1>' 0?<>' 1-& 1' C001-B'?>' 1'0' I'1& 'B?' ' '-A1' B&-B100' 'I'B&-8' B1A' 'C' C01- 10G <' <>1-' HA' 0 1-' 1B &' '-' ?=' 1.'0' 0" H?'0' +1g H?" '-A1' 0?0' 1&0' 01?' 1& ' <@'H?1>' @&H?" +&@ '-' +1g +&@5' ' A1' C>'00'0' 01?' <@'H?# C>'00& ' ;' CA&-<+' ' '-0?C' I' 1>'0' ' 'A1>' A-0' 1L' &' <" 1.-" 0?" CAQ" I'B?' ' 0'-.?@<" C0&-1' 1 ?0A1>' 1.-" 1LB1C '0' C1LB1C '0' H?'BH?'A' <A' 1?>' CA-1 ' +1g C '-1 1' C&R' ' C' &'-'# ' /-0. 100'&-'# ' '-' 1&A1>' 1.-&' <- 1' +'B10'>?' H?< ?>' A'1>' a&# ' <--&' C01-" H?<@' B''H@ =B'0' 0'+1 ' CC1 < '0g = '0. 100'&-'# ' <>1-' &>'# ' C' H?&0B?>H@ = B'< '&0' A-" 1.'0' I'<@'& ' A-& ' I' <.-<?>' 1.-'g -1B-&-' C' ><-?1-&10' H?1 1@< " I' ? < & 10' &'''10g <B' 1B'< <' -0. 10<&-'# ' R <0' I' 1-' H?<@'CB?>H@ B&-R-1-8' '# '<- 1' AB>' +'B10'>?' H?< ?' A'1>' =B'0' 0C<@' ' 1LB1C '0' ' ?@ '?0' & A'-<?>' 10 ' C' A->' 1.1>' C2AQ>' 1 ' . &01' B&-B100?>' HA' .=<' 1>'00'&-10' I' CA&-<B&10' CAB=1' +<<' @1<-' B?'B?>H@ @'.1&' 1.'0' CA " 1LB1C '0' C1LBBC '0' <B' 0" '-A1' B< <>' 'C'?0' 1.'0' '-' 0C<@" H?'0H?'0' 1& ' 0?C' D&B' C1-10' 01' D1 1 ' +1g 1B'<>' &C ' -1 1

' 'A1&' '#" C2B'C'>h' HA' 0 <?<& A'-<=I 10' . <>' CA&8' -<A 10' I' 1>'00'&-10' C2AB<' -' @&B'0' '-= <' #<@@'+<>' ?<>' ?#" >1@'?0' 1LC1A' 1' +'A1 '0' '-= <' @'# < 10' I' 1L J C?#@'B1' 1L' C 1' -=<' CB@<>< 'g AB<H@ 0 <?<' I' & A'-<B&10' '-' &= '#X8 = >'R' 1-1 "=<A' ?L <' 1-& 1>' I' 1=B >' 1& 0A1>' ' '<C?A' F 10 >' LL''' ' A'1' &# g' <--&' + N[

&-0' ><-A<<' A' '.?-' 0''. '0' +'B1B&>' '# ' C' -. g 0?# 1<A1>' A<<

K(& 0.' 0' 9+!2 1' 2!H#.' !3& '

-' "'*&-!' 6. 0+&

* ' ' (' ' $ ' ' % ' > !

' 4 ' '

C M b' .' !' !'& 2' . ' .-/.-' -/' &//+!2!%' b"!! &-*' M-.7' @!' ' &-' .0"' + 2'3 "+& 1!-' .+/!-' ' V !2 1&-2 !"' V !' # 02!/' .' ;!' 1 /!' #!" &-' 0 !2' 3 "/.-2' -/' "/&- -#!2' &-' !2!' V ."/2' 0 ' -' !'3 "+& 1!-' .+/!-' 'V !2 1&-2 !"' .-' .-/ @'&-' !' &"/' V !!E' . ' !-' &-' !' &% ' ! '" . ' &"!' 6!&*-'. 'M&-*' 6&# "/' !' !#.-/' !'" !' .-S0!2 ' 0" ."/' !'M&-*' 7& ' !' 22!-' . ' !' 3"!+ !2' .;+!2' -/' b"! ' !-' 22&2 &-*' &1'&-' !'2 1!'3 "+& 1!-' # 02!/' #!" &-' 0 !2' 6!1&22&.-2' -/' "/&- -#!2' .' ;!' 1 /!' .' !' 3" &2!' -/' .-.0" . ' +1&* @' b./' -/' ." !' SO&!' . ' &2'3!. +!' &-'B."1' .+. 7&-*

B 6 ' ' &2' ."/ &-!/' -/' *" - !/' ' !' 0"# ' . ' -*+ -/' 2 +' 0++@' !-H.@' -/' 02!' +' !" &;!" &!2' -/' "!' 02.1Z') -/' ' !' b"! ' " !" -/' !' " !". ' !' B."!2' 2 +' ;!' &"1+@' .+/!-'&-' +' !&" "&#+!2' -/' 0' &-' /0!' %!#0&.-' ##."/&-*' .' !' !^E' . ' !' 2 1!

' ' &2' ."/ &-!/' -/' *" - !/' ' !' 0 !2' . ' 30"'!@."2' . ' &/E0 +2' -/' ""& *!' ." !'M&-*(2' .02! .+/' ;!' &-' +&E!' --!" E! '&-' +' !&" "&#+!2' -/' 0' &-' /0!' %!#0&.-

g FD1 1<0' &?' &+1 1'.-' & A' D1', '-.g '-' <@'<>1-'0?>>&-1A'<' F 10 >'-0 1 g D1' &-A<' '-' D1' <0' &=' <'-' 'BD<1@g D1' 'L D' 1<' &=' D'0 1'.-g &=' D'0 10C1B'<@ E <B1g A'A' C< A&-'<-A' 1>'' & <@g <-A' 0'- <'D'0' '1.1' 1&C@1' <-A' ?# 1= 0g &=' KD< j 0&1+1' 0 < 1g "1. 11g & ' &-A' '&-' D1' K1 1g 1LB1C' B1 <'-' ''\1-0' &=' &-A&-'<-A' & D1 g &=' KD&>' 0C1B'<@ >1-'&-' '0 ><A1' '-' D1' 0<'A' < A&-g D1' ?'' &=' D'0 1<B1g <-A' KD< 0&1+1' D'-.' &' D1' 0<'A', '-.' C1 j <'-1A' &' >'.D 'C1 <'-g =& '<@g <--1' &=' 1<0&-0' <-A' !1@&-'10' A&-1' &' B&>>' 1A'-' D1' '>1' &=' D1' -0? 8 1='' &-g D1-' @<1@ ' K' D>' D1' 0<'A' 1<@>' &=' -.@<-A' 0' 1Ag KD1 1&=' D1' K1 1' '-A' I 1Ag < <'.-1Ag &

ME' = ' ' 'G '6 # HH' ' '.

'B1B&>' '# ' &-A&-' I' 'A" 0<' >' B'< '0' HA' V' '-' C@'<>1-&' -&' <C?A' F 10 '-' ?@ '>&' 1-&' H?1A<>' <?<' CA&-<B'&-10' I' A'-<A&10' ='1 " =1B'>h/ '-' D1B', #<;' -' C@'<>1-&' 1-&' <C?A' F 10 >' A'1' @?-1' '-' RB'<' 01C ' ><-<' H?<A <.10'>1' <--&' 1.-" 1.'0' 'B" 0BA" C&0' B&-H?10 ?>' 01L &@ AD0' -=' 1L' A1' <001-0?' 1@< 1 'CR?>' I' <.-<?>' 0'#" '-' 1&A1>' C@'<>1-&' <00'0 1-A?' <?<' H?1A<>' 1>'00'&-10' I' & A'-<B#10' ='1 " =1A ' <A' @<?A1>' I' D&-& 1>' & >-'C& 1-'0' AA' I' C' H?'1 1' CC@" 0?" '-'=& ><' 0?#01H''

-' C '>'0' & A'-<?>' 10' I' B&-B100?>' HA' 1BB@'<' -.@'B<-<' &=-'# ' @'# < '# 9 I' @'=1'0' B&-0?1 ?A'-'# ' 0?'0' C@1-1' .<?A1<' I' ?<G 1' HA' <.-<' <' <' I' <' <' A1' ! & 10 <'-' &>'# ' 0?'0' < AB?@'0' =' >'R' 1-1<- '1' 1L1B?8' =#" A1#' 1' ?L <' 1==B>' 1< A1>' A1><-A1-/

1>' & A'-<?>' 10' I' B&-B100?>' HA' <?<' A1' C+'0& '# ' +' ?<@'?' I' B< '<.'" C' D&0C' '&' A-" 1.'0' '-' &'-'# '0?'0' < AB?@'0' 0'>'@'R' B?0 &A'<- '1' 1L1B?1#" A1#' 1' A1><-A1-

1>' B?>' -?C' AB?0' A-0' -=' 1L' '-' C@'<>1-&' 0?&' <C?A' F 10 >' A'1' @?-1' '-' A <#'0' B" 'BD'0' <--&' 1.-" 0?" -.@' 01L &' B&-+&B< &@ A1' .=<' 0?<' 0C<@" CA&-<+' ' I' 1>'01 ' ' &'-'# ' I' 0'-.?@'0' @'.1'0' 5[1.-'B&@'0' 0?'0' B? ?0&' B?H ' 0 < ?0' .<A?0' =& 1-' 01?' B&-A'1#'0@ H?'#?0A<>' '+'# ' &-A&-' I' <@''0' ?-A1' '-' AB<' CA&-<B#1' C@1-' ' =' ' >1-B'&' 0C<@' '1LB1C '0@ 01=a<>' C<A0' 0?1' I' H?'BH?'A' <A' 'C>' A->' 1.1>' C '-?'' +1@' C '-1 1' C&001 ' C' & >-'8' >&A'0' CA'B#'# ' I' =1@&-''0' 1>C& 1' '-0? 1B1#'0' ?-B' -&+'R' '-= <' 1.-?' -=>' -.@' CA' & '1' 0?#& 1' H?<@'C@' B?>H@ =B'0' 0'+1' CC1 < '0' ?-A1' '-AB< " 1 < " +1@ <CC1@@<A

=?1 ?- ' C? ' '-' 1&A1>' C@'<>1- &' C@1-@h' B&- '-1=G C2 I ?0 A 0 = =' 1L' <A' '-0 <- 1>' 0?CC@'B<B&1>' &' < '0 1 ?0A1-" 1.-" '-' C 01- " C@'<>1- &' 0?&' 0'#" =B<>' <- 0>' C'-0 A-0 0?#A' & ' 0?& ' >'01 < ?0 <A>1-0 B@< 1 1&' >< & 1>' H?''@' < 1>' ?#'H ' '-R' 0?#A' &0 0?&0 C&001' <BB 10B1 1' H?<- &' 'C1' . &0'?0 <.1 ' B?>' 1'0A1>@ A1' <001-0?' CA #' +?@ ' I ' B&-B1A' ' HA' .=<' CA&-<B'&' I ' 1>'00'&' '-' C@'<>1- &' = A & +'A1 ' A1' CA'B&'#4 I ' =1@&-'' ' '-' A1<' '-0? 1BB 1' CC1 < '0 ? ' C2AB>' 10 ' =11' <A' ?-'R0&0 I ' 0'-.?@&0 @'.1&0 I ' 1.-'B&@<0 0?&0@ < -' +'A1@ ' &-A'-1-0 HJ>' <@'&0 H?&0 B?>H0 C '?0 A1' 1<A1>' .=<' 1LB1C &0@ C OH W>' <A' '@@&0 '-' 0C<@" H?& ' -&'<' '-' C@'<>1- &' 'C'?0 1.'0' <C?A' F 10 >' '-' <0=' <@< ' <--&' 1.-" 'C'?0 1.'0' H?'- &' 1- &' &'<# &'-" .=<C'C>' 1.1>' ?-B')' 1LB'C'1-A'@'#< <'=?1 ?- @ C@1-<' 1L-?-B' '-' &>'#X' 01' 1L 1-A<- G 0'B' HA' &'-10' I '0'D.?@" C0&-1' 1 ?0A1>' 1.-" B? B?>H@ . ?0' = ' '+1@ B&-A'B&'0 C@@&' 1&CA1>' 1LB1C &@ CO ' C0&-<0 H?& 0 -&'<' '-' A & C@'<>1- &' <--&' H?'- &' ? ' C2AB>' 10 ' @'#< <'=?1 ?- @ C@1-<' #1-1='B'?' .=1' CA&-<B'&-'0 I ' 1>'00'&-'0 1< 'A1>' +'.& 1' C01-A?' 1C& 1- @ <B' 0" H?'0H?'0 1&CA1>' B< <>' 1.'0' 0?C' #''0 '-' 0C<@" C1-10' 01' #1 1 '+1@ 1B'<>' &C '-1 1 ' I ' C? ' 1C& < 1- '0" 1LB B'&'<@'<' A1' A1>' '-' A <' C '& " . <' +1@ CA&-<1&1' = '' -&-' ='' 001 ' - 1-B '0' <>1-' AA' 1.'0' -&-'1L'0 ' ' H?'-' D#'10' + @1' A1' ? ' A" A>? A" ' 1< '0' 'C'?0' 1.'0' A1' CA&-<1&1' '-' 0C<@" C01H?" 1 ' AR'?0' 0?=='B'1- 1>' 01B? ' < 1>' A1' #&-&' .10 -' 0 &' < <' 1 .<' A''' >' 1.1- ' I ' CCD-' 0??' H0>' 1' ?-' A1' ? ' ?L <' A&-<A 1>'0?C' D&B' <@'<0 '-' B&-0'@'&' 'C'?0' 1.'0' I > ' '-+1-' 1' 1-1<-

= 1>' CCR' C<B1>' I ' W-H?'@@' < 1>' '-' 1&A1>' 1. ' ?#'H@ -? '1-A' I ' <?. >1- <-A' <B' @' 10' I ' #'.<0' <>C? ' <-A' '-' 1&A1>' 1.-&@ & A'D< ?>' 10 ' I ' B&-B& A< ?>' HA' 0" C &-<' <@'H?<' 01-01 ' ' 01' &B1#-1' <@'B? h' = '0. 100'&-'0' >' 1<A1>' '-0? 1BB I 1' =& 1' . < <>' 1@ A<>C-'='B< <>' 1' &#' D&B' =& 0<-' 01= <>' '-A1' =<R1' CC&-<' , 0?0 D'0@ . 100& 10' C2AQ&0@ HA' 'C<' C0&-<' 01Q <>' '@@<>' <- 1' H?'-@ A1-<>' 0 " &#'0 <C 1' C L' =? ?=' '-A1' '-B'C'<' 0" 0'#" +'A1 ' ' 1LC1A' 1@ <@'&H?'-' , &' 1@<C0<' 1<A1>' H?'-A1-<' #' 1<A1>' 01=@<' I ' <1 #1' '-A1' C' CC1 ?&' 1LB@?A<=

1>' H?<- ?' <A' H?1 1@<0' 0'+1' 01= <0' =#0. 100'&-?' '-' AR<' '-0? 11A#1' =B< @ B& <>' H?'H?0B?>H@ ?0 'A' 1.'0' '-1#&< '0' <? ' B'=' H?'-A1-<>' CAB<>' '-BD&<-A@ 0'>'@'R' & A'-< ?' 10 ' I ' B&-B& A< ?@ HA' 0" 'C" 0?0' H?&0' D?h' 01=#1' B<C 1' 0'- ' +1@ B<C'1- ' <- 1' H?'-A1-<>' CAB<-@ <- 1' ?A@B'?' 1AA' ?>' +1 '- @ I ' 01' '-A1' C ' 10' +1@ H?< ?& ' #&-&0' +' &0' 1' 'A&-1&0' < H@ -&-' 0?0C1 # ' <A' D&B' d? < 5' 1& <0-' ?A'A@>0' C=' ?>' '-A1' C1-A1-0' = ' ' 01' '-A1' C .< 1' +A' <@'<0' <BH?'1 < 1' +1@ '- @ +'AA=' HA' "' '-' #B&' C 1-0&' B<?0<' ><@" +&@?- < '1' -&-' +1-18' >' -1 f ' A<>C-?' =1B1 ?- ' -'0" 0&@&>&A&' C' 1&>C?@8' < -1' <@'& @ <A' D&B' 1B'C'<- ' C' ?0 '5 B ?A'B10' CA#&0' 1 ' #?h" C .<B&1' C' 10 10' CAB&0' 1L ?-B' '-A1' C1 ' h' 1B1A<- ' H?'1 '

&#' CB'C'>h' HA' 0 < ? <' & A'-<= 10' B CA&-<B I 10' CA <' '-= <' #<@@'+<>' + <>' C?#@'B1' CB@<>< " I ' =' ==@'R' 1?1 "=11' ?L <' 1==B>' ' 1-& 1>' 1< 0A1>' ' ' <C?A' F 10 '-' L+'' ' A'1' <' ' <--&' ' D ' 01L &

&-0' ><-A< <' A' '.?-=' +'B1B&>' '#4' 0?#01 ' 0?# 1<A1' A<@' +'A1@

'B' & ==' I ' ?=='	'B' ? =' I ' ?001L'	'B' 1A' I ' ? '
' ' 001L' B 1 ='	'B' & ' B " & 0'	'B' & D '
'B' '-1'	'B' & -?#	'B' E@& B
'0' #C 0'	'B' " 1+&-'	'B' ? D
'B' ,<- '	'B' <- 1# ' B ?-'	'B' F '@ 10

' ='' = <' ! ' ' = 4 HH ' ' ' ' *4

<CC1<@1A@ <0' '-' D1' 0<>1' < @'<>1-' '0' >& 1' =&@@ ' &-<'-1A@ D1' 0<'A' &? ' &+1 1'.-' & A' D1' , '-.' < ' D1' '-0 <-' ?CC@'B< '&-'&=' D1' & > > &-0' &=' D'0' 0<'A' 1<@>@ ><A1' '-' D'0' C 101-' < @'<>1- @ <0' <' #1-'.-' & A@ D'+'-.' &>C<00'&-' &=' D'0' ?# 1=@0@ B@1< @ ' C1 B1'+'-.' D< ' '-' D&K' >?BD' >& 1' . <B'&?0@ ' D1' K&?@A' A&' # ' D1>@ 0&' >?BD' D1' >& 1' <-H?'@@' ' 0D&?@A' . &K' #1 K'L ' D'0' 0<'A' ?# 1= 0@ &=' D1' 001-' <=& 10<'A@ K'@@ <-A'. <- 1 D ' D< ' D1' 0<'A' E <B1@ < A&-@ <-A' 1>'08' A&-'' '-' D1' 0<'A' < @'<>1- @ D<' '0' &=' 1<0&-0' <-A' !1@&-'10' A&-1' <-A' B& > >' 1A' '-' D1' 0<'A' -0? 1B '&-@ <0' #1=& 1' '0' 0<'A@ 0D<@@ '-' <@@ D'-.0' 1L 1-A' &' <@@ <-A' 0'-.?@< ' D'0' =&.1' 1&C@1' <-A' ?# 1B 0@ <0' K1@@ `&=' &-j / .-' <0' &=' D1 P' #1=& 1' 1LB1C 1A' = &>' D1' 0<'A' E <B1G 0?BD' &-@ ' 1LB1C @ KD&01' <>10' 0C1B'<@@ ' '-' D1' 0<'A' < @'<>1-' D&@A1-' <' F 10 >'-0 1 @ D1' & &K' &=' @@' &?@0@'-' D1' !'= D' 1< ' &='D'0' 1'.-@ K1 1' `#' D1' 0<>1' , '-.' A1@'+1 1A' &' #1' 1LB1C 1A' = &>' D1' 0<'A' E <B1G/P &' D< ' <@@ <-A' 0'-.?@< ' 1 0&-0' &=' D1' 0<'A' 1<@>@ &= KD<' ` 0 < 19P' " 1. 11@ & ' &-A' '&-' D1 ' #1@ -&-1' &= D1>' 1LB1C ' #?' D1' 1 0&-0' KD&01' <>10' #1' A1@'+1 1A ' ' D1' 0<'A' < @'<>1-' D1' 0<'A' !'= D' 1< @ 0D<@@ <a1'=&'@ 1-1=' ' &=' D1' 0<>1' E <B1@ < A&-@ <-A' 1>'00'&-@ # B."#!' &=' D101' 101-0@ <0' D&?.D' 1+1 ' &=' D1>' D<A & ' 0D&?@A' &# <'-' ?C&-' D1' 0<>1' D1' , '-./0' 0C1B'<@ D< 1 @ <-A'<@0& <0' D1 ' 0D&?@A' <a1' '=' -&' LB1C '&-D1 1&=' K1 1' ><A1' &=' D1>' '-' D1' 0<'A' =' 0' E <B1' & D1' 1-'&=' A>&-A0#? ' 0D<@@ #1' D1 1&=' D&@A1-' &' C ' ?1' 0C1B'<@@ '=& ' D1' , '-./0' D< 1 0' &=' < A&-@ <-A D1 ' &'='-A' 0?=='B' <' ' ? 1 ' &=' D1' ' .&&A'#1< '-.@ <0' $ K1@@ <.<'-0 '&? ' &+1 1'.-' & A' D1' , '-.' <-A' D'0' 1&C@1' <0' <.<>0 ' D1' ##1 '&=' ? @ <BB& A'-.' &' D1' A'-<-B1 D1 1&=' <-& D1 ' '>1' ><A1' '-' D1' , '-./0' &' >B'@9

) 4%

D1' 1-'&= 'GT <-U'/:

< =&&0 0C1B'<@

@ ! & ' 1<B1' <-A' <-H?'@@' ' &' #1' -&? '0D1A' <-A' <?. >1- 1A' D &?.D&?' D1' 0<>1' 1<@>@ <-A' &' B1<01' '=1' <-A' &- 1- '&-0' /)@ ' '0' & A<'-1A' <-A' <B1# A1A' D< ' '=' <- ' 1 0&-'=11@ D' >01@=@ # '&BB<0'&-' &=' <- ' 10C<00' A&-1' '-' D1' 0<>1' -0? 1B '&-@ &' #1'. '1+1A' & ' A<>-'='1A@ <-A' =& ' D1' 0<>1' C1 <A+1- ? 1' A& D' C? j C&01' &' ><a1' D'0' ?' ' <.<>0 ' D1' 0<'A' 10C<001 0@ D<' D1' 0<>1' 1 0&-' #1.' -' D1' 0<>1' ?' @ '=' D1' 011' ' ' 1LC1j A'1- '=& ' D' >@ #1=& 1' D1' L+ ' &=' <'-' &D-' -1L ' B& >'-.@ & ' 1@01@ D1' 0<'A' L+ ' #1' -.' C<0 @ D1' 0D<@@ #1' 1LB@?A1A' = &>' D1' 0<>1' ?' @ <-A' ` BB<0'&-'/P' D1 1&=' =& ' 1+1

8' A'K=& '

'-0< 1<' >' @'>' 1A@

B , ' C ' &' D1' ^?< 1@0' & ' ?' 0' &=' 10C<0010' A&C1' >' D1' 0<'A' -0? 1 @'&-@ B&> >1-B1A' #1=& 1' <-' &=' D1' , '-./0 ?0 'B10@ & ' #1=& 1' D1' 0<'A' L+ ' &' #1' &- - -B1A@ ' '0 @'a1K'01' & A<'-1A' <-A' <BB& A1A' D< ' '=' D1 @ <.<'-0' KD&>'0?BD' ?' 0' #1' <a1-@ & ' #1=& 1' D1' 0<'A' W ' 0D<@@ #1' <a1-@ B&>1' #1=& 1' ?A.1>1- @ <-A' K'@@ D1 1&=' C? .1' & ' <BH?' ' D1>01@+10@ # ' D 11' & ' !&?' .&&A' < ' B&-+1-'1-' 1-@ <-A' -&' 0?0C1 @ D1 1?-&@ 0K& -@ #1=& 1' D1' ?0 'B10' KD1 1' D1' @1<' 0DA@ #1' D1 1&=' DT > . @ D<' '0' &' 0< @ D<' D1 ' <>1' -& 'K'=='-.@ ''-' D1' @<B1' C 1 1-01A' =& ' D1' B<?01' &=' <-' +'@@ -&' A'A' -&' D< >@ #?' &-@ ' # ' D1' &>j C?@0'&-' &=' & D1 @ D1 ' 0D<@@ #1' D1 1 &' 1B1'+1A' # ' D1' ?0 'B10' <-A' ?A.10' <=& 10<'A@ <-A' 0?BD' ? .< '&-' ><A1' # ' D1' 0<'A' F ' -1000@ D1-' D1 ' 0D<@@ A1C< ' D1 1&=' ? 1 @ ' H?' ; ` I B P

! !-/ - Z'&-' 20# ' # &.-2' 1 @ 0"*!' D1>01@+ 'D ' .1 0"* k ·"2 ". '&-*' 1 -+2&.-

F '' B&>><-A' &?@ D<' D1' < ? 10@ A'-<-B10@ <-A' < j A&-0' <=& 10<'A' K' D'-' &?' <'@'K'Ba@ &?' A& B<?01' &' #1' C?#j @'B@ ' C &B@<'>1A@ <-A' =' >@ ' &#01 +1A' <BB& A'-.' &' D1' ==1=' <-A' 1-& ' &=' D1' 0<>1' F ' -100' D1' , '-.' <' F 10 >'-0 1 @ =11' '.D 11- D' " < ' &=' < ' '-' D1' 'L D' 1< ' &=' &?' 1' .-

'a1' &>><-A0' < 1' A' 1B 1A' & D1' D1 ''=0' ?-A1 K ' 1-' ?-A1 ' D1' 0<>1' " < 1@ & K' G D1' D1 '=' &=' & =&@a' <-A' ?='#'a@ D1' D1 '=' &=' 001L' <-A' 1 =& A@ D1' D1 '=' &=' '-B&@-@ D1' D1 '=' &=' & a0D' 1@ D1' D1 '=' &=' ,1-@ D1' D1 '=' &=' ? 1 ' <-A' ?001L@ D1' D1 '=' &=' &>1 01 ' <-A' "& 01@ D1' D1 '=' &=' & -K<@@@ D1' D1 '=' &=' "1+&-0D' 1@ =11' D1 '=' &=' <># 'A.1' <-A' ?-'-.A&-@ D1' D1 '=' &=' 1A=& A' <-A' ?Ba'-.D<>@ D1' D1 '=' &=' & D<>C &-@ =11' D1 '=' &=' F '@ 0D' 1

) PH& P P' $' ! ' $ %$ +' '$ ' $ $ 2
<' % -Q % $' ' ' - %' $ ' /'1 ' '1 %' ' ' 'N 1+
0'-' D10<>1' 1<@>1' " G ' ' W

)) ' :c' ! # ' -9.9

=A ? ? <C?-' ' ' 01C >& " ?

(' " ' ' $ ' 5D' ' $ ' > !

-' < .'-1' & ?@'

ME' = ' ' 'G '6 # 'HH' ' 'H9'@5 '

' ' ' '<' - 1' '0B&?- ' A1' , 1 - 9 P' 0<@?\ ' <BD1\'] 80e' H<' - =1' C@1 > 1 - ' <K \' F 10 <' @1' ?-A ' &BD1' -' A1+<- ' @1' =10 1' A10' &? \' 1' - \' A< 1' -' C<001' <@ D&-&' A1' "'1?' I ' A1' 1' - 1' 0.@'01' I ' C ' 1C1' C=' ' A?' &'<@>1' A1' @<001- ' A10' 1@< \' _0' I ' E&10' 10 1<- \' 1@' A' ' C@1 > 1 - ' <+&-0' =1' ' =<' 1' R 1' '0' 10 < ? \' I ' & A' -<- B10' 1 ' @<' =&/ > 1' ' 01 - 0?' G

' > 1 1 > 1 - ' 10 ' <001- ?\' I ' <B & A1\' H' A - 1' 0.@'01' 1' ' ' 1 - &'01' &? 10' 010' @'# 110' I ' = <?- BD'010' <?L" 1-8' '1 1 > 1 - ' B& > 1' 1@1' @10' <A' 1 ? \' I ' 1 - &'1\' 1 -' 1 > C0' A10' -&#@10' &'0' " 1 - .@1R 1' C.1 - & 0' - =1' '@1' &" H& 1' 10

1 > ' H' @<' .=& ' D< 1' I ' @<' D< 1' A1' @<' !& 10 1

&? \' '10' <? 1 ' #&-10' 10 < ?\' I ' & A' - > '1 ' <+<- ' B10' D1? 10' =''' \ ' B -'1 - ' 1C1@@1\'9 0&'1 - 9 1 - ?\' B .< A1\' B A?1 > 1 - ' 1L1B? \' 01@&-B' @1==1 ' A'B1@@10

1 > ' <' @<' . 1+&?01' C@1' - 1' H10 ' & 1' =1' 1' A10' ' > 0 10' A1' @<' !& 10 1'9 10 ' < 01- ?\' B <BB& A1\' H' -?@@1' > < 1' A1' > 11' 0&' ' A10& # < 1\' C' <0B?-' '-'0 1' A1' @<' !&8' 10 1' -<? 1' C0&-1' H?1a&-H'9 A1' J+<'@@1 ' A1' @'1?' 1-' @'1?'9 D& 0' A10' @'1?L' &?' @1? ' BD< .1' @&? ' 10 ' A&-1\'9 B1- 1' '1' ' P 11'9 1' C' > < B1' &?' C' > <- <11' &?' <? 1' A? 1 11' B&-0 1'- 1' A1' A' 1' @&/' +1 1A' '9 A1' 10C<0' =<' ' 1-' =& 10 1' <?C @1 - ' H' @1? ' B&-0B'1-B1' -1' @1? ' 1 - ' +& <' B@1 1 > 1 - ' 1 - =&? > 1 '9 A - \' A'1 - ' 0' @&? 0' +1 1A' \' 0? ' @1? ' BD< .1'9 10' @'1?L' &?' B1@@1' BD< .1' @&? ' 10 ' A&-1\' &>1' A10?0' 10 ' A' ;' 1 ' 10 ' <001- ?\' H' -? " D&>1' 0&' ' C '0' -1-C '0&-1\' > C' -'0 1' A1' !& 10 1' 0<-\' A?1' 1-A' 1 > 1 - ' &?' ><'-8' &1+ 1'9 &?' R0C<00<-' 1-' @<' !& 10 1'9 -1' B&-0 1'- ' A1' =<' 1' &#@'. &-' &?' 1A1 > C '&-' < <0B?-' '-'0 1' A?' !& 10 1' C' HBC-H'9 > <51' 1-B&- 1' @&' . 11' B @<00'01' A1' =& 10 1'@ 1' 0" <0B?-' =<B1' 1-B&- 1' B10' & A'-<-B1' 1-' <?1 -' C&'- ' B' A1' B1' 0&' ' < 1'- 9 C<'1' <0' C '10' 1-A<8' > <.1\' @&/0' A&?#@10' A<> <.10'9 I ' = -' B <?-B1&-' <?' & ' C? ' 0&-' > <@1=<'

1 > ' & AA . -1\' 10 ' B <001- ?\' H' @10 < ? \' =<' \' 1-' 1 > C0' @? ' -&#@1' & ' AK< A' <'1'9 -=1' /' @1' &" H& 1' 10 '9 A1' &#A10 > 1-' B " <K1@<BBD10' 0&'1 - ' =1 > 1 > 1 - ' 1 - ?\' B .< A1\' G 1 ' &? 1' B1' 10 ' & A1' . -1\' B <001- ?\' C? ' 10 1'-A 1' @<' > <@'B1' A10' A'C010' .1 - \' =''' &? 0' B +<.1 <- \' A1' 1?' 1-' @'1?' B? <- \' A1' ?! ' ?' C<''0' C@?'0' D<#?-A<- 1 > 1 - ' H' -1' 0&@&'1 - ' <+<- ' B10' D1? 10'9 H' A10& 1' @10' ?0 'B10' A10' <00'010' 1-' @1? ' 100'&-0'9 @10' ?0 'B10' A1' @<' C<'L' B @10' '0B&- \' 1-' BD10B?-' &- 11'9 <'1 - ' C&<' ' A1 - H?1 1' A1' &? \' '1@L' +<.1 <- \' B =<' & 0' ; A1'@& 0' > <@=<' \' B 0? ' 1?L' =<' 1' B1' H' @<' @1 ' A1 > <- A1G B H' 0@ &' @10' A' \' ?0 'B10' I ' '0B&- \' B&>1' @10' <' 0' <'@ =0' &-10 <#@10' B <?R0' E&, -&? 0' A10' +'@@10' I ' @'1?L' &?' '1@L' =<' &? 0' B <.1 <- \' +1-A &- 9 <'1 - ' A10& 1

\' 'BD< A9 11' <' '0B&- 1' " 1RK a@ *%' %' . $-

! 9 ' '0 <001- 1A' <-A' <BB& A1A ' D< ' &@ ' D? BD' D<+1' <-A' 1 - & ' <@@ D1 ' '#1 '10' <-A' ! <-BD'010' <0' KD&@@ ' <0' 0D1' D< D' D<A' <-A' 1 - & 1A' D1-)' '-' D1' ' > 1' &=' D1' `` , ' - ./0' -&##1' &.1 - ' & 0 / P

5 ' D< ' D1' E 1 <' D< 1 ' <-A' D1' D< 1 ' &=' D1' ! & 10 9 <-A' <@@ & D1 ' . &&A' < ? 10' <-A' A' - <- B10' > <A1' #1=& 1' D'0' ' > 1'9 <-A' - & ' 1C1<@1A9 0D<@@ #1' D&@A1' @ <-A' a1C 9 <-A' C? ' '-' A?1' L1B? '&-' <BB& A' - .' &' D1' ==1=@;' &=' D1' 0<>1

9 ' D1' . '1+&?0' &>C@<' - 'KD'BD' '0' - &K' > <A1' &=' D1' ==' B1 0' &=' D1' ! & 10 9 ' '0' <001- 1A' <-A' <BB& A1A ' D< ' - &' <--1 ' &=' ? '0D<@@ #1' = &>' D1 - B1=& D' B& > ' C1@ 1A' # ' <- ' ==' B1 ' &=' D1' ! & 10 9 & ' & D1 ' 1 0&-' KD< 0&1+1 9 &' <+1@ = &>' @<B1' &' @<B1' &?' &=' D1' @<B10' KD1 1' D1' ' D< .1' '0 .'+1 - ' &' D1 > 9 <.<' - 0 ' D1' ' E 11G -& ' # ' <@' B1'9 -& ' # ' 1 - <B1'9 & ' & D1 ' ? 100'9 B&-0 <' - 1A' &' .'+1' D1' ' 1 A =@;' &=' <' 10C<00' A&-1' ' - ' D1' ! & 10 9 & D1 K'01' D<-' D1' ' &-0B='1 - B1' K' @@ B@1< @ ' '-=& >' D1 > G #? ' D1 ' 0D<@@ .'+1' D1' ' 1 A' ^0' ?C&-' D1' ' D< .1' '-' D1' @<B10' KD1 1' D1' ' D< .1' '0' .'+1 - ' D1 > 9 <0' <#&+1' '0' 0;<A' V

9 ' '0' <001- 1A' D< ' -&' < ' #1' < 1 ' -& ' ' > C '0&-1A' # ' <- ' ==' B1 ' &=' D1' ! & 10 ' K' D&?' A?1' -A' A > 1 - 9 & ' #1' -.' <a1 -' K' D' D1' <-1 9 & ' 1 <0@' 0' - .' '-' D1' ! & 10 G -& ' 0D<@@ #1' B&-0 <' - 1A' &' > <a1' <- ' #@'. < '&-' & ' <-0&>' &' <- ' ==' B1 ' &=' D1' ! & 10 ' '-' <- ' & '9<. <' -0 ' D1' ' . 11 > 1 - ' <-A' D1' 00'01' &=' D1' ! & 10 G <-A' '=' <- ' A&' <. <' -0 ' D'0' A' - <- B1' '-' <- ' &' - 9 <-A' D1 1&=' #1' < <' - 1A@ D1' 0D<@@ C< ' &' D1' < 'A<> -'='1A' D1' ' A&?#@1' " <> <. 10' <-A' ! -1' <-A' <-0&>' &' D1' , ' - .' =& ' D'0' ='1 - B1

9 ' '0' & A<' - 1A' <-A' <001- 1A' D< ' D1' < ? 10' > <A1' '-' D1' ' > 1' &=' , ' - .' AK< A@ E <-A=< D1 ' & &? ' &+1 1' .-' & A' D1' , ' - .' D< ' -&K' '0@ &=' &#1 A0 > 1-' <-A' " <K@< BD10' #1' =' > @ ' DC@A1 -' <-A' a1C ' =' <-A' > & 1&+1 ' ' ' '0' & A<' - 1A' <-A' <001- 1A@ &' 1=' <' -' D1' <@'B1' &=' A'+1 0' 1&C@1'9 ! 1' & 0' <-A' K<-A1 ' - .' = &>' @<B1' &' @<B1'9 ?- - ' - .' ' -' D1' &?- ' > & 1' <#?-A<- @ ' D<-' D1 ' K1 1' K&- ' ' -' ' > 10' C00 9 D<' = &>' D1 - B1 j =& D' D1' ?0 'B10' &=' 00'010' ' -' D1' ' 100'&-0'9 D1' ?0 'B10' &=' 1<B1'9 <-A' D1' D1 '==0' '-' 1+1 ' &?- ' 0D<@@ D<+1' &K1 ' &' 1-H?' 1' &=' <@@ 0?BD' <.<#&-A0' <-A' ! A & 0'9 <-A' &=' D1' ' ==1 - B10'9 <-A' ?C&-' D1 > ' &' A&' D<' D1' <K' A1 > <-A1 D' G <-A' D<' <0' K1@@ D1' ?0 'B10' <-A' D1 '=@0'9 <0' D1' < & 0'9 <'D = 0'9 &-0 <#@10'9 <-=' & D1 ' E&+1 -& 0' &=' &K-0' <-A' @<B10' KD1 1' 0?BD' !1' 0' <-A' <.<#&-A0' 0D<@@ B&> 1'9 0D<@@ = &>' D1 - B1=& D' D<+1

C&e? ' A1' @1? ' 1L<>'-1 ' A'@'.1<@>1- ' I ' B&>C1@@1 ' A1' &+1 ' 01? 11' A1' @&'#&-' C& 9 C' 0?=='B'<- \' ><'-C-&Ø A1Ø '1@L' H' 0&'1- ' A10 1'-<#@1Ø <' <0B?-1' A1=1? 1' =1?001' A10@& Ø &+1\' 1-' >10>1Ø @1Ø =1' &? Ø I ' +<.1 <- \G I ' 0'@Ø -1' C&'1- ' '1@1' 01? 11' &+1 ' 0&'1- ' ><-A1\' <@ C0BD<-1' . @1' C ' ' A1> 1 ' <-H9 < @<' +1-?1' A1Ø ?0j 'B1Ø <00'.-1Ø C ' A1@',<-B1' A1Ø .<&@1099 @1Ø H?1?L' 1-' '1@ B<Ø <'1- ' C&<' ' A1' =1' ' 0? ' @1Ø A' \' +<.1 <- \' I ' =<' &? Ø '00'- ' 1>C '0&-1\' B1&' H' @1? ' 1- ' 01>#@1 < -''1? \' <=@<' 1' C' @<' 1 9

1>' 0? ' @1Ø . 1+&?01Ø' >10BD'1=1' I ' B&- C@1'- \' H1' <+<. -1- ' A0' & ' 1-' <? 1' A1Ø &#'1Ø @< B'#Ø' #&>'B'A1Ø' < 0? 1Ø' A1Ø' >1'0&-Ø I ' BD'+<BD11Ø' 1Ø' &? 10Ø I ' .0-A1Ø' B&>C<'. -'1Ø' BD10B?-1' C ' AU' &'<@>1' ' & A1'. -1\' 10 ' I ' <001- ?\' H' @10 < ? ' A1' F - 10 1 9 A&- ' @1' 1-&' 10 &' ' 1-+&'1\' C' -=1' = ' @1' &'' 1-' <-' C0BD<-' C< 01\' 1-' BD10B?-' &C- 11' " 1-.@1R 1' C ' ' 10 1' CB@<-'1\ 9 0&' ' 18' ')?\' I ' .< A1\' 1-' &? \' C&'- \9 I ' > 0' ' #&-1' I ' D<0 '+1' 1L1B?B'&-' <' @<' C@<'- ' I ' C 0?' 1' A1' BD10B?-' H'' 01' 01- 1 <' . 1+1\9 1-B&?- 1' @1' 1-&?' A'B1@@1G I ' <?' = -' H' D&>1' -1' 01' C? <' 8A10& 1' 1LB?01 ' C' '. -& <-B1' A1' >10>1' @10 < ? 9 10 ' <] '@@' <001- ?\' H' BD10B?-' '08' B&-' " 1<.@1 1'0&' ' U > \' B=1B '1-' <+<-' 1-' 1C0>'1' A1' =1' 1' CB@<><B'&-' A1' >10>1' @10 < ? ' H?< 1' =&' \' <-' 1-' BD10B?-' D?-A 1A' A1' 0<' #<'@@'1' I ' C' 010' #<'@@'=0' 1-' BD10B?-1'+'@@1' >< BD11'0'#-'A1'-\'= <-BD'010' B&>1'A1D& 0

1>' 1- &- 1'@1' >10BD'1=' H<+'1-' <0' A', 01 ' .1- \' A?' &'<@>1' H?1?L' 0&-' 1>C<=@1@@1\' I ' 1 &>1\' A1+<-' @10' ?0 'B1Ø I ' < &-Ø A1' @10B= 1H ' 1-' H?1@ B<Ø' C' B<?01' H' @1-H?10 1' C10' > 1' C 0?1' < ' = -' C' B1?L' H'' 0&-' C '10 9 1'-\' > Ø 1-' A1@< ' A<-' 1-' <-9 @10' ? &Ø ' CA1- ' .3-A18' >1-' I ' <0B?-Ø C@?'0' H' @<' +<@?1' A1' @1? ' R 1' 10 ' C' <-9 <' @&' 50.D ' 1>C& '001>1-' I ' A10 ?BB'&-9 10 ' <BB& A1\' I ' <001- ^m' ' A10& 1' 1-' <+<-' 1-' &? 10' >< 10' A10' C@110' 1-' H?1?L' # '1=' A1' '0'' C '?0' 10 ' . > <#@1' A&='B1' < Ø @1' . CA1' A10 10B1' =&'0' =&' \' M+'\' I ' 1 & -1\' A1+<-' @10' ?.10' A1 Ø @<' ? 119 I ' 0? ' B1' @10' C '10' A1><-A1\' 0'' -?@@ A10' A110' C '10' +1?@@1' C0 ' 19 &?' 0'' @10' C '10' D01-' A<+&'' # '1=' A1' '0'' C 'C0' 1-' @1' B<09 <A&-H0' <'= C 0? 1' A<?B?-' A'B1?L' ? &0' H'' 0&' ' 01- 9 0&' ' # '1=' A1' -'0'' C '?0'=>' I ' . - 1\9 I ' B1' <?L'D-' 1-' @10BD1H' ' B&>1' <'@@&09 I ' 0? ' B1' @<' H?1 1@1' > 01' <?' = -' 0<-\' A1@< '01@&-B' B1' H' @1' B<0' 1H?'1 ' I ' @<' @1 ' A1><-A0

1>' <001- ?\' 10 ' I ' <C1& A1\' H' @10' 10 < ? \' A10' C8+1&Ø =>@m' <+<-' B10' D1? 10' 0>1-' =1 >1>1-' 1>'\' I ' .< A1\'5= > 01\' 1-'#&-1' I ' A?1' 1L1B?B'&-G <A &?0 1\' < B1@@9 H' '' @10' M+<-\' A<?R ' _ 0' &?' A<>10' H'' -1' 0&-' B&>C '010' Ø A' \' 10 < ? m' CO'.-1-' A10& 1' <0B?-' C ' A1'-\' @1' &'<)>1' +' <'@@10' &?' B< '<.10' <@ &1C0' A1' @&Ø A ! I ' 1-10 9 <?R>1-' H'@Ø -1-' C? &-' <BB& A1 ' &+10H9 @10' C&00100&Ø = B+1-A&Ø A'B1@ 109 C' C<=1>1-' 1-' <==<' 1' `C0 1>1- P' 1-' C&'-9 H' >10>10' B1@@10' R+<-\' 1-B&? .1-' @<' C1 -1' 1-' &? 10' BD&010' B&>C '01' 10' A' 10' 10 < ? \' A10' ? +1& 09 I ' -'1- >1 -0' 1' ' @<' C '1' C' 'B1?L' +<-\' 1-A<><.11' 0 @ +& <' 0<' 0?' 1' <' @<' &'1 @1

' 1>' 0? ' @1' >10BD'1=' H<+'1-' A1' & ' W <? 1' 0? ' @<' =1?L'-1' I ' A1B1' Ø H10 ' &+1\' 10' A <C0' +1-A<#@10' 0'#-' A1' B&@&? ' B&>1' A10' <'10' B1- 1' @<00'01' 1-' & A1'. -1\' A1+<-' B10' D1? 109 10 ' & A1'. -1\' I ' <001- ?\' H' &? \' @10' 10 < ? \' 1-' =<' \' A1+<-' B10' D1? 10' <+1B' @10' 10 < ? \' ='? \' A1' @10' <@-1>-0' I ' B&'@@&? Ø A1@ ?#0'A1' A10' A' \' A <C0' 0&'1-' 1C?'' I ' .< A1\' I ' > 010' 1-' #&-1/P' I ' A?1' 1L1j B?B'&-'G <A &?0 1\' < B1@@ ' B1@? ' H'' A10& 1' 10C'1 <9 I ' C+1 < A1=1? 1' 1-' <0B?-' '1@ A <C' > 0' < +1- 1' B1- 1' @<00'01' & A>.-11' A10' A' \' A <C0' I ' B1- 1' @<' =& >1' A10' A' \' 10 < ? \9 1' ' @<' '1 B1' C '1' A1' BD10B?-' '1@ A <C' A1=1 I '+1' C?' ' 0&-' =+<'@@' C' @<' A10' '0=B&- \' 0'@0

-1@'-1A&-' D1' &@@

&K1 ' &' 1L<>'-1' D1>' A'@'.1- @ 9 <-A' &' B&>C1@@ D1>' ' &'=' -A' ? 1 ' &=' D1' ' .&&A' #1< '-.9 # ' 0?='B'1- ' 8' C1>& 0 9 &=' 0?BD' <0' #1' A'0 <'-<#'19 '=' <-' " 1=1?@ ' #1' =&?-A' '-' 0?BD' !1' & Ø <-A' <.<#&-AØ G' <-A' '=' D1 ' B<--&' =' -A' 0?BD' ? 1 9 D1 ' 0D<@@ #1' 01-' &' D1' -1L ' <&@9 D1 1' &' <#'A1' '@@ D1' B&>'-.' &=' D1' ?0 'B1Ø <00'.-1A' =&' D1' " 1@'+1 <-B1' &=' D1' E<&@09 KD&' '-' 0?BD' <01' 0D<@@ D<+1' &K1 ' &' A&' ?C&-' 0?BD' !1' & Ø <-A' <.<#&-AØ 0&' '>C '0&-1A9 D<' D<' D1 1&=' &' D1>'#10 ' 0D<@@ 011>'# ' D1' <K

9 =& ' D1' . '1+&?Ø '0BD'1=0' <-A' &>C@<'- Ø D<' A&' A<'@ ' D<CC1-' &=' &##1 '109 D1= 09 <-0@<?.Dj 1 09 ? -'-.' &=' &?010 9 <-A' 'A'-.Ø '-' &? 0' 1-A' . 1<' &>C<-'10' '-' 1+1 ' < ' &=' D1' 1<@>G ' '0' & j A<'-1A' <-A' <001 1A' D<' D1' < ? 1' &=' F '-BD10 1 9 D1' 1-&? ' KD1 1&=' '0' 01-' # ' &? ' & A' D1' ,'-.' D'0' 1< ' @<0 ' C<0 ' '- & 1+1 ' &?- ' &=' -.@<-A' &' #1' C &B@<'>1A9)' #1' D&@A1-' <-A' a1C ' '-' <@@ &'- 09 <-A' C? ' '-' .&&A' <-A' D<0 ' L1B? '&-9 <' D1' &>C@<'- ' <-A' ? 0?' ' &=' 1 + ' <-' D<' =11@1 D' D' >01@=' . '1+1A' <.<'-0 ' D1' 1-&? ' &=' D1' 0<>1' ' <-A' &' D1' - 1-' D<' -&' <-' 0D<@@ 1LB?01' D' >01@=' # ' .-& <-B1' &=' D1' <>1' < ? 1 9 ' ' '0' <@0& <001- 1A9 D<' 1+1 ' D1 '== &=' -.@<-A' 0D<@@ #1' #&?-A' = &>' D1-B1=& D' '-' C &C1 ' 1 0&-' &' ><a1' &B@<>< '&-' &=' D1' 0<>1' ' <-A' &?' ' >10' >' <' 1< ' '-' 1+1 ' ?-A 1A' &=' D'0' <'@'K'Ba9 <>'' # ' D'0' <'@'==0' '-' 1+1 ' < a1 ' &?>9 <0' K1@@ F= D'-' '#1 '10' < ' K' D&?

!' 0 ! V&-# !2 !" #.-&''1!/

9 .<'-0 ' D1' 'BD'1=' D<' D<CC1-1 D' &' A'+1 0' 1&C@1' &=' D1' 1<@C'9 KD'BD' #1'' >C<-1@@1A' <-A' 1 ? -1A' #1=& 1' D1' ?0 'B10' <-A' < &-0' &=' D1' LBD1H?1 G '-' FD'BD' <019 #1B<?01' D<' D1' -H?10 ' '0' -& ' C? 0?1A' H' D1' -A' # ' D&01' < ' #1' < '109 #?' C? ' '-' " 1@<' = &>' 1<' &' 1< 9 D1' ? & 0' A&' . 1< @ ' @&019 '<-A' 0&>1' >?BD' >& 1' D<-' D1' <@?1' =' D1' ' <-A' ï # ' 1< 9 &' D1' ' . 1<' >C&+1 '0D'-.' <-A' '-A <-B1G ' '0' <BB& A1A' D<' = &>' D1-B1=& D' '-' <@@ <--1' &=' @1<0' KD1 1' <' '0'' '?0' '0' . <- <##1' &=' ==' B19 <= 1 ' D1' . 1<' " '0 100' ` 1 ? -1A9 <-A' D 11' '>10' 01 +1A/P' #1=& 1' D1' ?0 'B10' . <' - 0 ' D1' ? & 09 <-A' D1 1?C&-' D1' < '10' A1><-A1A9 '=' -&-1' &=' D1' 0<'A' < '10' K'@@ C? 0?19 & ' '=' D1' < A10' 1=?01' &' D<+1' < F ' '&=' '0'' '?0' '-' D1' <019 D1-' <' D1' ?' ' &=' <- ' &=' D1' ? & Ø D<' #1' C 101- 9 < F ' '&=' '0'' '?0' 0D<@@ #1' ><A1' <-A' . <- 1A9 <-A' D<' <0' K1@@ '-' D1' LBD1j H?1 ' <0' 1@01KD1 19 <-A' D1 1?C&-' D1' ^?< 1@ 0D<@@ #1' 01 ' < ' <-' -A' F ' D&?' " 1@< 9 <BBT A' -.' <0' D1' <01' 1H?' 1 D9 <-A' D1' <K' A1><-A1 D

0 !2'

1L 1?A1A' &' !- - 2' 0;#! &2'

9 ' '0' <BBH A1A' <-A' <001- 1A9 D<' D1' < ? 10' &=' ? +1 & Ø ><A1' #1=& 1' D'0' '>1' #1' =' >@ ' D&@A1-' <-A' a1C 9 <-A' C? ' '-' .&&A' <-A' A?1' L1B? '&-'\@ &'<-8' '-.' &' D1' 0<>19 D<' '=' D1' 1 +<- Ø &=' & D1 ' & A0' <-A' <A'10' KD'BD' #1' -& ' B&>C '01A' '-' D1' 0<'A' >8' ? 10' A&' = &>' D>'B1=& D' <a19 ' <- ' < ' K' D'-' D1' 1<@>9 ' ?<@0' & ' < '<.10' &' D1' 01' &=' D1' ' & A0' <-A' <A'10' & D1 K'01' +6% D1 ' D1 1&=' >< ' <. 11' K' D' D1' K-1 Ø <-A' 1@@1 Ø &=' D1' 0<>1' # ' < >1-' D1 1&=' &' #1' ><A1' 1<A'@ ' '-' <-A9 D<' D1' 0<>1' 1 +<- Ø 0D<@@ '-B?' D1' <'-' /)' B&>C '01A' '-' '@1' 0<'A' < ? 10' &=' ? +1 & 0 9 <-A' -1+1 D1@100' D1' < ' 1-A<>.<1A' # ' 0?BD' 1 +<- 0 9 '=' D1' K'@@ 0D<@@ D<+1' D'0' ?' ' < ' D1' & > >&-' <K

W 0 !2'1 /!' * &-2 ' /!#!&' &-' +. 2' . ' ;!L2.+/ ' /' ' * ;2 ' 0+k -!*!'2 -/' 1+! ."2 . ' !' 0;2&/@ . ' +. 2' #.-&''1!/0

9 ! & ' D1' '0BD'1=' KD'BD' A<'@ ' D<CC1-1 D' ?C&-' D1' !<@01D&@A' <-A' " 1B1' ' 8KD'BD' '0' =&?-A' '-' @& D0' +1-A'#@19 .K1@@ B&@&? 1A' <0' < ' @& D0 9 <.<'-0 ' D1' 00'01' D1 1&=' & A<'-1A' #1=& 1' D'0' ' > 1 9 ' '0' & j A<'-1A' <-A' <001- 1A' D<' ' <@@ D1' < ? 10' D1 1&=' ><A1' '-' ' > 10' C<0 9 8K' D' D1' < ? 10' ><A1' &=' ?@-1.1 0' <-A' &@@1^& Ø &=' D1' ?#0'A ' &=' D1' 0<'A' @& D0 9 #1' D#@A1-' 9 a1C 9 <-A' C? ' '-' A?1' <-A' .&&A' L1B? '&-'G &'-'-.' &' D1' 0<>1 9 D<' D1' KD'BD' = &>' D1-B1=& D' ''<@@ 10C ' <-A' C &+1' " 1=<?@ ' '-' <- ' 0?BD' @& D' 01 ' &' <@1 9 <.>-0 ' D1' 00'01' D1 1&=' & A<'-1A' &=' D1' 0<'A' @& D0 9 <-A' <.<'-0 ' D1' ! & >' &=' D1' 0<'A' < ? 10 9 0D<@@ D<+1' D1' D' A' < ' &=' 1+1 ' 0?BD' @& D' A1=1 " '+R' =& ' D'0' <#&? 9 # ' D1' " 1@'+1 ' &=' D1' D1 '=0 9 '=' D1

) !!' 6. ' + 02' J' 6&#' ' 1 ' ' / ' -/' . !' .' ' V @- .-K <^/7 ' ' &. ' =' < *!',

Q ' ' 2 %' " %

) &-' +' @-*!2' ' ! ' 5

&' '

CC'2B< '?& ?=' ' !' '-&?BOO

#1'C 101-9&'&=' D1' & AO'&=' D1'!<' 0'<-A' < a1 0@<-A' & D1 ' @<B10'KD1 1'0?BD' @& DO'0D<@@ #1'-&?-A' A1=1= '+1@ & ' &=' D1' ' 1K< AO'& ' <'@'=0@ & ' &=' D1' &-0 <#@10' &=' D1' &>'0'<-A' @<B10' <=& 10<'A@ # ' -A1- ? 1'#1 K'L' D1>'A?@ ' &#1' ><A1@ KD'BD' -A1- ? 10'0D<@@ #1'1+1 ' 1< '<' D1'!1<0 ' &=' ' 'BD<1@ A1@'+1 1A' '- &' D1' Lj BD1H?1 9# ' D1>'KD'BD' 0& 0D<@@ ><a1' D1'0<'A' "1@'+1 9 &' D1' -1-' D1 1' &' BD< .1' D1' ?@-1.1 0'<-A' &@8 @1 =& 0'<=& 10<'A@ # ' KD&>'0?BD' "1=<?@ 0'&?.D ' &' D<+1' #11-' 01< BD1A@ B& 1A1A@<-A' >1-A1A@<-A' #1' -& 9#?' B&>>&-@ ' ><'- <'-1A' <-A' B&-B1<@1A' '-' <@@' < 0G =& ' KD'BD' D' A' < ' D<' C1 <'-1 D' &' D1', '-.'<0' D'0 !& j =1' ? 1'# '=& B1' &=' D1' < ? 10' ><A1' '-' '>10' C<0 9 D1' ? &1.1 0' <-A' &@@1A@& 0' <=& 10<'A' -' 1+1 ' &?- ' <-A' @<B1' KD1 1' 0?BD' @& DO' A1=1 '+1' 0D<@@ #1'=&?-A@ =&' D1' <'-' <.<'-=@G D1'0<'A' ==1-B10' <-A' &-B1<@>1-9 0D<@@ ><a1' E 11' &=' D1' '&K-' &-1 ' &' &?' & A' D1' ,'-.' '-' D'0' LBD1H?1 9&=' D1' <@?1' &=' D1' 0<>1' D' A' < G 0&' D<' <0' K1@@ &=' D1' 0<>1' D' A' < ' <0' &=' D1' 1>-<-' &=' D1' 0<'A' @& D@ D1', '-.' 0D<@@ #1' KD&@@ ' <-0K1 1A' < ' D'0' 0<'A' LBD1H?1

W "& +' ' 22&j!' .'" 6!-' .0' .' W& -/2+@&-'* &-' 7 .' .0- &!2

9 ' '0' & A<'-1A' <-A' <001- 1A' D<' <-' 00'01' &=' &+1@ "'001'0'-' 0D<@@ #1' = &>' D1-B1=& D' . <- 1A' <-A' ><A1' &=' 1-' #1D'-A@ A?1' &=' 1-1>1-0' #1'-.' '-' A'+1 0' &?- '10@ &' #1' D&@A1-' '-' D1' &-='-1' &=' D1' &?- '10@ K' D'-' KD'BD' D1' 1-1>1-0' #1G' <-A' D1 1?C&-9 D1' 00'01' <a1-' <-A' '1A' # ' 1&C@1' &=' D1' 0 ?A' &?- '10' '-' D1' 0<>1' <--1' <0' '0' A&-1' &=' <' &>>&-' &=' <0 ? 1' #1'-.' '-' &-1' &?- 9 <-A' <CC1-A<-' &' 1-1>1-0' >' <-& D1 ' &?- G <-A' D<' <0' K1@@ &=' "'001'0'-0' A&-1' '-' '>1' C<0 9 <0' &=' "'001'0'-0' 1' &' #1' A&-1G <-A' D<' F ' 0' D1 1?C&-' <' D1' ?' ' &=' D1' @<'-'==0' #1' ><A1' = &>' D1-B1=& D' '-' D1' D<-B1 ' K' D&?' <-' <--1 ' &=' &- <A'=='&-9 '-' <' A?1' ! & >

W !' 0 !2' <' 6&#' ' #L .:' J L -/' ' 6&#' ' B8$ ' ' &' #.-#!"-&-'* B&2 1.-*!"2' &# 0 +!"2' -/' &-!"2' "! ! +!/

9 F D1 1<0'-' A'+1 0' < @'<>1-0' D&@A1-' <' F 10 j >'-0 1 9 D1' !'= D' <-A' 'L D' 1< 0' &=' &?' 0<'A' & A' D1' ,'-.9 A'+1 0' A'-<-B10' <-A' < ? 10' &=' !'0D1 0' &=' &-j A&-' <-A' & D1 ' '= ?<@@1 0' K1 1' ><A1@<-A' <@0& &=' '-j -1 0@<-A' &=' D1' <@1' &=' F '-10@<-A' D1 1?C&-' D1' 0<>1' A'-<-B10' <-A' < ? 10@ K' D' D1' <'-0' '-' D1>' B&-j <'-1A@ K1 1' C?#@'0D1A' <-A' C &B@<'>1A' D &?.D&?' D1' 1<@>9 <0' '-' D1' 0<'A' < ? 10' <-A' A'-<-B10' >& 1' C@<'-@ ' >< ' <CC1< ;' 1+1 D1@100' =& ' B1 <'-' <?010@<' D1' 1H?1=@ &=' D1' &>>&-0' &=' -.@<-A' D1 1?C&-' 0C1B'<@@ ' ><A1' ''0' <001- 1A' <-A' <. 11A' D<' D1' 0<>1' A'-<-B10' <-A' < ? 10' &=' !'0D1 0@ '-1 0@<-A' 'Bj ?<@@1 0@ ><A1' '-' D1' 1<0' <=& 10<'A@ 0D<@@ #1' KD&@@ ' <--?@@1A' <-A' 1C1<@1A@<-A' 0D<@@ &@01' D1' ' ==1=' <-A' 1-. D;' 1+1 D1@100' 0<+'-.' &' D1', '-.' <@@ D1' !& j =1' ? 10' &=' F '-10'=& ' D1' '>1'C<0' D<' &' D'>'C1 <'-1 D' # '+' ?1' &=' D1'0<>1' A'-<-B10' <-A' < ? 10;' &+'A1A' <@K< 0@ D<' <@@ D1' ` '->1 0'<-A '= ?<@@1 0@<0' K1@@ !'0D1 0'<0' & D1 ' B& >'-.'K' D' D1' ' 'A=?<@0' &' D1' ' '&=' &-A&-9 0D<@@ #1' = &>' D1-B1=& D' ?-A1 ' D1' E&+1 -<-B1' <-A' ?@1' &=' D1' < & ' <-A' @A1 >1-' &=' D1' 0<'A' ' ' =& ' D1' '>1' #1'-.9 <0' '-' '>1' C<0' ' ' D<' D' #11-' ?01A

W 6&# ' #' ' "!#& !/'H

9 D1 1<0' @<1' '-' D1' < @'<>1-' D&@A1-' <' F 10 >'-0 1 9 D1' D' A' 1< ' &=' D1' 1'.-' &=' &?' 0<'A' & A' D1', '-.9 <' D1' 1H?10' &=' D1' &>>&-0 9 <-A' # ' D1' 001-' &=' D1' & A0' 1>C& <@@ ' ' K<0' & A<'-1A' <-A' <001- 1A@ <-A' ?C&-' <'. '1+&?0' <'-' C &D'#' 1A@ D<' -&' ?# 1=' &=' D1', '-.' -&' & D1 ' 1 0&-9 &=' KD<' 0 < 1' &' &-A' '&-' D1' K1 1@ 0D&?@A' <a1@ -1' D1 ' 1j B1'+1' = &>' D1-B1=& D@ K' D'-' D1' 1<@>' &=' -.@<-A@ &B? <B 9 1 1' &=' & -1 9 -1' 1 >@ -& ' <-' & D1 ' A>'-'0 <'&-' # ' -A1- ? 1@ & ' '-' <-' & D1 ' <--1 9 &=' <-' 1 0&-' B&-B1 -'-.' <-' 1 -1=' B1' &=' &@ ' D? BD' K' D'-' D1' 1<@>9#?' &-@ ' &=' D1', '-.//0 ?# 1=@0' &=' D1' 0<>1' 1<@>9 K' D&?' D1' 10C1A<@ E <B1' <-A' 1LC 100' 'B1-B1' &=' &? ' 0<'A' & A' D1', '-.9 ?C&-' <' B1 <'-' <'-' B&- <'-1A' '-' D1' 0<'A' < ? 1G ' '0' <001- 1A' <-A' <. 11A' # ' D1' 0<>1' & A0@ D<' D1' 0<>1' < ? 1' 0D<@@ a11C' D'0 \' X' ' #

#.-4"1!/' -/' !% !-/!/' .' +&!.Z .+/&-'* 4!-! #!2&-' -*+ &/'_

0&'1-' 01- \'&?' A10' _ 0' A10' =1' 10' I ' >< BD110@ I ' <? 0' @'1?L' &?' '1'L' A <C0' A1=1^'+10', &-' &+1\@&?' A1' @& 0' 1-10BD<@L' I ' <'@''=0' &?' A10' &-10 <#@10' A10' +'@@10' I ' @'1?L' <+<- A' \' C' 1-A1- ? 10' 1-' 1-' 1' 1?L' A?1>1-' <=j =<' 10' G @10' H?1@10' 1-A1- ? 10' 0&'1-' BD10B?-' <-' <' @1' =10 1' A1' 1'-' 'BD1@' @' 1\' 1-' @10BD1H' ' C' B1?L' H1-0" =1 &-' @<' A' 1' @'+011@ <@ 1==1 ' A1' BD< .1' '@@&1H0' @10' @-1&? 0' I ' B&'@'&? 0' <+<- A' \' C' H?1?L' '1'L' A1='' ? 10' A1?001-' 10 1' MBD1\' BD<0 '1\' I ' <>1-A1\' I ' -1' 0&-' > ' 1'-\' B&1>1-' ><'- 1-?\' &?' B&-B1@1\' &? \' C \G C?' H?1@1' '1 B1' C '1' H<CCA1-' <?' &" B&>1' 0<' =& =1' ? 1' C' =& B1' A1' @10 < ? \' A1+<-' & 1' =1' \' @10' <@-1&' I ' B&'@@&' <+<- j A' \9 1-' BD10B?-' &?- 11' I ' @'1?' &?' '1@\' A <C0' A1=1Bj '+10' M &-' &+1\' C/' C1'-1' 1-B&- 1' @& 0' A' \' ><@ =''' ' I ' B&-B1@1>1-9 =1B1-' . 11' A1' @& 0' CC 10' A1-'1 0' <'-=1' A' ' I/' @1' &" 1-' 0&-' 0BD1H' ' A1' @<' +<@?1' A1' B1@@1' '1 B1' CA1@ '00>' H' 0'#-' A1' >10>1' @<' A1 B1' C '1' B&>1' A1@ 1>1-<-' A?' A' ' A <C' -=1' = ' @1' &" 0&=' 1-A1 1>1-' 10C&-A?\' <' 0&-' 0BD1H' ' <+<- A'

1>' 10' & A>.-1\' I ' <001- ?\' H<00'01' A1' &+1@1' "'001'0'-1 0&' ' A10& 1' ./- 1' I ' =1' 1' A1' 1-' <A1 '1 1@ A?1' A10' 1-\' 10 1<- \' 10' A'1010' &?- 110' <' 1-' '1-' @<' B&-8' = -1' A10' &?- 110' A1'-\' H?1?L' @10' 1-\' 0&-9 I ' 0?' B1' @<00'01' C '01' I ' '11' C' .1- \' A10' A' \' &?- 110' 1-' >10>1'@<' >< 1' B&>1' 10' =<' ' A?' B&1' A1' C<0 ? 1' 10 1<- \' 1-' ?-' &?- 11' I ' <CC1-A<- 1' <0' 1-\' 1-' <? 1' &?- 119 I ' B1' <?L" <+<- ' A10' A'001'0'-10' =1' 10' A1+<- ' B10 1' D1? 19 B&>1' A1' A'001'0'-10' ?-H& 1' <==<' 19 I ' H' # '1=0' 0? ' B1&' <@<' C 0? 1' A10' C@1'-A=0' 0&'1-' A10& 1' =<' \' 1-' @<' D<?-8' B1@@1 '1' 0<-\' -?@@1' >< 1' A1' B&- A'BB'&-' 1-' A?1' =& >1

1>' B&>#-' H' -<A.<' 0' 1-' A', 010' C@1>1-\' 1-?\' <' L F 10 >' @10' <-0' A?' 1.-1' -=1' A' ' Y' @1' &" H?'-' I ' 0'0>19 ='' 1-' =<' \' A'1010' & A'-<-B10@ I ' 10 < ? \' A10' C10@ 0&-1 0' A1' &-A 10' I ' A<?R0' +' <'@@1 0' I ' <?L'-' A10' +'-1 1 0' I ' @<' +1-1' A1O' +'-0@ I ' 0?' B1' >10>10' @10' & A'j -<-B10' I ' 10 < ? \' &+10H@ @10' C1 -10' 1-' B1@10' B&-18 9-?\'=? 1-' C?#@'1\' I ' CB@<>1\' C> ' @1' &'<@>1' 0'B&>1' 1-' @10' A' \' & A'-<-B10' I ' 10 < ? \' C@?'0' C@1'-1>1-' C? <' <CC<' &' G '1-' >1 -0' C' R 1'-0' 1-BD10&-0' <' @<' 1H?10 1' A10' &10' "1-.@1 1' 0?' B1&' 10C1B'<@>1-' =1' 19 10' <001-?\' I ' <BB& A1\' H' >10>10' @10' & A'-<-B10' I ' 10 < ? \' A10' 100&-1 0' '-1 1 0' I ' ' <'@@1 0@ =1' \' 1-' @10' <-0' A10?'0A' \9 0&'1-' A1' &?' <-'1-' \' I ' 1C1@@1\' I ' CA1-' @&? '=& B1' I ', ?1G <?+1\'-'1-' >1'-0' <' -=1' K?' @1' &" &? \' @10'=& =1' ? 10' A10' +'-0' <' @?" <CC 1-<- 10' C', -1' A1' >10>10' @10' & A'-<-B10' I ' 10 < ? \' H<-<@ 1>C0' C<001\' ? +1?\' &? \' =&' \' H' &? \' @10' ^ + ' - 0 I ' +' <'@@1 0' 0'#-' 100&-1 0' B& >1' <?R0' &+1' @1? ' +' <'@@10' +1-<- \' <' @<' A11' ' 11' A1' &-A 10@ 0&'1-' A10& 1' A10&?\' @1' .&+ -<'@1' 1?@@1 P' A10' 1' ' I ' @A1 >-<-10' A1'@<' ' 11'<+<-A11' C/' @1' 1>C0' 10 1<- \' B& >1' <?-B'1-1>1-' ' 0&@1'1-' 10 1

1>' B&>1' -<A.<' 0' 1-' C@1>1-' 1-?\' <' F 10 >' <-' L A?' 1.-1' -=1' ' @1' &" '1 B1@' <@<' 1H?10 1' A10' &10' I ' C' <001-' A10' 0' 1>C& 1@@9 10 &' ' & A1'.-1\' I ' <0j 01- ?\' I ' 0?' . 1+&?01' C1 -1' A1=?-A?\' H' -?@@ @'1.1' @1' &" -<? =1' C0&-1' H?1@B&-H' A1' H?1@ 10 <' &?' B&-A'B'&-' H'@ =?'0 9 C@-A &' ' -1' 10B1'+&' ' A1=1 0' 1-<+<-' A1'-\' @1' &'<@>1' "1-.@1 1' CB? <B'1@ = 1' A< & -1@ -1' =1 >1@ -<? 1' <A>'-'0 <B'&-' C' 1-A1- ? 1' -1-' <? 1' >< 1' H?1@B&-H@ A1' -?@@1' C0&-1' A<0B?-' #1-1='B1' A1' 1'- 1' 0.@'01' A1'-\'@1' A' ' &'<@>1' =& 0' <- 0&?@1>1-' A10' @'1.10' -=1' ' @1' &" A1' >10>1' @1' &'<@>1' 0<-\' 10C1B'<@1' . B1' I ' 1LC&01' B&-.'1' A1' -=1' ='\ @1' &" 0?' ' C 1'-1' C1'-1' B&>C '01' 1-' @10 < ?' <+<- A' 9 <001- ?\' 10' & 1' I ' <Bj B& A1\' C' >10>10' @10' 0' H' >10>1' @10 < ?' '1.-1' 010

) &-!"Z %' %'.$- + 0 - 1 @'-1A' &-' D1' &@@

=C 1' I ' , ?1' 1-' &? 1' C&' - \G' 1 ' &? 1' B1&' 10 ' <?L''' ' <001- ?\' H' 0" <0B?-' <@'1-' 1' ' C? BD<B1\'&?' A10& 1' C? 8 BD<B1' <0B?-' #1-1='B1' A1' 1'- 1' 0.@'01' "' . -' 1' &?' <? 1' I ' 1-' CC 1' C0&-1' C2' -1' C&00100'&-' A'B1@@C' &?' 1BB?C'1' A1'=<' 9 A1'-\' > 10 -1' @1' &'<@>1 9 0&'@ '@' < 0&-' 1C0 CC 1 9 &?' <A &&C0 A<? " 0<' '" 10C1B'<@1' B&- . '1' A?' &'9 0&' ' '@ B&- C '0 1-' >10>1' @10 < ? 9 I ' &? 1' B1&' '-B&? .1' 1-' &? \' C&'- \' '1@L' C1'-10 I ' =& =<' ? 1' CCC'1' 0&- ' & A1' . -1\' C' ?-' <? 1' 10 < ? '=<' ' 1-' <-' LL+ ' A1@ 1. -1'@? ' -&##@1' &" ' <'1@ ' ='=/ @1' &" H& 1' 1 9 BC- 1' B1<L' H" C? BD<B1- ' C+'0'&- 'A<##1'10'&?' '& '10G 1 ' 1-&? 1' <?' = -' H' '1@L' @'B1-B10' -1' 01' =' B1- ' A10& 1' 1''<+<- 9 @1' &" +C1 ' I ' B&><-A1' <' &? \' 010' @'1. ' I ' < 10' H'@0' @&? ' <#0 '1. -1- ' A1' B ' 1-<+<- ' A1' @? ' C '& ' A<0B?-0' '1@0' @'B1-B10' A&-1 G 1 ' 0" &1 '<?L" @1' &" @? ' >10 -&0<#0A1. -1 ' A&'A&-1 ' <0B?-& 'A1' @'B1-B1 9 A? <- 10' @10' .?1 10' D& C '0' <?' < A'-<@ A1' <C@10' &?' <' < 1' 10C1B'<@1' C0&-1' <' H" @1' &" 0&' ' C' 10C1B'<@1' B<?01' 1-C\ '

L'' ' 1-" 10 ' & A1' . -1\' I ' <001- ? @ I ' @1' &" A1=1-A1' H A'0& 1 > 10' - ?@@ D& > 1' BD'+<BD1' A1' -\' @1' &'<@ > 1' < >1m) $ 1-B - 1' @<' =& > 1' A1' @10 < ? ' A1' =C D<>C &-' 0? ' B1' =1' 9 -1' o+10H9 @<-B1. < ' AA - \' >10>1' @1' &'<@>10' @10' H?1?L' @<-B1. < 10' &'1-' A1' &? ' ?0 1\' A1'-\' @1' A' ' &'<@>1' B& > 1' BD& 1' A1=1-A?1' C' -=1' '@1' &'9 0? ' C1'-1' A1' =& =<' ? 1' A'B1@L' @<-B1. <'10' < >? 10' I ' <?R0' D1 -1 0' H?1@B&-H10' 10' >< -0' I ' C&00100'&-' A1' B1@@? ' H" @10' C < A10& 1' A1'-\' >10>1' =1' &'<@>1' H& @<1' B10 \' 10 < ' I ' & A'-<-B10' 0<-\' 10C1B'<@1' B&-. '1' A1' &" -=1' = N '

L''' ' 1>' 10' # '1=0' A1' C>?-' 1' =11' 10 ' <001- ?\' I ' <B8' B& A1\' H' B1?L' 0' H?1?L' '1@L' # '1=0' 0&-' C& 1\9 I ' H" 0&-' A1' C01- ' #C 0' A1' &'<@>1' I ' 0&-' A1' #&-1' =1>1' A ' >1-' =<' \' @&// .1 <@L' < & -10' A1+<- '@&' A1C 0' H' @1' D<?-B1@@1 ' " 1 - . @ 1 P' C? ' @1' 1>C0' 10 10> '9 C' @<A '0' A10' ?0 'B10' C? <' .W- 'B ' ' >10>10' @10' C -10' C? &- ' <CC< ' ' I ' 10C&-A 1' I ' =1' 1' I ' 10B1'+ 1' B1' H' @<' @1 ' A1><-A1 9 C' @&' .1 <@L' < & -10' <+<- A'\' 0'<+<-' B& > 1' 10' <? 10' 1<1' I ' H?1B1'10G 1 ' B1?L' C0&-10' H" A1B ' ><<- <-' C<001 & >' C' @'B1-B1' -=1' @ 7 @1' &" I ' '1-' <? '- ' A1' #&-1' =1 > 1 9 H' <' @&' 1H?10 1' @1' A' ' D<?-B1 1 ' ?' @<A+'0' A10' ?0 'B10' @&? ' C? <' .D@ '1 ' A1=1' 1' @&' .1 8' <@L' < & -10' 1-' @<' D<-B1@@1 '1' C' C< 1 - ' A?' &" A1 <-' '& ' C<001 9 ^< 10C&-A 10P' 0'=' -' 10' A' \' # '1=0' A1' C > ?-' 1' =1'R9 B& > 1' 1 -' <?R<' H?1 1a0' 1 -' H?1 1@B<0 & > 10' +& 10'B&' ' 1L 001' > 1 - B' & -] = @aOP' A10' # '1=1'0 ' H?1 1@10 A1' 8' -' 1' =11G 1 ' B1@@1' C< 1 - 1' 1 -0" =1' 0 C? & - ' A10' @& R' @10' A' \' < & -10' 1-' <#01-B1' A1' @&' 1'0 109' 10C&-A 1' C' 1?L' I ' <?R0' < & -10' A10&?\' 1?L9 A1+<- ' H?1@B&-HO' .1' A?' &'<@>1' I ' =1' 1' I ' 10B1'+ 1' 1@ A' ' <0@ 0'<+<- ' B& > 1' #-' -? ' <? 1' B<# -'1- B&- 10 1 ' <0B?-' 10 < ? ' ='?' < N A- '1' <+<- ' B10' @'1? 10

1>' 0? ' @<' . 1+&?01' C@1'- 1' H10 ' =1' 1' A10' 1-& 0' A10' H?1 1@10' I ' BD<?>C & 0G 10 ' & A1'. -1\' I ' <001- ?\' H' @10 < ? \' 1- ' =<' \' 1-' @10' <-0' A?' 1. -1' @1' &" AK< A' <'1@ -=1' A' ' @1' &" C '>1 ' I ' H-< 0' 1 ' <-L'- ' 1-' <-' A1' -=1' @1' &" H& 1' 10 ' C ' >1 9 0=11K ' 1-?\' I ' .< A1\' I ' A?1>1- ' 1L1B? \' 1-' &? \' C&'- \

1>' 10 ' <001- F\' I ' @1' &" A1=1-A1' 10 &' 1>1- ' H' A1B ' 1-<+<- ' -?@a' C0&-1' <@'1-1' &?' A1-0\1'-' A1' H?1@8 &-H ' 10 < ' &?' B&?A'B'&-' H'@ 0&' ' <>10-1' &?' 1- &'1' &?' =<B1' <>10-1 ' &?' C' R 1' o<' C' >11 ' D& 8 AD &'<@>1' " 1-.@1R 1' <0' <0B?-10' C '10' " 10B&B1' 1-' C '+1' -1' 1-' <CC ' <0B?-1' >< 51' A< >? 1' A1' #@11' A1' # 110' -1' A<? 1'+' <'@@1' &?' A<? 1' 1= 100DBD1>1-' H?1B&-H9 ?' C1'-1' A1' =& =1' ? 1' A1' >10>10' @1 '+' <'@@10' < >? 10' I ' / !Z <? 10' oD&010 9 <+<< A' 10' 1-#1>D@1' <+1B' @10' - ' ' 1001?@L' BD< 1 10' I ' B +<@L' H " @10' C& 1- ' &?' <>10H1- 9 &?' A1' @<' , &'1' +<@?1' A'B1@@10 9 " 1-0" -1' 0&' ' H' @1' N N W /' - 1 @'-1A' &-' D1' &@@

!& B1' <-A' ==1^' '-' <@@ &'- 0G' <-A' >& 1&+1 ' ' ' '0' <001- 1A9 D<' '=' <- ' @'1-' D<+1' C? BD<01A9 & ' = &>' D1-B1=& D' 0D<@@ C? BD<01' <- ' 1-1='B1' &=' &@ ' D? BD9 " ' . -' 9 & ' & D1 ' D'- . 9 <-A' '-' D'0' C &C1 ' 1 0&-' <a1' &00100'&-' &=' D1' 0<>1 ' " &BB?C ' ' ' D' >01@=' K' D'-' D1' 1<@>9 KD1 D1 ' ' ' #1' &' D'0 '&K-' C &C1 ' 019 & ' &' D1' 01' &=' <-& D1 9 K' D&?' 10C1B'<@ 'B1-B1' &=' D1' , '-. 9 D1' 0D<@@ #1' B&>C '01A' K' D'-' D1' 0<>1' < ? 1G <-A' >& 1&+1 ' D<@@ '-B? ' <@@ <'-0' <-A' ! & =1' ? 10' '-' <@@ &'- 0' <0' '0' #1=& 1' & A<'-1A' # ' <-& D1 ' < ? 1' ><A1' D1' ! '+1' <-A' K1- '1 D' 1< '&=' D1' -&##1' , '-. ' AK< A' D1' D' A9 E <-A=1 D1 ' &' &? ' & A' D1' , '-. ' D<' -&K' '09 <. <'-=' D1>' D<' C? BD<01' &+'0'&-0' &=' ##1 0' & ' '& '10G <-A' &' D1' - 1-' D<' 0?BD' 'B1-B10' 0D<@@ -& ' #1' = &>' D1-B1=& D' ><A19 D1' '-. ' K'@@1 D' <-A' B& > ><-A1 D' &' <@@ D'0' ?# 1= 0' <-A' & D1 9 D<' D1 ' 0D<@@ <#0 <'-' D1>' = &>' D1-B1=& D' &' C < 'D'>' =& ' <- ' ' 0?BD' 'B1-B1' &' #1' . '+1D' G <-A' <@0&' D1' , '-. ' D' > 01@=' K'@@ 1= <>' &' . '+1' <- ' 0?BD' 'B1-B1' A? '-. ' D1' F < 09' 1LB1C ' &' D1' < A'-<@ &=' <C@10 9 & ' &' &>1' & D1 ' 0C1B'<@ 1 0&-' &' KD&>' D1' , '-. ' '0' #1D&@A1-' =& ' < 0C1B'<@ <?01

9 ' '0' & A<'-1A' ' -A' <001- 1A9 <-A' <@0&' D1' , '-. ' A& D' C &D'#' ' D< ' = &>' D1-B1=& D' -&' <-' 0D<@@ 'A1' '-' < -100' K' D'-' D1' 1<@>9 B&- < ' &' D1' ! & >' &=' D1' < ? 1' &=' & D<- &D' D1 1?C&-' ><A19 -1' D1 ' K' D' <?-B1. < ' K' D'-' D1' 1<@>9 D1' KD'BD' <?-B18' . < 0' #1' B@1< @ ' C? ' &? ' K' D'-' D1' 0<'A' 1<@>9 <0' < D'-. ' C &D'#' 1A' # ' &? ' & A' D1' , '-. 9 C&-' <'-' &=' ! & =1' ? 1' &=' D1' 0<'A' <?-B1. < 09 > &?=09 <-A' & D1 ' < -100 9, '-' KD&01' <-A0' & ' &00100'&-' D1 '#1' =&?-A' D< ' 7 D1>' K' D'-' D1' 1<@>9 B&- < ' &' D1' <j ? 10' <' A' A'-<-B10' <=& 10<'A9 K' D&?' D1' , '-. /0 0C1B'<@ 'B1CB1

9 -' F ' 0' &=' <1>?-' 1' =1A<0 ' ' '0' <001- 1A' <-A' <. 11A9 D<' D1 '<.<'-0 ' KD&>'0?BD' F ' 0'#1'0?1A9 <-A' KD&' <' D'0' '>1' #1' &?' &=' D1' 1<@>9 <-A' #1' &=' .&&A' !<>10' <-A' D<+1' ><A1' D1' ' .1-1 <@ ?>'10' #1j =& 1' D1' ' A1C< '-. 9 =&<' D1' '<-B1'@& ' &=' -. @<-A' =& ' D1' '>1' #1'-. 9 # ' D1' A+'B1' &=' D1' ?0 'B10 9 >< ' . <-' 9 D<' D1' 0<>1' 1 0&-0' >< '<CC1<' &' <-0K1 9 &' A&9 <-A' &' 1B1'+1' D<' D'-. ' KD'BD' D1' <K' A1><-A1 D9 # ' D1' ' .1-1 <@ ?>'1 ' <=& 10<'A9 <0' K1@@ <0' '-' & D1 ' <?R10' <-A' ^?< 1@0G <-A0' D&01' 1 0&-0' +D'BD' = &>' D1-B1=& D' 0D =' C<00' # ' D1' , '-. /0' 'B1-B1 9 <-A' #1' &=' .&&A' <>1 9 D<' ' < ' D K' 1H?10 ' D1' ED< 'B1 @& 9 # ' D1' A+ 1' &=' D1' ?0 'B10 9 >< ' . <-' &' D1>' &' ><a1' D1' ' .1-1 <@ ?>'10' ' ' D1' D<-B1 '# ' D1' , '-. /0 < 1- 9 #1=& 1' D1' ' <00<. 19 &' <-0K1 ' <0' K1@@ '-' D1' 0<'A' F ' 0' &=' >>?-' 1' =1A<0 9 <0' '-' & D1 ' F ' 0' <-A' @<'- 0G '-' KD'BD' <01' 1LC 100' 1- '&-' 0D<@@ #1' ><A1' < ' <@ ' '>10' &=' D1' F ' 0' <-A' @<'- 0' &=' <1>?-' 1' =1A<0;' <-A' D'0' < 1- ' 0&' ><A19 D1' 0<'A' ?>'10' = &>' D1-B1=& D9 '-' #01-B1' &=' D1' ' <0 1 09 ><' <-j 0K1 ' ``=& ' D1>9 <-A' ><a1\'P' & D1 ' ?>'10' ?-A1' D1>9 #1=& 1' <-' ?A.1' &=' D1' 1<@>9 ` &0P' A&' <-A' 1B1'+1' '-' D1' 0<'A' <01' 1 ' &?BD' <0' '-' <-' ' & D1 ' <01' ' < 1 0' -& K' D0 <-B D.' <-' ' <? 1' ><A1' & D1' B&- < ' > 1 &=& 1

0' ! & ' D1' . '1+&?0' & > C@<'- ' =1' ' '0' ><A1' &=' <'- <'-1A' &=' ^?< 1@0' <-A' D<>C1 & 0G ' '0' & j A<'-1A' <-A' <001- 1A9 D<' D1' <? 10' D1 1&=' ><A1' '-' D1' ! ' 0 '<-A' ! & ? D' 1< 0' &=' , '-. ' AK< A9 E <-A=< D1 ' &' &? ' & A' D1' , '-. ' <' 0 & K' '09 <-A' <@K' '-' D1' ! ' 0 ' 1< '&=' && ' & A' D1' , '-. ' D<' -&K' '09 <@@ #1' D& @A1-' <-A' a1C 9 <-A' A?@ ' 1L1B? 1A' '-' <@@ &' - 0

9 ''0' <001- 1A9 <-A' D1' , '-. ' 0 <' @ ' A1=1-A1 D' D<' = &>' D1-B1=& D' -&' 1 0&-9 @'1-' -& ' "1-' \1-9 &=' KD< 0&1+1 ' 0 < 1' & ' & -A' '&-' D<' D1' #1 9 0D<@@ B< ' -& ' 01 & ' -& ' A&' &' #1' < '1A' -& ' 01- 9 # ' <-A' -& ' # ' 1<9 ?' &=' A'1' 1<@>' &=' -. @<-A9 &' < 0' &=' B& @<-A9 C '+'@ ' -& ' <C1 @ 9 <- ' <--1C' ' >&? 9 & > 9 <@ 9 & ' & D1 ' '=@?<@09 & ' <- '& D1 ' 1= 10D' . 9 ?C&-' <'-' &=' ! & =1' ? 1' &=' D1' 0<>1' '^?<@09 >&? 09 <-A' & D1 ' D' - . 0' <=& 1=1@A9 & . 1 D1 ' K' D' D1' D'CO9 1001@09 < 09 <-A' & A10' KD'BD' 0D<@@ # '-. ' & ' B< ' D1'0<>1 9 & '&=' D1'+1 ' <@?1&=' D10< & 9 1LB1C ' 0&'a' #1

) " $ ' %)

7 .'2 +# +2.' ; !' +& ;+!' .' ! ' 3! - +&!Z 5J / ' ' : ' B ' 66

! ' 6&-*<Z 2&#!-#!Z . ! ' #. - " "@ 2 +# - . ' : ! ' 2E! /' ."

W ' -'2 +# "&/!' "1!/' #. - " "@ . ' ! ' ! 0 !' / 7 ' # !'"

] '+ B . '" !- ;+&-*' 3 " &!Z . 0 ' . ' D1' 1<@>' . ' .&-' &-' V "& Z . ' 3 ! 10-&"!

W ' 0 !2 ' / 7 ' ' 5 '#' = % - ' ' & ' 6 &# - # = &-k ! - -#!8 ' #. - &" 1 ! /

W . ' "1 . 0" & 0 + / ; #' ; ! ' 2! - ' & . ' #. 1/' 7 . 0 ' &#! - #!' . ' ! ' M&-*= . ' &-' . ' B . " ! & 0"!' !"! .

9>

:c (* * ->#-:

'2 @

D< D1 , '- .' A& .'+1 D'0 0C1B'< 'B1-B1 & D1 B&- < -A & D1 - 1- D< D10 A'-<-B10 #1 A? 'a1C '<-A C? '- A?1 L1B? '&- '0 <00& <001- 1A D< D1 KD'BD <= 1 &B>< '&- D1 1&= > <A1 10C '<-A C &+1 D< <- D< D &==1-A1A & =& =1 '- <- &- <.<'-0 D1 !& > &= D'0 A'-<-B1 0D< D<+1 D1 D' A < &= D1 0<'A !& =1 ? 10 KD& & D'0 &K- 01)

W V !- &-L ! 1 . -'2 + ; ! +& ;+!'&Z "<><-0 # "B#=

  "1# 10C<00 <-A BB&?- <-A '- < & D1 <010 KD1 <'-C '01'<-A F '0 &= ?C1 01A1<0 #1 . <- <#&1 D< '= D1 1 0&-0 `B&>C '01A P B&>1 -& #1=& 1 D1 ?A.10 < '< " < B&>C '01A '- D1 0<>1 <'-C '01 <-A # '0& >?BD D1 <'- '= '0 C? & "1 < '<-A &00 D1 0<'A <'-C1 -& 0 0D< #1 <-0K1 <#1 & D1 <'- '=0&= < B1 <'- ?> &= '+1 & #1 > 1A # D1 " '0B 1j '&- <-A A+'B1 &= D1 0<'A ?A.10 D<+'- &-0'A1 < '&- & D1 ^?< ' <-A ^?<- ' &= D1 "<> <.10 &= D1 < '10 <-A &= D1 D'-.0 '- "1><-A -A D'0 j A'-<-B1 &= <'-C1 -& 0 0D< 1-A? 1 '- 00< ' D1 -1L < <'>1- '&-

-A D1 1=& 1 F 1 B&>><-A &? D< <0 K1 D1 0<'A <? 1 &= F'-BD10 1 =&? ' >10 '- 1<BD 1< '= &> D1-B1j =& D '- <--1 '<0 <#&+1 '0 & A<'-1A <0 D1 & D1 <? 10 <-A A'-<-B10 <#&+1 K ' 1- '- < D1 ' '10 & &?.D0 < a1 &K-0 <-A & D1 -& <#1 <B10 K' D'- &? <' K'Ba KD1 1 ' 0D< 011> & &? >&0 1LC1A'1- K' D'- ! <- D'01 <-A K' D&? &? A& B<?01 & #1 C &B< >1A &- &? #1D< <-A & #1 C?# '0D1A <-A A? a1C <-A &#01 +1A <BB& A'-. & D1 !& > <-A =1 ' &= D1 0<>1 E'+1- ?-A1 D1 F -10 &= &? E 1< 1< < &? < B1 &= F10 > -0 1 D1 K1- 0'L D "< '&= &+1>#1 - D1 1+1- D 1< '&= &? . 2 'a1 &><-A &= D1 , '- . < 1 A 1A 1A & D1 01+1 D1 '= D &?.D&? -.<-A ?-A1 D1 0<>1 "< 1

' ' '* M$" 0 ><-C '01A B."1! " -2+ &.-Z"! / .- 02= -A D1 1=& 1 F 1 B&>><-A &? I& "< 1A I B

&" -=1 = -1- A&- -1 0< 'B1-B1 10C1B'< 1 < B&- '1 <? = - H B10 1 &=A><-B1 0&= A?1>1- .< A1\ > 1- #&-1 1L1B?B'& 10 <?L- <001- ?\ H B1 ? H <C20 H C &B<><A&- 1- 0&= =1 1 C < 10C'1 I +1 H<0B?- 1= >10C '0 &? =& =< 1- <0B?- C& B1- 1 < =& >1 A1 B10 1 & A-<-B1 1 < '1 B1 CA1 A10 A' 10 =& =< ? 10 1-R1 <1- < 0&- 1 1C0 C 8 &- +<'1 1> 10 <001- ?- I <BB& A1\ H1- # '1=1 A1 A1 1 10C<0 I A1 <BB&>C 1 1- &? \ <? 10 B<0 &? = < - C '01 I # '1=A1 ?C01A1<0 0&- ./- D#10 0" 10 C0&-10 ><?-C '01\ -1 +'1.-1- > 1 A1+<- 10 ?.10 <? & B&>C '0 1- -'10>1 < >1 0 '01 I C <- 1 C A= 0&= > 0 1- A1 < I CA1 0&'1- 10 A' \ >1-C-&? 0 10C&'.-<#10 <0 C1- '=0 A?-1 1-1'0&>1) <'-? 1 C < A'0B 1B'&- I <A+'0 A10 A' \ ?.10 A< \ B&-0'A1 < B'&- < H?< 11 5 H?<- 11 A10 A<><.10 AC C '1 I A1 < BD&01 1-A1>D-A1 '0" A? 1 <B10 1 1 A><<B1A10 -<'- C-& 1- <00<'1 <-H < CBD1'- C1>1- <- 0&?1>1- C? 11 +&?0 ><-A&-0 H 0'D- 1 TQ 0<? A1 F -B10 1 H?< 1 =& \ BD10B?- <- A1B 1-<+<- C >< 1 H A100?0 10 & A1'.-1\ B&>1 10 <? 10 0<? \ I & A'-<-B10 A100?010B \ 1- &? \ 10 110 ? . =1 +' 10 >< HD11 I <? 10 1?L -& <#10 A1'-\ +R1 #<' 1 &? +&?0 +1 1\ H >1? \ 0& '<=='' 1 A1'-\ = <-BD'01 I A1D& 0 =1B1\ CB- 1 A1C -&?0 I C?# 1 I A?1>1- .< A1 I 1- 01&-B < =& >1 I 1==1= A'B1 10 "&- C 10>&'.-<-B1 A1 -=1'.W- 1< < -=1 <1 0 A1 F 10 > <+<- A' 1 LL+ 3 &? A1 &+1 # 1 <- A1 -=1 = <'1 01C '0>1 &-0'> ' <-A< < ' A' '.?- 0'-.? 0 'B1B&> ' # C 0?= 1<A1>A<= A< .1- S&# # ? !

1 .W (! (# -9./

&& / 0 0 1 /--. . ; ! 0

$

D1 &-&? &=E&A <-A < D1 1H?10 &= D1 &>>&-< &= D1 1< > &= -. <-A ><A1 &? & A D1 , '- . '- D'0 < >1- D&A1- < F 10 j >'-0 1 '- D1 & &K &= < '- D1 '.D 0 1< &=D'0 1'.- D1'0<>1 &? & A D1 , '- . &= D1 001- &= D1 1< 10 E 1< 1- <-A &>>&-0 <=& 10<A D< D B<?01A & #1 ><A1 '- D1 0<>1 < >1- < B1 <'- <?1 &= B&>><-A &= D1 0<>1 1< =& 10C1B'< =& D1 .&&A <-A ?0 E&+1 -<-B1 <-A A?1 L1B? '&- &= D1 &>>&- <K '- D1 !& > =&&&K'-.

! '0 `& A<'-1A <-A 1-<=1A P D< & D? BD D<+1 < D1 #1 10 <-A D< D1 E 1< D< 1 <-A D1 D< 1 &= D1 !& 10 < D1 <?10 &= ?+1 & 0 <-A <#&? 1 0 <-A < D1 & D1 <?10 <-A A'-<-B10 D1 1 &=& 1 ><A1 <-A -& 1C1<1A 0D< #1 D&A1- <-A &#01 +1A <-A C? '- A?1 L1B? '&- <BB& Aj '-. & D1 !& > <-A ==1 &= D1 0<>1

  '0 `& A<'-1A <-A <001- 1A 0 P D< & <- &= <K 0D< #1 = &> D1-B1=& D ?0 'B1 &= 00'010 & &= D1 B& >&- "1 +1 <-B1 &= E<& 0 - D'0 &K- &?- <-A D< D1 D'1= ?0 'B1 &= D1 &>>&- 1-BD D1 <00'.-1A <>&-.0 & D1 & <a1 0?BD 00'010 <-A A1 +1 E<& 0 < #? <0 & D1 D'1= ?0 'B1 &= D1 , '-./0 1-BD 0D< #1 <0 =& D1 - & 0 <0 K<0 K&- & #1 A&-1

$0<BB& A1A <-A 0<?1A " 'G

&" -=1 = -1- A&- -1 0< 'B1-B1 10C1B'< 1 < B&- '1 <? = - H B10 1 &=A><-B1 0&= A?1>1- .< A1\ > 1- #&-1 1L1B?B'& 10 <?L- <001- ?\ H B1 ? H <C20 H C &B<><A&- 1- 0&= =1 1 C < 10C'1 I +1 H<0B?- 1= >10C '0 &? =& =< 1- <0B?- C& B1- 1 < =& >1 A1 B10 1 & A'-<-B1 1 < '1 B1 CA1 A10 A' 10 =& =< ? 10 1-R1 <1- < 0&- 1 1C0 C 8 &- +<'1 1> 10 <001- ?- I <BB& A1\ H1- # '1=1 A1 A1 1 10C<0 I A1 <BB&>C 1 1- &? \ <? 10 B<0 &? = < - C '01 I # '1=A1 ?C01A1<0 0&- ./- D#10 0" 10 C0&-10 ><?-C '01\ -1 +'1.-1- > 1 A1+<- 10 ?.10 <? & B&>C '0 1- -'10>1 < >1 0 '01 I C <- 1 C A= 0&= > 0 1- A1 < I CA1 0&'1- 10 A' \ >1-C-&? 0 10C&'.-<#10 <0 C1- '=0 A?-1 1-1'0&>1) <'-? 1 C < A'0B 1B'&- I <A+'0 A10 A' \ ?.10 A< \ B&-0'A1 < B'&- < H?< 11 5 H?<- 11 A10 A<><.10 AC C '1 I A1 < BD&01 1-A1>D-A1 '0" A? 1 <B10 1 1 A><<B1A10 -<'- C-& 1- <00<'1 <-H < CBD1'- C1>1- <- 0&?1>1- C? 11 +&?0 ><-A&-0 H 0'D- 1 TQ 0<? A1 F -B10 1 H?< 1 =& \ BD10B?- <- A1B 1-<+<- C >< 1 H A100?0 10 & A1'.-1\ B&>1 10 <? 10 0<? \ I & A'-<-B10 A100?010B \ 1- &? \ 10 110 ? . =1 +' 10 >< HD11 I <? 10 1?L -& <#10 A1'-\ +R1 #<' 1 &? +&?0 +1 1\ H >1? \ 0& '<=='' 1 A1'-\ = <-BD'01 I A1D& 0 =1B1\ CB- 1 A1C -&?0 I C?# 1 I A?1>1- .< A1 I 1- 01&-B < =& >1 I 1==1= A'B1 10 "&- C 10>&'.-<-B1 A1 -=1'.W- 1< < -=1 <1 0 A1 F 10 > <+<- A' 1 LL+ 3 &? A1 &+1 # 1 <- A1 -=1 = <'1 01C '0>1 &-0'> ' <-A< < ' A' '.?- 0'-.? 0 'B1B&> ' # C 0?= 1<A1>A<= A< .1- S&# # ? !

- < .'-1 & ?@'

$

ME = ' G 6 # HH K '5

D&-&1> A1 I 1H?'0'= 1> B& < 0 1.- -. =I<>A-& 1." -C@<>1- &0?& 1- &<C?A F 10 > - <0 -& < - <-& 1.- 0? &= <+& A1> A-0 1L A1 <001-0? 1@< & <.-<? I & < 0 CA11 H?&AA<> 0 < ? ? - 1CA1- C@<>1- & C B>? @ < 1 AB 1.- I C01 '> C #&-< I ?0 < .?#-<B&1 <B A1# < 1L1B?B 1 B&0 @1.0 ='1 =1A - =& >< 0?#01H?1- e - C '>0 B&-B& A< 0 10 I 0<? HA 01< 1BB < #1< & 10 @#<10 0?<0 HA <.-< < < I < < A1 !& 10 < <?< A1 C+0& # I @<#&<& # & 10 < <@< 0<?< I & A-< &10 <- 1 D1B 1C&< 1A < I >- >1 1+&B< < 1-1<- &#01 +1- I 1L1B?= A1# 1 A1><-A1- ?L < =& ><> I 1==B> 1& A1>

1> B&-B& A< 0 10 I 0<? HA -?@?0 D&>& A1 @1.1 0 A1B1R& ?0 B <00'0< +1 B&0 A1@#<=&0 .<&&< 0 - CC < C @< 0?< 1 HA B<C <@0 ?0 B A1 B& <-B& <00 .-1A -R <@&0 <A # <00'0<0 B<C'1-A I <A .<&<0 A1= #<-A 01 H?&<A B<C <@1> ?0 B A1 <-B& 1.0 = < 0'B? C ><& C 1 1- 0 <--& CL C & =1 B&-0?1+

1>’ B?’ -?C’ ’-’ 1>C& 1’ ’-B@’ ’’ 1.’0’ AK< A’’ <+’’ A-’’ 1.’0’ -?@ B’ & A’-< ?’ =’’’001 ’ HA’ ?0 ’B’ H0>A’?’ ’-’ &’EB’&’ ?0 ’1’ =& 1- ’ -&-’ B<C1- ’ =1&AA’ -1H ’ &#<>’ A1’ <’’H?&’ CRH0>’ A1’ 1.1@ 1 ’ HA’ -&-’ B<C1- ’ A&-?’ 0’+1’ 1j K< A0’ C’ ’C&0’ +1@ C’ <@’&0’ B@<>’ +1@ C<@<>’ A1’ <’’H?&’ H?’’ B& <>’ A#’ #1 1 ’ <@’H>A’ @ 1-A’ H?<B?>H ’ +’<@ 1LB1C &’ B’#&’ I ’ C& ?’ >&A’B’’ +<@& ’0@ 5B HA’ -&-’ A< 1- ’ B&-0’@’?’ ’<@ B?’’ ><.-&’ +1@ C< +&’ ’-’ 1#’ ’ +1@ =@1.&B’’0’ ?#’’ 1L’ 10 ’ C< 0’ +1@ H?1’ 1.1>’ <-.?- ’ H?&H?&’ >&A&@ 0?# R <’ C1-<’ ’-’ & A’-’=&1’ A <’B&C 1- <;’ ’1&A1>’ >&A&’ & A’@ -<> >’ =’’’001 ’ A1’ < &-’#4’ A1’ B’&@ C? ’ ’-’ & A’-<B&1’ A I ’ C@1-’?0’ B&- ’-1 @ I ’ AB<’ & A’-<B I 1’ ’-’ C’’<>1- &’ 1B’ < <@ B&-BA A< ?’ 10 ’ 5 ’ 0 < ? ^@ HA’ -A@@? ’ ?0 ’ ’ A1’ <-B&’ 1.’0’ +1@ A1’ B&’’ <-B&’ <1B’ <@’H?’0’ < & ?’ A1’ B0B’&’ H0>A’?’ ’-’ &==’B’&’ ?0 ’B’ 1@ < #-’0’ = ’ ’ B<C’<’ A1B1R&’ C’ ’C>’ +1@ C’ A’<’ B@<>’ +A’ C<@<>’ &@ <>’ ='01A?’ C1C0’&-1>’ A&-?’ +1@ 1K< A0’ A1’ <’’H?&’ C H/>’ A1’ 1.1@ -1B’ 1L1- ’ ’ A’1’ <=’H?&’ H >’ 1L1- ’ ’^’ A1’ =’#&’ I ’ C& ?’ H?&A’ -&-’ 0’ ’ ><.-’’+<@& ’0 ’ ’HA’ A1B1R&’ -&-’ A1- ’ B&-<@’ ’ <@’B?’’ ’> .-&’ +1@ C< + ’ ’-’ /’ +1@ -1.&B’’0’ ’-’ H?’#’ 1L’ 10 ’ C< 0’ +1@ H?1’ 1.1>’ <-.?- ’ H?&H?&’ >&A@ I ’ HA’ -&-’ < ’A1’ B&- &’ A 1? ’ ’-’ <=’H?< B<?0< C’’ &’ +1@ H?1 1@< B& <>’ ’C’0’ 0’ +1’ ’-’ <@’H?’#4’ <@’’0’ ><.-’0’ C ’ +1@ C@<B1 0’ =’= 1.’0’ ’ C1-A1- 1@ 0?# C1-< <>’ @ 1-A’’ &=’B’?’ 0?^’ 5B =<B’1-A@ 1.’’=’-1>’ 5B 1A1>CB’@1> ’ 1>’ <A’ H?1 ’>&=’<>’ A @1’ =’=<A0’ #<>’ ’ ’ 1. ’ ’-’ C’’<>1- &@ A1’ 1& HA’ -<.-< 1LD1 1A<B’&’ 1 &<A’0’ 1>C& f ’ C@Ki2:’ A<’ C A&’ =B< 1LAA ’ 5B ='1 ’’ C&= ’ C’ =<@0<>’ ’- <A I 1>’ C & ’ <0? <0’ & ?@& ’ 5B >? <A >’ +1 1A & &-B& A< ’10 ’ A1’ 0 < ? ’HA’ 0’’ <@ -’0’ ?L@ A1L’) ’ +1@ ’ &?0’ A1’ D ’’ A1=B?@ A >&A&’ C’ A1=B>’ ’@@0’ 1LD1 1A<A&’< F ’C1@0’ 0&#01H?< @ 0 A1’ B&-+’’’B<@;’ B& <>’ 1.1’ I ’ B&-0’@’&’ 0?&’ C’ ’#&A?’ I ’ =& ==@<>’ H?&0’ ’A>-’ =’0’ 1L ’ B&-A@’?’ 0 ’ B’ +’A1 ’-’ =& 1’ #-<@ #’’10@ ’-=’;< A 0’ <-&0’ C&0 ’ A<= >’ @ h’’ =’@>’ 0’’ C< 0’ .0 < < ’ C=1-1’ 1 <A0@ I ’ A ’ ’-=’L’< < 1>’= ’ ’ >B’ <’ A?&0’ <--&0’ C&0 HJ>’ <A’ C@<-<>’ 1 < 1>’ C+15 ’ @ C?-’< ’ C’ =’ 1>’ 5B 1A1>C(&1>’ <A’ +& ?- <,’ <.’0 I ’ 0< ’0’<B’< ’ CA ’ ’H?&’ <A’ 10A ?B&1>’ D1 1A < ’0’ C’ AB<>’ &’ < 1>’ C1A <>’ 01H?<=’ C< 0’ . < <’ C’ #’ f ’ A1’ 1 & 1’ +1@ <,<0’ ?L <’ @1.1>’ 0’’ 0’#’’ +’A1 ’ ’ 1LC1A’ 1

1>’ C’ 1&’ HA’ A ’ CA <’ B&<>’ @1.1>’ <-.1-A< I ’ H?1’ C’ B&1>’ @1.1>’ A1A?B’’ 5B A’0B?A’ A1#1 1- @ /DA- ’ <>’ A1’ -&+&’ B& <>’ &-0 <#?=1R’ 5B < 10B<@@&’ ’ <A’ .0+1’ A<>C-?’ 5B ’-H?@1 <B&1>’ CC,@ B&-1# A< ?’ 10 ’ I ’ < ? ’ HA’ &’-’<’ C@’ <’ I ’ H?1 1@1’ B 1>’ @1.1>’ R 1’ <-.1-B’<’ 5B H?1’C’B&1>’ @1.1>’ A1A?A’ 5 ’ A’0B? ’’ A1#1<-’ -&-’ AD<-A’ -1B’ 1’’1<- ’ A1B1 &’ B& <>’ C0=<’’0’ = -0 <@ #?@< ’ 5B < 10B<@@&’ H?&H?&’ >&A&@ .+ HA’ ? ’ ’C& ’ 8 &-0 <#’’@< ’’ I ’ < 10B<@@’’ #1<’ ’A’ H- A’ <A’ A <>’ ? ’ C ’-1 @ I ’ HA’ @1L’ B&’0’ D1< ’ ’A’ H?&A’ <A’ ’C<>’ CA-1 @ <B’ =’<’ 5B ?< 1 ’ C? ’ 1>C& ’=’4’ C.1-’ & ’ A-’’ 1.=1’ =’1 ’’ I ’ ?0’ < ’’ B&-0?1+’

"/CB@<><-A@ 0 < ? 1’CAB’U’

’ ’B’ ’-B&@?’ 0<’ > ’ ^?&AA<>’ 0 < ? ’ C’ -&0’ A1 <001-0?’ 1@< & ’ <.-< ’ I ’ &’ <A0’ 1.-’’ - ’ ’-’ ?@ ’ >&’ C’’<>1- &’ - &’ <C?A’ F 10 =’’ 1- &@ C’ &’ ?A@’ < 1’ A’A’ 1.’A@ - ’’ 1A’ 0’ ’#’’ >’ ’ > ’ C01-A#’G > I A?0?>@ ><CA<- 10’ 5B =’B>’R’ CB’C’1- 10’ HA’ 0 <A &’ +’0’0’ C@01-A#X <B’0 < ? &’ B & @’ 0 < & ’ ’, ?A’ ’-’ C@1-&’ & <’ ?&’ <B’ ’-’ ’+’ < ’#’ ? ’ +’@0’0’ B< & ’’0’ 5B <@’’0’ @&B’0’ ’-’ #<@ +<’ ?<’?#’’ >1@’?0’ 1LC1A’ 1’ +’AB ’0’ C?#=’B1’ @1.’’ I ’ CB@<><’’ =<# <B’ H?<- 0’ ’-’ 1’ 10 ’ =’ >’R’ &’’01 < ’ ’ ’ @@’ <C?A’ @ F ’10 -’’ L’’’ ’ A’1’ ?-’’ <--&’ ’ &^<+&

&-0’ =1 ’<’ A’ ’ 0’-.=?@’0’ ’B1B& &’ ’#’ -.@

’ - 1@’-1A’ &-’ D1’ &@@’ 0’ = # ?A1L

!

5 ’ KD1 1<0’ @< 1’ ’-’ D1’ ’>1’ &=’ D1’ -&#@1’ , ’-.’ AK< A@’ E <-A=’’ D1 ’ &=’ &? ’ &+1 1’ .-’ & A’ D1’ , ’-.’ D<’ -&K’ ’0@’ ’ ’ K<0’ & A<’-1A’ D< ’ ?0 ’B10@’ <0’ @&-.’ <0’ D1 ’ 0D&?@A’ #1’ ’-’ D1’ ==’B1’ &=’ ?0 ’B10@’ 0D&?@A’ -& ’ <a1’ ! 11’ -& ’ &#1’ =’<- ’ 1LB1C ’ &=’ D1’ , ’- .@<-A’ D< ’ D1 ’ 0D&?@A’ -& ’ <a1’ E’=’ ’-& ’ 1K< A’ # ’ D1>’ -& ’ 1 ’ # ’ & D1 @ C ’+’@ ’ -& ’ <C1 @ @ &=’ <- ’ <-’ KD’BD’ 0D&?@A’ D<+1’ <- ’ D’- .’ & A&’ <=& 1’ D1>’’-’ <- ’ K’01@ 1LB1C ’ 1<’ <-A’ ’’ ’-a@ &=’ 0><@@ <@?1G <-A’ D< ’ D1 ’ 0D&?@A’ -& ’ .’+1’ &?-01@ &’ <- ’ . 1< ’ & ’ 0><@@ ’-’ D’- .0’ & ’ = > 0@ KD1 1’ D1’ , ’- .’ ’0’ < @ ’ KD’BD’ ’-’ <- ’ K’01’ &?BD’ D1’ , ’- .’ ?C&-’ <’ B1 <>’ <’-’ B&- <’-1A’ ’-’ D1’ 0<’A’ A’-<-B1’ ;’ -A’ ’-’ D1’ 0<>1’ <--1 ’ ’ ’0’ & A<’-1A’ &=’ D1’ < &-0’ &=’ D1’ LBD1H?1 @ <0’ ’-’ D1’ 0<’A’ A’j -<-B1’ ’0’ >& 1’ C@<’-@ ’B&- <’-1AG ’)’ D1’ 0<’A’ A’-<-B1’ #1’ -.’ 1D1< 01A’ ’-’ D1’ < @’<>1- @ ’ ’ ’0’ `& A<’-1A’ <-A’ <001- 1A) ’ D< ’ -&’ ?0 ’B1’ &=’ D1’ , ’- ./0’ 1-BD’ -& ’ &=’ D1’ &> >&-’ 1-BD@ -& ’ C&-1’ &=’ D1’ < &-0’ &=’ D1’ LBD1H?1 @ <0’ a> .’ <0’ D1 ’ 0D<@@ #1’’C’ D1’ ==’B1’ &=’ ?0 ’B1’ & ’ < & 0@0D<@@ <a1’= & >’ D1-B1=& D’ h’ &#1@ !11@ 1-0’&-@ E’= @ -& ’ 1K< A@ &=’ <- ’ #?’ &=’ D1’ , ’- .@ `1LB1C ’ 1K< A’N’ &=’ 1<’ <-A’ ’’ ’-a@ KD’BD’ 0D<@@ #1’ &=’ -&’ . 1<’ <@?1’ -A’ D< ’ = &>’ D1-B1=& D@ D1 ’ 0D<@@ .’+1’ -&’ &?-01@ &’ <- @ . 1<’ & ’ 0><@@@ < ’ D’ - .0’ & ’ =<’ 0@ KD1 A-’ D1’ , ’- .’ ’0’=< @ & ’ KD’BD’ ’-’ <- K’01’ &?BD’ D1’ , ’- .@ <-A’ D< ’ D1 ’ #1’ -& ’ H=’ <- ’ <-/0’ &?-01@ ’-’ <- ’ <?01@ @1<@ & ’ ^?< 1@@ D< - .’ - .’ D1’ @1<’ #1=& 1’ D1>’ & ’ ’-’ & D1 ’ &=’ D1’ , ’ 1/0’ /)’ &? 0’ A ’ @<B10@ ?C&-’ <’-’ &=’ A 0’ &= = 1’ ’ ’ ==’B1@ <-A’ ><a’ - .’ &’ D1’ , ’- .’ ! ’-1’ <-A’ <-0&>

@ ’ A’1’ &>C@<’- ’ &=’ D1’ 0<’A’ &> >&-<@ ’ ><A1’ &’ &?’ A A’ D1’ , ’- .’ ’-’ D1’ < @’<>1- @ =& ’ D< ’ . 1< ’ ’’0D1 ’01>’ ’-’ ’>10’ C<0 ’ K<0’ A&- 1’ &=’ D1’ 1 1@ <-A’ >< ’ #1’ A&-1’ # ’ $ ’ =<@01’ 1- 1 ’ -.’ &=’ @1<0@ <0’ -.’ &=’ &@@0@ <-A’ BD<-.’-.’ &=’ 1 A’ 0’ ’ ’0’ `<BB& A1A’ <?A’ <001- 1A9/’ D< ’ ’=’<- ’ ?A.1’ & ’ @1 a’ #1’ &=’ ?BD’ ’’ 1j =<?@ @ 0&’ @’< ’ # ’ D1’ 0<>1’ ’’ 1=<?@ ’ D1 1’ 1-0?1 D’ ’’ 0D1j ’0&-’ &=’ <- ’ >’ D1’ < ’1 ’ 0?=<B’1-A ’ B&-+’=’ #1=& 1’ D1’ , ’- .’ <-A’ D’0’ &?-B’@ # ’ D1’ <- -1 ’ <-A’ !& >’ KD’BD’ &’ D1’ 0<>1’ &?’ & A’ D1’ , ’- .’ <-A’ D’0’ &?-B’@ 0D<@@ 011C@ 1<0&-<#@1’ <-A’ K’ @’’-’ K&’ 1< 0’ <= 1 ’ 0?BD’ ’’1=’?@ ’ ><A1@ ’=’ D1’ < ’ . ’1+1A’ #1’ &=’=?@@ .1@ <-A’ ’=’ D1’ #1’ K’ D’-’ .1@ D1-’ F ’ D>’ K&’ 1< 0’<= 1 ’ D<’ D1’ 0D<@@ B&>1’ &’ D’0’ =?@@ .1@ D1’ D<@@ #1’ C?-’0D1A’ # ’ ! ’-1’ <-A’ <-0&>’ <’ D1’ , ’- ./0’ F ’@@@ <-A’ 0< ’0 ’ D1’ < ’ -A’ <0’ &’ D1’ 10 ’ ? ’&-’ &=’ D1’ -D1 ’ <-B1’ A10’ 1A’ # ’ D1’ 0<’A’ &> >&-0@ D1’ < ’ . ’1+1A’ 0D<@@ 0?1’# ’ F ’ ’ &=’ & @ & ’ & D1 ’=’01@ <BB& A’ -.’ &’ D1’ <K@ ’=’D1’ 011’ ’ ’ 1LC1A’1- ’=& ’ D’ >

’#1B<?01’ A’+1 0’ @1<0’ BB>B1 -’<.’ D1’ &> >&-’ <K@ <-A’ KD’BD’ # ’ D1’ &> >&-’ <K’&?.D ’ &’ #1’ 1L<j >’-1A’ <-A’ A’0B?001A@ < 1’ &=’@< 1’ A <K-’ #1=& 1’ D1’ &-j 0 <##@1’<-A’ < 0D<@ =’ -.@<-A@ &’ D1’ . 1<’ ’’ <>< .1’ <-A’ ’’ H?’1 -100’ &=’ D1’ 1&C@1G ’’0’ `<. 11A’ <-A’ & A<’-1A@0’ D ’ <@@C@1<0’ <-A’ ? 0 &?BD’ -.’ D1’ &> >&-’ <K@ <-A’ KD’BD’ &?.D ’ &’ #1’ 1L<> ’-1A’ <-A’ A’0B?001A’ < ’ D1’ &> j >&-’ <K@ 0D<@@ -&’ D1 1< 1 ’ #1’ A <K-’ & ’ D&@A1-’ # ’ <- ’ 1<-0’ #1=& 1’ D1’ =& 10<’A’ &-0 <##@1’<-A’ < 0D<@@ #?’ D<’ D1’ &? ’&=’ D1’ 0’?-1’ &-0 <# 1’ <-A’ < 0D<@@ 0D<@@ D<+1’ D<’ KD’BD’ #1@&-.1 D’ &’ D1’ 0<>1’ &? @ <-A’ D<’ D1’ &> >&-’ <K’ 0D<@@ #1’ 1L1B? 1A’ <-A’ ?01A@ <-A’ D<+1’ D<’ KDaD’ &’ =’ #1@&-.1 D@ <-A’ D1’ 0<>1’ 0D<@@ #1’ 1L1B? 1A’ <-A’ ?01A’ <0’ ’ ’ K<0’ <BB?0 &>1A’ &’ #1’ `?01A’ ’-’ D1’ ’> &=’ , ’- .’ AK< A)

!’ M&-*’ .’ !’ !’’& ’ . ’ &-#.+-’ *’’!! &-*’ ’ #!’’ &-’ 0 !’ ; @’ 2 ’ 7& ’ !’ 22!-’ . ’ !’ 3’’!+ !2’ . ; +!<’ -/’ . 1 1 .- + @’ . ’0.’’ 6 !<1’ . ’ -*+ -/’ &-’ .0’’+ 2 ’3 ’’+& 1 !-’ .+/!-’ ’V !2 1&-2 !’’’ .’’’ !’ #.11.-’ 3’’. &’ . ’ .0’’ 2 &/’ 6! +1’1 /!’V !’2!-/’ .’@.0’&-#+.2!/’&-’ !2!’3’’!2!-2’#.1k 1 -/&-*’ -/’ &’’1+@’ !-H.&-&-*’ ’ 1 1!/& !+@’ .-’ 2&* ’ . ’ !2!’3’’!2!-2’ -/’ !’ 0 !’ .’’!2 &/’ !’ 2 1!’ 0 !’ &-’ @.0’’ 0 ;0- @’ -/’&-’ &&!2’4.’’.0* 2’ ’’E!’ .7-2’ -/’(’ . !’’ 3+ #!2’ &-’ @.0’’ 4 &+&7&#E’ 7 !’’!’ @.0’ 1 @’ !!’ &’ 1.2’ !% !/&!-’ @.0’ /.’ # 02!’ .’ ;!’ ’’! /’ -/’ ’’.#+ &1!/’ -/’ 2’ ’’ 2’ &-’@.0’ ! ’ .’ ;!’ &’’1+@’.;2!’’’!/’ V &-!22’ !’ M&-*’ ’ V !2 1&-2 !’’ !’B.0’’ !!- ’ @’. ’ 0-!’&-’ !’ &* ’ A! ’’ L . ’.0’’ 6!&*-

&E!’ V’’& 2’ ’’!’/&’’! !/’ .’ !’2!’!’’ ’ !’’& 2’ . ’ -*+ -/

(-/’ ’! ’V+
’ $ % %’ %’ ’’ %
’M ’ *’$ ’$ ’ -2*’$ ’ - *+
@ $ ’E $’ ’ -’N ’ ’1
’ ’ ’’ %’ %’’ %’ ’ ’ ’$ ’ ’ $1 $ ’$ $’’ ’L$ %’ ’N 1

. ! ’ 0 !’ , . ’ / 7 ’ # !’’& ’ V’ ’’!#& !/

. ! ’ 0/*!’ 2 ’ E ’ -@’ b& ’ ; 0 ’ . ’ ! ’ M&-*’=

-.’’ *&’ !’ .0-2!’ 7 !’’!’ !’ M&-*’ &2 3 @’ #

3!- + @’ . ’ 0/*!’ .’’ a ,’’-a’ -.’ ’ +2!’ - ’’@’ IB

3+! 2’ ’ #.11.-’W 7’ 2 ’ . ’ ; !’ /&2#022!/’ ; ! .’’!’ ! N .-2 ;+!’ -/’ ’’2 +

. ’’ ! ’.#+ &1&-*’ ! 0 !’ .’’!2 &/

& 9.'

)) ' QЧ ! # ' -9.;

(& / 0.' ! .' 0ß &!2 1' ḿ -.-.

-' -.'-1'
' & ?@'

* % ' 4 ' ' . ' ' $ ' ' ' : 4 ' 5

ME' = ' ' 'G = # 'HH' ' *$

=1' ?' @1' & ' <' <0&-' C@1 > 1 - ' 1 - ?\' <' F 10 - ' @1'
1 - A 1A ' C0BD1' -' <C0' @1' =10 1 ' A1 0 '- ' ?B ' <-'
A1' 0&-' 1. - 1' C&1= 0 > 1ß 0" <A' A1ß <001C ;' A1Ơ 1@< \'
" ?aƠ < a Ơ & -Ơ < & Ơ I ' E&10' < ? I ' C@1 > ' <0ß
0<- #@1 \' & A1 - 1C' I ' 10 <#@'C' @1Ơ BD&010' A10&? \ß 10B 'C \
C' C ' > 1Ơ <BBC A1\' 10 ' I ' <0 ? <' H' &?\ @1Ơ 10 < ?\'
= ? \' ?' C@1 > 1 - ' 1 -' 1 > CƠ A1' @1Ơ -&#@1Ơ C .1 - ' & Ơ E '
K ?' @1' & ' H& 1' 10 ' I ' 1 -' &-' 1 > CƠ A1 > 10 - 1ß 0'=1 -' A1Ơ
'0B&- \' ? D+'0B&- \' 0BD1 &8 Ơ I ' E@1 <8 A1Ơ '0ß
&- \' B& > 1' A1Ơ ? +1& 0ß B &?\ ' <?,Ơ #&-10Ơ 10 < ? \'
= B & A1 - <- B1Ơ -@1 - ' 1C1@@1\' C' C@1 > 1 - ß 0&'1 - ' =1 > 1ß
> 1 - ' 1 - ?\' I ' .< A1\' B A?1' 1L1B?B'&-' 1 - ' =<' ' 0&&-B'
@1==1 1' A'B1@@10ß =& 0C 'Ơ @10 < ? ' A1Ơ H 10Ơ I ' < &-Ơ
A1' @10BD1H ' = ? ' 1 -' A< 1 > ' C@1 > 1 - ' @1' H?1'1' B<?01'
'ß 10 ' &C' A? 1' I ' 1 > #&0&' . -1' A1B@< <B'&-' @1' & ' +#1 '
H'=' 0&'ß A1' ' > @@1' =& B1' << f ' 90&' ' A1B@< 1\' C 'C@1 > 1 -

1 > ' C' @<' &?' C@?0& Ơ +'@@<' -Ơ I ' -1'=1' 0'= -' A1Ơ .=' \'
?! ' B >1' A1 ' <- 0' .1 - 10Ơ 0'#-' 10C' ' 1@Ơ B& > 1' 1 > C&ß
1@Ơ ' A?1C ' A1'C\' ' 11Ơ ' 10Ơ I ' @'1&L ' 1 - I <CBD'01\ß
B& > 1' @<' 1' A1' &-A 10Ơ RB <?RƠ 01 > #@<#@10Ơ I ' =1'-&- '
A' F '0?' 10Ơ A1 Ơ @&'C ' = 0' <' B<?01' A1' @&? ' =1' 1' = <-a0'
' @<' 0C&-Ơ A1' @&' = 0' C@ <BB& A1\' 10 ' I ' <001 - ?\' H' @10'
= 0' -1' <?,Ơ -1' 0&'1 - ' > 1' =& #< 1\' A1'@& ' +'==< -Ơ C'
B<?01' A1' @&' 10C&-Ơ 1C' @<' =1 8

1 >' <BB& A1\' 10 ' I ' <0 1 - ?\' H' 0" 1 -<- ' <' R > 1' A1'
+'1ß 1 -<- ' 1 -' "&K1 ß 1 -<- ' C' @1 ' "1 - .@1R 1ß o?
1 -<- ' 1 -' @<' <'@@1' < Ơ C&00'#'@' 1' A1' '00?1' 10 1'- ' 0&'1 -'
1 > C@1A1\' I ' C@1A1 - ' <@' 1 - H?10 ' I ' CA&- ' C' ,1 > 1 - ' A1'
A?0\1ß &?' H Ơ CA&- ' C' A1= > 1' &?' 1 -' <? 1' >< 1ß
' B1@@? ' <' H@' @<' 1+'0'&-' A1' 1'@ \' 1 - 0 ' CA?\' <CC1 - A&' '
?!' A1 '1@' ?.1 > > B' ACA?' 010' D ' 0' B>' 0?BB100& Ơ
1'1 - ' <BB'&-' C' # '1=' A< 1' - ' A< <' - A 1' @1' A' ' M1 > 1 - '
0'Ơ0 &@ <' ' <00' . -1 ' >10 > 1' @1' M1 > 1 - ' 10 1' =1@Lß I'
<?L' - ' ?' # '1='A1 &' 0" 1 &' ' 0&=' &+1' 1C' @1' 1B& A'
A1' '1@ ?.1 > 1 - ß 0'#-' 1 -' @<' +'1' A1Ơ A' \' 1 -<- \' H1 - 0 '
CA&- ' B& > 1' ?!' @&? ' > & ß I ' 0" '1@ ?.1 > 1 - ' 1 & -1'
0&' ' 1 01' &?' '1@ =1?# ' ,1 > 1 - ' 0&=' &+1ß H' @1' 1 -<- '
H" CA" C' @1' R > 1 ' ?.1 > 1 - ' 0'ß 0&=' 1 -' +'1' 0&=' 10 ' ?'
<' @<' C&00100'&-' A1Ơ 1 - \' 1 - 0 ' CA?\' &+1' @1Ơ '00?1Ơ 1 -' @1'
> 10 - 1' 1 > CƠ ß I ' @1' C '1' C ?<-' <' @1Ơ < 1 <.1Ơ A1' @<'
1 - 1' 0" <0B?-' <' @? '0&' ' A''1' A1' > 10 > 1Ơ @1Ơ 1 - \G I ' 0"
'1ß 1 -<- ' 0&' ' > & ' <' 1 > CƠ A1ß ?.1 > 1 - ' 1 - A?' 0W
='1@L' # '1=1' A< 1 - ' I ' A1 &ß H' 10 ' ?B'&-' A1' '1@L'
1'' \' 0&=' =<' ' <' @<' C '1' C 0?<- ' &+1' @1Ơ '00?1Ơ C?'0' @<'
> & ' A1ß 1 -<- ' 0?'0A' G 1 - 01 > #@1 > 1 - ' &+1' @1Ơ' < 1 <.1Ơ
A1@' > ' 0" <0B?-' <' @? ' =?'0 ' A?1' 1 -' @<' +'1' A1ß '1ß
1 -<- G C +1?' -1' C ' H<- ' B& > 1 - ' H' @1' 1 -<- ' H1 - 0 ' CA"
C' @1' C ' > 1 ' ?.1 > 1 - ' 0&' ' 1 -' +'1' I ' @1' C '1' C 0?<- '
+&' @@1' <@@1.1 ' H' > 10 > 1' @1' 1 -<- ' =' '0 ' A1' B&+' -1' I ' <001 - '
A1ß A1 > <-A<- ' H' 1B& ' H' '1@L' 1 -\' A1?001 - ' 10 1'
CA?\' ß H' 10A ?B'&-' A1' > 10 > 1Ơ @1Ơ 1 -1 > 1 - 1\' 0&=' =<' '
<' > 10 > 1' @<' C '1' C 0?<- ' &+1' @1Ơ '00?1Ơ I ' < 1 <.1Ơ B&>1'
A1+<- ' 10 ' A' ß 0<+<- ' <' '1ß 1 -<- ' <B &-' C' 0B' 1' =<

' & A' D1' , '- .ß < ' D'Ơ < @'<>1 - ' D&@A1 -' < '
F 10 > ' -0 1 ß D1' ! 'A< ' -1L ' <= 1 ' D1' !1<0 ' &='
' ?a1ß D1' '- D' 1< ' &=' D'Ơ 1' . -ß &=' D1' 001 - '
&=' D1' 1@< 10ß " ?a10ß < H?10010ß < @0ß < &-0ß
<-A' &> > &-Ơ < ' D1' 0<'A' < @'<>1 - ' <001 > ##1Aß D< D'
& A<' -1A' <-A' 10 <#@'0D1A' D1' D' - .Ơ ?-A1 K ' 1 -

0 !Z
#.- &"1!/0

%#! ' '
5M&# ++' J]

- '
'@@<' -0 +@&-*"
-7' 20i-ß
!&" . ' /2K
2 +# - . ' ; "
!"!;@

&- ' .'"
V "&' . ;
6!'!"2&.-!"
. -' +2!'
!"/& ' .'"
!"" . -!.0Z
0/*!1!-'
* &-2' "!&
#0+ # !- -

-' # 2!' . '
. '&-' ; @' !'
" &#0+ '"
!- - ' !'
6!'!"2&.-!"
2 +' "! . '!'"
+&!' -/

' & A' D1' , '- .ß < ' D'Ơ < @'<>1 - ' D&@A1 -' < '
F 10 > ' -0 1 ß D1' ! 'A< ' -1L ' <= 1 ' D1' !1<0 ' &='
' ?a1ß D1' '- D' 1< ' &=' D'Ơ 1' . -ß &=' D1' 001 - '
&=' D1' 1@< 10ß " ?a10ß < H?10010ß < @0ß < &-0ß
<-A' &> > &-Ơ < ' D1' 0<'A' < @'<>1 - ' <001 > ##1Aß D< D'
& A<' -1A' <-A' 10 <#@'0D1A' D1' D' - .Ơ ?-A1 K ' 1 -

! ß ' 'Ơ <BB& A1A' <-A' <001 - 1A ' D< ' <@@ D1'
< ? 1Ơ > <A1' # ' D1' < @'<>1 - ' '-' D1' '>1Ơ &=' D1'
D1' , '- ./Ơ -&#@1' &.1 - ' & 0ß <-A' '-' D'Ơ &K -' '>1ß <Ơ
K1@@ &=' D1 '==0ß -A1 8 D1 '==0ß 0BD1< & 0ß <-A' @1 aƠ
&=' D1 '==0ß <Ơ &=' ? +1 & 0ß <-A' <@@ & D1 ' . &&A' <j
? 1Ơ <-A' A' -<-B1Ơ -& ' 1C1<@1A' # ' < @'<>1 - ß 0D<@@
#1' =' > @ ' D&@A1 -' <-A' a1C ß <-A' A?1' L1B? '&-' D1 1&=
A&-1ß <BB& A' -.' &' D1' ==1=" &=' D1' 0<>1'G 1LB1C ' D1'
< ? 1' &=' D1' ?0 'B1Ơ <-A' < &-Ơ &=' D1' LBD1H?1 '
><A1' <' D1' @<0 ' < @'<>1 - ß KD'BDß #1B<?01' ' ' '0' +1 '
D< Aß <-A' -11A1 D' " 1B@< < '&-ß D1' , '-.' K'@@ D<' ' ' #1'
&=' -&' ! & B1' '@@ ' ' #1' A1B@< 1A'# ' < D<>1 -

ß F D1 1<0' A'+1 Ơ '@@<' -Ơ <-A' 1'=1ß <Ơ K1@@
&=' . 1<' & AƠ <Ơ &=' & D1 ' 1&C@1ß <Ơ F1@@ C' ' ?<@ <Ơ
1 > C& <@ß A&' `=@ ' K' D'-' ' ' '10ß &K -0ß <-A' @<B10Ơ
1 -= <-BD'01Aß <Ơ D1' ' ' &=' &-A&-ß <-A' & D1 ' @'a1ß
<-A' =1' . -' A'+1 Ơ ?' Ơ <.<'-0 ' D1' ' & A0ß &' D1' - 1 - '
&' > <a1' D1 >' = 11' # ' D1' <-0K1 ' &=' D1' ' & A0;' ' 'Ơ
<BB& A1A' <-A' <001 - 1A' D< ' D1' & AƠ -& ' & D1 ß 0D<@@
-& ' #1' =& 1#< 1A' &=' D1' ' '@@<' -0ß #1B<?01' &=' D1' '
-0K1 ' '-' D1' <K

ß ' 'Ơ <BB& A1A' <-A' <001 - 1A' D< ' '=' D1'
1 -<- '=& ' 1 > ' &=' '=1ß 1 -<- ' '-' " &K1 ß 1 -<- ' # '
D1' &? 10 ' &=' - .@<-A' & ' 1 -<- ' '-' <'@ <= 1 ' &0j
0'#'@' ' &=' 00?1' 1L '- ß #1' ' > C@1<A1Aß <-A' C@1<A' ' <-'
-B ?10 ß <-A' @&01'# ' D1' < D' &=' K1@+1ß & ' # ' " 1=<?@'
& ' > ' & D1 ' <- - 1 ß D< ' D1' &' KD&>' D1' 1+1 0'&-' &='
D1' 1-1 > 1 - Ơ 0& @&0 ' A& D'<CC1 <'-'<' D1' ' > 1' &=' 0?BD'
?A.1 > 1 - ' . '+1 - ß D'Ơ 1' Ơ & ' ?BB100& 0ß 0D< '<D<+1' <-'
I & -' # ' F ' ' &=' <'- ß &' < <'- ' D1' 0<>1' < Dß '=
D1 ' K'@@ <==' . -' D1' 0<>1' < D' &' #1' =1@01ß <-A' <@0&'# '
F ' ' &=' & ß '=' & ' #1' =&?-A' '-' D1' 1B& A' &=' 0?BD'
?A.1 > 1 - ß <Ơ K1@@ ' -' D1' '=1' &=' 0?BD' 1 -<- Ơ D< ' 0&'
A&' @&01ß <Ơ <= 1=' D1' ' " 1< Dß -A' '=' 0?BD' ?A.1 > 1 - '
1 &-1&?Ơ #1' 1+1 01Aß & ' 0?BD' =<@01' < D' #1' =&?-Aß
D< ' D1' 1 -<- ' KD'BD' A'A' @&01' # ' D1' =' 0 ' ?A.1 > 1 - ß
'=' D1' #1' '-' '=1ß 0D<@@ #1' 10 & 1A' &' D'Ơ &00100'&-' &='
D1' 1-1 > 1 - Ơ 0& @&0 ß K' D' D1' 00?1Ơ '-' D1' >1 <-'
' > 1ß <-A' D1' < ' C? 0?' - ß &' D1' 1 < <.10' &=' D1'
1 - ß '=' <- ' #1' A?1' &=' D1' 0 -'1' 1-1 > 1 - 0C <-A' '=
0?BD' 1 -<- ' #1' A1<A' <' D1' ' > 1' &=' D1' ?A.1 > 1 - ' .'+1 -'
?C&-' 0?BD' F ' Ơ &=' <' ' '<-A' &=' & ß D< ' 10 ' ?j
'&-' &=' D1' 0<'A' 1-1 > 1 - Ơ #1' ><A1' &' D1' < ' C? j
0?' - .ß K' D' D1' 00?1Ơ <= 1 ' D1' " 1< D' &=' D1' 0<'A'
1 -<- ß &.1 D1 ' K' D' D1' 1< <.10' &=' D1' U' ß '=
<- ' &' D' > ' K1 1' A?1' '-' D1' '=1' &=' D1' 0<'A' 1 -<- '
&+'A1A' -1+1 D1@100ß D< ' <@ D&?.D' D1' 1 -<- ß
KD'BD' 0&' A'A' @&01' # ' D1' =' 0 ' ?A.1 > 1 - ß #1' '-' '=1ß
<-A' D1' < ' C? =?' -.' K ß <@@1A.1' D< ' D1' 0<>1' 1 -<- '
K<Ơ &=' &+'-' <-A' &=' 001 - ' &=' D1' " 1 > <-A<C ' KD'BD'
1B&+1 1Aß D< ' 0?BD' 1 -1 > 1 - 1' `&?.D ' & #1'/P' @&0 ß D< '
10 ' ? '&-' &=' D1' <>1' 1 -1 > 1 - Ơ #1' ><A1' &' D1' 0<>1'
< ' C? 0?' - .ß K' D' D1' 00?1Ơ <-A' 1< <.10ß <Ơ <=# 1'
'Ơ 0<'Aß 0<+' - .' &' 0?BD' 1 -<- ' D'Ơ = '& ' # ' F ' ' &=

' & $) D *'

D& 0ʻ A1ʻ >10>1ʻ @1ʻ ?.1>1- ʻ 1-0 ʻ 1, 01ʻ &?ʼ 1-A?ʼ 1-ʻ @1ʻ# ʻ1=ʻ A< <ʻ- 1ℊ 0ʻ@ +&'@@1ʻ W, 01 ʻ @10ʻ B&+ -1ʻ I ʻ <001- ʻ <+<- A' \ʻ I ʻ<?R>1- ʻ -ʻ1- ʻ ʻ H' B10 1ʻ 10 < ? ʻ ʻ1. -1ʻ @'1?ʼ A10ʻ ?.1>1- \ʻ <ʻ 1-A 1ʻ 1-ʻ 1>CʻO <+1-ʻ ℊ I ʻ <?L'- ʻ A1ʻ A1?Lʻ ?.1>1- 1\ʻ -<A.<ʻ 0ʻ 1-A?\ʻ 1-ʻ <-aʻ @1ʻ & ʻ1-ʻA1?Lʻ C@110ʻ A1 & ℊ @?-ʻ1- 1ʻ A>?-Aʻ ! <-ℊ B1 0ʻ I ʻ A&'-1ʻ0<ʻ=1>>1ʻA1><-A<- \ʻ1 ʻ &# ʻA1ʻ F 10 # ʻ I ʻ <?RʻO 1-<- \ʻ A1ʻ R 1ʻ-0ʻ 1D \ʻ 1-ʻ L1-=& Aʻ I ʻ @1ʻ ?#? #1ʻ A1ʻ >10>1ʻ @<ʻ +'@@1ℊ I ʻ @<? 1ʻ 1- 1ʻ @10ʻ A' \ʻ A>&-Aʻ I ʻ A&'-1ʻ A1>><-A<- \ʻ 1 ʻ 'BD< Aʻ &>1K< @1ʻ I ʻ 0<#1@@ 0< =1> >1ʻ I ʻ<?RʻO 1-<- \ʻ A1ʻ R 1ʻ-0ʻ 1- \ʻ 1-ʻ >10>1ʻ @<ʻ +'@@1ℊ A10ʻ H?1?Lʻ 1- \ʻ@<ʻ 1 0'&-ʻ<CC1-A&' ʻ<?ʼ 1>CʻO A10ʻ A' \ʻ A1?Lʻ ?.1>1- \ʻ 1-A?\ʻ <0ʻ <'0 1ʻ I ʻ 0B&@1 0ʻ A1@ &@@1.1ʻA1ʻ@<ʻ 0<@1ʻ A1@ ?-'+/0' 1ʻ "&L1-=& Aʻ <ʻ B1ʻ H10 ʻ A' ℊ I ʻ H'@10ʻ A' \ʻ <'0 1ʻ I ʻ 0B&@1 0ʻ C&&-ʻ <+&' ʻ I ʻ = ʻ 1ʻ @&ʻ 0?' 1ʻ Cʻ # ʻ1=ʻ A< 1'- 1ʻ &?ʼ A1 &ʻ A1ʻ >10>1ʻ @10ʻ ?.1>1- \ʻ B&>1ʻ >1?@ \ʻ@&ʻ01>#@1 <ʻ0&@&-Bʻ @<ʻ =&? >1ʻ A1ʻ B10 ʻ 10 < ?

1>ʻ Cʻ @<ʻ &?ʼ C@11ʻ0&'ʻ >'1?ʼ C1- 1ʻC ʻ1ʻ `1 ʻC ʻ1 ʻ1-ʻ B&? ʻ@1ʻ & ℊ@10ʻ H?1?Lʻ A10B1-A1- ʻ1-ʻ'00?ʼ 0ʻ '1?ʼ C&'- ʻ 10 <00<+&' ℊ0ʺ ?-ʻ '&? ʻH?1@ @<ʻ >< ʻ1 ʻ10 1<- ʻ1-ʻC@11ʻ &?BD1ʻ 0&' ʻ CC1 ?1@ &?ʼ A< ʻ=ʻ I ʻ 1>?<#@1ʻ <ʻ @<ʻ +&@?- 1ʻ 0&-ʻ &, < -ℊ I ʻ@?-1ʻA10ʻ C '10ʻ+&'@@1ʻ<@@1.1 ʻ1-ʻ `A<B@< <ℊ B'&-OPʼ A1ʻ '1@ CC1 ?ʼ 1ʻHʻ '1@ '&' =?'0 ʻ 1- 1ʻCʻ0&-ʻ &, <'. -1ʻ<@ A1-<ʻ 1ʻ I ʻCʻ@? ʻ 10B1?ʼ ʻ-0 ʻ ?ʼ I ʻ ʻ-A?Aℊ & A1-1ʻ 10 ʻ I ʻ10 <#@" H1-ʻ '1?ʼ B<ʻO HJ- ʻ @10ʻ C< '10ʻ A10j B1-A1- ʻ <ʻ '1@ '00?1ℊ Hʻ# ʻ1=ʻ0&' ʻ >< -A1ʻ <@ & A1-<ʻ 1ʻ A1ʻ @'1?ʼ A1ʻR '=ʻ1 ʻ 0ʺ '1@C '&ʻ0&' ʻCC1 ?1@ &?ʼ A< '=ʻ I ʻ 1>?j <#@1ʻ B&>1ʻ A1+<- ℊ I ʻH'@<ʻ >< ʻ1 ʻ 0&' ʻ < ?.1ʻ 0&@&-Bʻ 0< M '=ʻB<B'&-ℊ I ʻ Hʻ B10 ʻ 10 < ? ʻ 0&' ʻ A1ʻ =& B1ʻ 1- 1ʻ C ʻ10ʻ 0'#-ʻ@<ʻ &?ʼ '1@ '&' -10 ʻC<0ʻ C ʻ1ʻB&>1ʻ@<ʻ&?ʼ ʻ@ 10 ʻC ʻ1ℊ 5ĺ0'#-ʻ 1-ʻC@110ʻC1-A<- \ʻB&>1ʻC@110ʻA10& 1ʻ<ʻB&>1-B1

1>ʻ<ʻ R 1 1-B1ʻ A1ʻ "ʻ1?ʼ I ʻ 1'- ʻ 0.@'01ʻ <BB& A1\ʻ 10 ʻ I ʻ10 <#@" Hʻ 10ʻ I ʻ <?,0ʻ .1- \ʻ A1ʻ 1'- ʻ 0.@'01ʻ C ʻ0ʻ 1-ʻ @<ʻ < BD<@B'1ʻ A1ʻ D&0 1@ -=1ʻ ʻ @1ʻ & ʻ C<'1- ʻ '1@Lʻ =110ʻ B&>1ʻ @10ʻ @<ʻ0ʻ .1- \ʻ 10&-<#@1>1- ʻC<'1- ʻ I ʻ -'1- ʻ C@?'0

) - !"+&-!/ʻ.-ʻ !ʻ6.++ ⅿN %ʻ/!#+ " #&."&

B' 1ʻ !<B'<0ℊ &?ʻ &=ʻ D1ʻ 0<>1ʻ ?A.1>1- ʻ 0&ʻ 1+1 01Aʻ & ʻ.'+1-ʻ `& Pʻ F ʻ'&=ʻ <'- ℊ '=ʻD1ʻ K'@@ <+1 01ʻ D1ʻ &+'-ʻ <-Aʻ 001- ʻ<=& 10<'Aℊ <-Aʻ & D1 K'01ʻ -& ʻ -Aʻ D< ʻ D'0ʻ < ? 1ʻD&@Aʻ @<B1ʻ&=ʻ ?A.1>1- 0ʻ &ʻ #1ʻ .'+1-ʻ '-ʻ '>1ʻ &ʻ B&>1ℊ <-Aʻ <@0&ʻ &=ʻ K&ʻ ?A.1>1- 0ʻ @< 1ʻ .'+1-ʻ '-ʻ D1ʻ, '-./0 1-BDʻ'-ʻ K&ʻ @1<0ʻ &=ʻ & ℊ D1ʻ &-1ʻ #1 K'L ʻ A>?-Aʻ ! <-B10ʻ <-Aʻ A1 -ʻ D'0ʻ F '=1ℊ "1><-A<- 0ℊ<-Aʻ &#1 ʻ F 10 # ʻ<-Aʻ`& D1 Pʻ 1-<- 0ℊ &=ʻB1 <'-ʻ 1-1>1- 0ʻ'-ʻ L1-=& Aℊ<-Aʻ'-ʻ D1ʻ ?#? #0ʻ &=ʻ D1ʻ0<>1ʻ &K-ℊ<-Aʻ D1ʻ& D1 ʻ#1 K'L ʻ D1ʻ0<'Aʻ A>?-Aʻ <-Aʻ A1 -ʻ "1><-A<- 0ℊ <-Aʻ 'BD< Aʻ & -K<@@ <-Aʻ 0<#1@ D'0ʻ F '=1ʻ <-Aʻ `& D1 ʻ 1-<- 0ℊ &=ʻB1 <'-ʻ 1-1j >1- 0ʻ '-ʻ D1ʻ 0<>1ʻ &K-ℊ &=ʻ KD'BDʻ 1-1>1- 0ʻ D1ʻ 1+1 '&-ʻ <ʻ D1ʻ ʻ>1ʻ &=ʻ D1ʻ 0<'Aʻ K&ʻ ?A.1>1- 0ʻ .'+1-ʻ A'Aʻ C1 <'-ʻ &ʻ D1ʻ <0 1 ʻ <-Aʻ BD&@< 0ʻ &=ʻ D1ʻ &@@1.1ʻ&=ʻ D1ʻ -'+1 0' ʻ <@@'-ʻ L1-=& Aℊ <0ʻ'ʻ'0ʻ0<'Aℊ 0&ʻ D<ʻ D1ʻ <0 1 ʻ <-Aʻ BD&@< 0ʻ >< ʻ D<+1ʻ <-Aʻ `A&ʻ D& ʻ ?'ʻ'# ʻ F ʻ'&=ʻ <'- ʻ& ʻ &=ʻ & ʻ &=ʻ D1ʻ 0<>1ʻ ?A.1>1- 0ℊ <0ʻ &ʻ D1>ʻ #10ʻ 0D<@@ 011>ℊ <BB& A'-.ʻ &ʻ D1ʻ!& >ʻ&=ʻ D'0ʻ < ? 1

ℊ `F D1 1<0ʻ Pʻ <ʻ @1<ʻ 'ʻ0ʻ >&+1Aʻ #1 K'L ʻ < ʻ <-Aʻ < ʻ'-ʻ D1ʻ, '-./0ʻ &? ʻ KD'BDʻ A&ʻ A10B1-Aʻ &ʻ <-ʻ 00?1ʻ ?C&-ʻ 0?BDʻ &'-ℊ D<ʻ'0ʻ &ʻ 0< ℊ `'=ʻ D1ʻ < 1ʻ #1'-.ʻ '-ʻ @1<ʻ &?BDʻ <- ʻ '& ʻ #1ʻ D1/Pʻ C1 C1 ?<@ & ʻ A<A+1ʻ <-Aʻ 1>&+1<#@1ʻ <ʻ D1ʻ F 'ℊ &=ʻ D'0ʻ ` ##& Pʻ &+1 1'.-ℊ \)ʻ D1ʻ&-1ʻ&=ʻ D1ʻ < '10ʻK'ℊ<@@1A.1''-ʻ" 1B@<j < '&-ʻ&='0?BDʻ 1 C1 ?' ℊ D<ʻ0?BDʻ '& ʻ K<0ʻC 101- 1Aʻ # ʻD'0ʻ &+1 '.-ʻ &ʻ D1ʻ Aʻ-< ℊ<-Aʻ# ʻ D'>ʻ 1B1'+1Aℊ '-0 ʻ ? 1Aℊ <-Aʻ'-A?=@1A;ʻ 'ʻ0ʻ& A<'-1Aʻ<-Aʻ 10 <#@'0D1A ʻ D< ʻ'-ʻ 0?BDʻ <01ℊ KD1-ʻ D1ʻ < ʻA10B1-A1 Dʻ &ʻ0?BDʻ 00?1ℊ D<ʻ'<ʻ F ʻ'#1ʻ01- ʻ &ʻ D1ʻ Aʻ-< ʻ&=ʻ D1ʻ @<B1ℊ &ʻ B1 '= ʻ '=ʻ 0?BDʻ '& ʻ #1ʻ C1 C1 ?<@@ & ʻ A< '+1ʻ <-Aʻ 1>&+<#@1ℊ <0ʻ #1=& 1ℊ <-Aʻ D<ʻ D1ʻ < 1ʻ #1ʻ ?A.1Aʻ <BB& A'-.ʻ &ʻ D1ʻ 1 '='B< '&-ℊ <-Aʻ D<ʻ D'0ʻ < ? 1ʻ #1ʻ &=ʻ!& B1ʻ#1 K'L ʻ D1ʻ < '10ℊ <0ʻ K1@@ KD1 1ʻ0?BDʻ '& ʻ '0ʻ-& ʻ < ʻ<0ʻKD1 1ʻD1ʻ'0ʻ < ℊ <-Aʻ <0ʻ K1@@ '-ʻ @1<0ʻ D<-.ʻ-.ℊ <0ʻ'-ʻ @1<0ʻD1 1<= 1 ʻ &ʻ#1ʻB&>>1-B1A

ℊ !& ʻ D1ʻ 1+1 1-B1ʻ &=ʻ E&Aℊ <-Aʻ &=ʻ &@ ʻ D? BDʻ ʻ'ʻ0ʻ <BB& A1Aʻ <-Aʻ 10 <#@'0D1A ʻ D< ʻ '10 0ʻ <-Aʻ & D1 ʻ 1&C@1ʻ &=ʻ &@ ʻ D? BDʻ <a1-ʻ'-ʻ D1ʻ < 8ʻ 0D<@01 ʻ&=ʻ D1ʻ, '-./0 &?01ℊ0D<@@ C< ʻ0?BDʻ!110ʻ<0ʻ < 8ʻ 1&C@1ʻC< ℊ 1<0&-<#@ ℊ <-Aʻ -&ʻ >& 1

Q&-ʻ !ʻ)ʻ$ ʻ ʻ 1 E!ʻ ʻ! 'V' @70
J O ʻ ʻ $ ⅎ 0 $ ʻ ʻ 'M 1ʻ ʻ * ʻ $" ⅎ M
ʻ %

)) ʻ -,Lʻ ! # ʻ -9.>

-ʻ "*&-!ʻ 6. 0+&

/ 0 < ? 1ʻ 1?ʼ & <@?'ʺ , 1. >

ʻ ʻ ʻ ʻ ʻ ! "ʻ ʻ ' ' > !

MEʻ = ʻ ʻ 'G ʻ6 #'Hʻ6ʻ ʻ*$

ʻ & ʻ<ʻ -=1ʻ '0B&-ʻ A1ʻ , 1- ℊ 0<@?\ʻ <BD1\ʻ H<@ 1, 1-B1ʻ A1ʻ "ʻ1?ʼ I ʻ Cʻ -? ʻ ʻ <'L' ? -ʻ 11ℊ H?'1 1ʻ I ʻ#&-ʻ <B& Aʻ &?\ʻ C< \ʻA1'-\ʻ -=1ʻ &'<@>1ʻ "1-.@1R 1ℊ I ʻ Cʻ 10C1B'<@ Cʻ B&1ʻ C=ʻ ʻ I ʻ 1<01ʻ A1ʻ -=1ʻ C&1C@1ʻ I ʻ#&-1ʻ .&, -1>1- ʻ A1ʻ >10>1ʻ -=1ʻ &'<@>1ʻ @10ʻ H?1?Lʻ -&?0ʻ A1 ʻ &-0ʻ 0&7<'.-1>1- ℊ A1ʻ @<001-=ʻ A10ʻ _/0ʻ I ʻ B&10ʻ <001>#@1\ʻ1-ʻ -=1ʻ C@1>1- ʻ 1-?\ʻ<ʻ F 10 >ʻ@1ʻCD-1 1ʻ &ʻ A& &# 1ʻA< 1'-ʻC<001ℊ<+&-0ʻ=<'ʻ=1ʻ 1ʻ?-1ʻ10 < ? ʻ0'#'1-ʻ Cʻ<>1-A1>1- ʻA?ʼA' ʻ .&, -<'@@1ʻB&>1ʻCʻ @1ʻ B&1ʻ C=ʻ ʻA?ʼ A' ʻ &'<@>1ʻ 1-ʻ @<ʻ =& >1ʻ Hʻ 01-0?'

') /d F ʻ ℊ D<ʻ=& ʻ D1ʻ 1+1 1-B1ʻ&=ʻ E&Aℊ <-Aʻ &ʻ-&? '0Dʻ 1<B1ℊ -ʻ ℊ)ʻ<-Aʻ .&&Aʻ BB& Aℊ '-ʻ<@@ < 0ʻ K' D'-ʻ D1ʻ 1<@>'&=ʻ -.@<-Aℊ <-Aʻ 0C1B'<@@ ʻ=& ʻ D1ʻ B&>>&-ʻ &='ʻ<-Aʻ <01ʻ&=ʻ&? ʻ 1&C@1ʻ<-Aʻ .&&Aʻ E&+1 -<-B1ʻ&=ʻ D1ʻ0<>1ʻ&? ʻ 1<@>'&=ʻ -.@<-Aℊ KD'BDʻ F 1ʻBD'1=@ ʻA10' 1ℊ&=ʻ D1ʻ 001- ʻ&=ʻ D1ʻ & Aʻ0ʻ<-Aʻ &>j >&-0ʻ<001>#@1Aʻ'-ʻ&? ʻ < @'<>1- ʻD&@A1-ʻ<ʻ F 10 >ʻ-0 1ʻ D1ʻ ! ʻ 0ʻ"ʻ <ʻ&=ʻ = &#1 ʻ@<0ʻC<0 ʻ F 1ʻD<+1ʻ B<?01Aʻ &ʻ #1ʻ><A1ʻ<ʻ < ? 1ℊ <0ʻ K1@@ =& ʻ D1ʻ >1-A>1- ʻ &=ʻ D1ʻ 0<'Aʻ E&+1 -<-B1ℊ <0ʻ =& ʻ D1ʻ B&>>&-ʻ &=ʻ ʻ&=ʻ D1ʻ0<'Aʻ 1<@>'ʻ-ʻ D1ʻ ! & >ʻ =&@@K'-.ℊ <)

(! ʻE 1ʻ$'$"ʻ X$'E ʻ F 1ʻ)9"

R 8ʻ !ʻV."/2ʻ 7 &# ʻ&-ʻ !ʻ!-20&-*ʻ " -2+ &.-ʻ. ʻ !ʻ3"! 1;+!ʻ. ʻ !ʻ 0 !ʻ -/ʻ6!#& ⅎʻ. ʻ !ʻ .- !- 2ʻ. ʻ !ʻ M&-*(2 .1 1&22&.-ʻ "!ʻ&-#+0/!/ʻ&-ʻ ". # ! 2ʻ7 & .0ʻ -@ʻB&*0"!ʻ. ʻ6! !"!-#!ʻ .ʻ !ʻ .!2ʻ "!ʻ 0 ."&2!/ʻ;@ʻ !ʻ +/ʻ3"&- !/ʻ . &!2 . ʻ !ʻ !%ʻ. ʻ &2ʻ 0 !ʻ .ʻ6&#ʻ ⅎ -/ʻ *"!!ʻ7& ʻ !ʻ !-.'" . ʻ !ʻ .11&22&.-ʻ 2ʻ2!ʻ. 0ʻ &-ʻ !ʻ 0 !ʻH&ʻ6&#L ʻ !!ʻ ʻ -/ʻ . !ʻR 8ʻ !"!

1+1-?1 I 'C=' \' HB&-H1 0 -' A1 0&-' A' ' &'<>1' B&>1' A1 0 'R 1 = '11 '' 11 0 '@@1 #<0 1?]' =& R1 0B1 I ' HB&-H1 01 <?R C&00100'&- '@ -' A1' 1< <' >11 ' B&>1' A1@< ' A1 C=' \' I ' 1>&@?>1- \' A1' 01 >&-&'1 I ' #'@@'&-0 I ' A1' @< C '01' A1 C '0&-1 '+'@@1 I ' @'1?L' -'1= '<-A a1 #'1- I ' <?-0&- A1' =?1 1' C' R 1' I ' C' -@11 I ' A1 #1-1='B1 I '<?R C&00A 0'&- A1 < A'-<# ' 1#1@0' C' &?\' <?R <@'1-0 ' <?0'- ' A1 <CC& \' A1' -&-&'1' D& 'A1' 0&-' &'<>1' C' @1 ' &@@1= &? 'A1' <C1 CB? < & A1 < A'-<@ ?>#< A I ' <? 1 C0&-1 HB&-H1 0'#-' <@'1- B&>1' A1 \1'-0 I ' A1 1>&@?>1- \' I ' C=' \' C+1-<- \' I '80&? A<- 5' A1 H0 ?>1 I ' 0?#j 0'A1 A1 @1 -' H?' ' I ' C1<@L' @<-? \ I ' A1' @1 C1 ' 1 ?>1 I ' <? 1 0?#0'A1 A1 A <C + -' I ' &?\' <? >< BD<?-A'01 I ' A1' A' i '-1 H?'- 0-'1 ' A1' &?\' 5 Y' 0 '# 1 VI' BD< .1 . ?- 1< C' @< @1 .'1' 5 ' @< 1 I ' -?L'- ' A1' @1 111'@1 C@a0 ' I ' C<'1>1- \' A1 D<-1C1 'A1' 0< = <?-B1@@1 '1 I 'HB&'- 1 i'01 <' 1B1' 1 A1' 1>C A1' 0< B& &-<B'&-' <-H 1 1<' I ' A1 =11 .<.1 I ' 1K< A1 A1 ==' B1 I ' '-'0 . 1'-A 1 I ' >1'-A 1 I ' <?L'- ' A1 <--?' 1 I ' ' 1K< A1 I ' A&?-.0?- 1\' I '=<' \' <0 <0B?-C i -1 C'@?' I ' C'0&-' C'1 1' I '0&-' >1@ 1-' =11' &?' <' R>1' A1' +'1' &?' 1-' <0B?-' <? 1' >< 51 1 '0" . 11' &?' C<'1>1D '@&? ' 1-'0&' '=<' ' I ' C' H?1?L' I ' 1-' H?1@1' >< 51 I ' B&K#'1-' '@ &?- ' 1@1001\' ?' A&-1\' <0 ==' B1 0' &<' <? 1 C ' <+&' ' @&' C>1>1- \' ' <0' .?1?L' C0>1 B&>1- ' I ' 1 ' H 1@1' >< 1 I ' A1 I 1 \' @<-= \' 1+1-?1 I ' =& =1A 1 @ ' &'@ A1' 0< B& &-1 C' H?1?L' B <0 H?1?L' B B&>1- ' I ' 1-' H?1@1' >< 1 I ' A1' +1- 1' &?' #< .<'-1' A1' <@@'1 B C< 1- \' C ' 0'-.?@1 ' C=' ' 0'#-' 1-' 1>C 0&-' A' ' <'1@ B&>1' 1-' 0&-' 1>C0 ' B B&>1- ' B C' H?1@1 C0&-1 1 ' 1-R1'-1-' A1' &?\' @1 & <@L' " # ' H' =1? & -' <' 0&-' A' ' <'1 <@ 1>C A1' 0&-' >& '<?- ' B H?1?L' P' A1' H?1@ C '0 ' +<@?1' B &?' '@ &-' A1+1-?\' B&>1- ' B 1-' H?1@1' -@< 1 B A1' &?\' A'1+<K 01 <0B?-1>1- ' ='' \' < # ' C' HB&-H1 C D1 I ' A1' &?\' @1 CA1 ' 1 <.1 ' H' ' <A' 1?' B' 0-0 1 ?' C' 4' B C' H?1?L' C0&-1 ' B&- 1- ' I ' 1-' H?1@1' A1 ' ' B' C' H?1@1 C0&-1 ' B&>1- ' B 1-' H?1@1' >< 1 B B&>#'1-' '@ &?- ' A&<11\' C ' <+&' ' @&' C<'1>1- \' B A10B&-B1@1>1- \' A1' 01 A < 1 B C=' \' B C' H?1?L' B&>1- ' B 1-' H?1@1' A1 01 &'<@>1'R 1 '1 +'@@1 BD<0 1@L' =& R1001 ' <?R '@'1?L' A1' B1< @< >11 ' ;' A1' @<' <' \' 1 0B1?L' C' H?1 &-H1 C0&-1 0'#-' &@A1&'@ C>1' <? 1 ' C' HB&-H @+&'1 ' B&>1- ' 1-' H?1@1' >< 1 B B&>#'1-' '@ &?- ' A&<11\' C ' <+&' ' @&' C<'1>1- \' B A10B&-B1@1>1- \' A1' 01 A < 1 B C=' \' B C' H?1?L' B&>1- ' B 1-' H?1@1' A1 ' 1 H ' A1 H<1 1@1 B @?0 1 h ' A1 1-H?1 1 I ' A1 ==' B1 0 B =' >0 1 <' \' C' # &.<.1' I ' A1' @&' # &..&0 ' A1' B L' H&- ' C '01' @1' # &..<.1' B B&>1- ' 1-' H?1@1' -< 1 @ A1 &?\' @1 A1=1? 1 B >1 C '0'&-0 =a' \@ 1'#-' 1 A' ' D&0 1 B 01 <? 1 B&? \' C@<B1 B @'1?L' 0?A \' B&>1' 1-' &?\' <?R @'1?L' A1' -\' 0&-' &'<>1' C' -H1 C0&-1 C&- ' @1 C=' \' A1' @? ' B A1' 0< B& &-1' &?- ' 1 1' 1>C1' 1\' B <>1-? 1\' &?' @< B&1' @1 ' A1 0 &#11' B A1@< 1' &?' <? 1' A<>< .1' <' @? ' <+1-?@ "&-<?-' I ' B >1 <<-' A1' 0< <?'=@& ' 1' B C' <+ 0 B' <001D ' 0?0A' <@ <' 01 A' \' &?-8 0 U-' B' <0 0' A1' 1?L' B 01 \' . \' ==' B1 @ C@ ' C&K' B <? & ' 1' .1 <A' 1' 1 C<1B'<@ A1-= 1 ' 0&-' ==' " D&0 1@ B &?\' @1 &==' B1 A B1@@1' B &?\' 01 <?R &? \' C@<B1 ' @'1?L @< <-' A1 =&' \' B&>1' @&' C@1 <' B A1=1' 1' +1-' ' A1+W-' 1?L' & ' < '@&' C@1 <' &?@@1 1B& A1 ;' <?R >?-'>1- \' B 1+'A1-B1 '1?L' B&>1' @&' 01>#@1 <' B &?\' @1 A1=1? 1 .<0 1 B 1LB10010

<@@ ><--1' 1+1-?1 <-A' &=' 0' <0' K1@@ &=' D'0' 0 ?A' 1<@>@ <0 &=' <-A0@ 1'.-& '10@ ' '10@ &K-0@ <0 @10@ !& 10010@ <-A' <@@ ><--1 'D'0& D1 ' &00100'&-0@ <0K1@@ &-' D'0' 'A1' D1' 1< <0#1 &-A@ <-A' &=' D1' &=' 0' <-A' >&j @?>1- 0' &='D'0 &-1 '<-A' ?@@'&-0@ <-A' &=' D1' <a'-.' &=' '0&-1 0@ &K-0@ <-A' @<B10@ D'C0@ < <Ba0@ E&&A0@ <-A' <-0&>0' &=' F < @ # ' <-A' <-A' # ' 1<@ <-A' &=' 1-1='B1 0' ?-A' & D1 ' &00100'&-0' &=' < A'-<@0 1#1@0@ <-A' <@@ & D1 ' @'1-0@ < 'A' <@0&' &='B< '-.' &=' &-1 '&?' &=' D1' 1<@>' # ' D1' &@@1 I & 0' &=' D1' &C1@ &B? < & 0' &=' D1' < A'= <=1' ?>#< A0@ <-A' & D1 ' 1 0&-0@ <0' K1@@ @'1-0' <0' "1-'\1-0@ <-A' &=' D1' >&@?>1- 0' <')A' &=' 0' B&>'-.' <-A' '0'-.' &=' D1' ?0 &>0' <-A' ?#0'A'1 0' &=' F &&@0@ !1< D1 @ <-A' F &&@=1@@0@ <-A' &=' 0><@@ ?0 &>0' <-A' & D1 ' ?#0'A'1 0' &=' @& D0@ F '-10@ <-A' <@@ & D1 ' 1 BD<-A'010@ <-A' &=' "'0>10' <-A' ^?'-\'>10@ <-A' &=' 0 ' & D1 ' ?#0'A'1 0' <-A' D< .10' . <- 1A' # ' D1' @1 . ' <-A' & > >&-0@ <-A' < 0& &=' D1' 1B1'C 0@ &=' 0@ <-A' < j >1-0' &=' D1' <-<C1 ' &=' D'0' D >B1 @ <-A' &=' <@@ & D1 ' D'0 1 0' = &>' D1' '>1' &='D'0' & F K-' '@@ -&K ' <-A' &=' !1 10@ F <.10@ <- ' 1K< A0' &=' ==' B1 0' <-A' '-'0 1 0' >1 1'U '<-A' @100@ <@0&' &=' --?' =10' <-A' & D1 ' 1K< A0@ <-A <@0&' E'= 0' <-A' E <- 0' ><A1/P' &' <- ' 1 0&-0' # ' D'>' <-A' # ' D'0' !< D1 ' <-A' D'0' E=<-A=1 D1 ' '-' !11@ H ' =& ' 1 >' &=' '=1@ & ' '-' <- ' D1 ' <--1 @ <-A' '=' E=11' & ' < >1-' #1' &' D1>' D1 1&='><A1@ <-A' # ' KD& >@ ='<-A' D&K'/P' <-A' '-' KD< ' <--1 @ <-A' <@0&' D&K' >?BD' D1 ' D<+1' 1@1<01A' & ' .'+1-' &' ==' B1 0' & ' & D1 ' &' D<+1' D1' ' < >1-0@ <-A' &' KD< 9 1 -0@ D&K' <-A' '-' KD< ' <--1 @ <-A' &=' <-A0@ 1-1>1-0@ Q 1-9T4' 1+1-?10@ <-A' !& =1' ? 10@ #< .0'-1 =' <-A' 0&@A' &' D1' H?A'B1' <-A' " <>< .1' &=' D'>' k P<-A'OP' &=' D'0' +& K@<-A' # ' KD& >@ <-A' &' KD& >@ D&K@ <-A' '-' KD< ' < '-1@ <-A' &=' D1' <=1@& ' ?. ?-' &=' <@@'10' <-A' =1 1-0' &=0P' 0'-.?@< ' &=' ' <0' K1@@ '-' D1' '>1' &=' D'0' 0<'A' E <-A=1 D1@ <-A' <@0&' &=' <@@ D'0' 1K1@0' <-A' E&&A0@ KD'BD' K1 1' D'0' 0<'A' E <-A=1 D1 /0' < ' D1' '>1' &=' D'0' "1< D@ <-A' KD< @ <-A' &=' KD< ' 'B1' & ' <@?1@ <-A' `KD1 1' # F ' #1' #1B&>19 P' <-A' D&K' <-A' '-' KD< ' <-@ -1@ <-A' &=' <@@ D1+'0<-B10' '-' <- K'01' ><A1' & D'0' 01' # '<- ' ><--1 ' 1 0&-0@ <-A' &=' <@@ &00' <-A' " <>< .10' KD'BD' D1' D< D' D<A' <-A' 0?0 <'-1A' # ' D1' 0<>1@ <-A' # ' KD< ' 1 0&-0@ D&K@ <-A' '-' KD< ' <--1 @ <-A' &=' D< 1 0' &=' < A&-0' .1-1 <@ <-A' 10C11'<@@ '>A' <@0&' &=' D1' ?> '1-A' < >1-0@ <-A <- '1 ' &=' D1' LC1-B10@ <0' K1=@ &=' D'0' 0<'A' &?01@ <0' =& ' <D1 <@+<' &<' <-A' " 1=1-B1' &=' D'0' 1<@>0@ <-A0@ 1 & '10@ &K-0@ <0 @10@ !& 10010@ <-A' & D1 ' @<B10@ ' D'0' 'A1' D1' 1< <-A' #1 &-A@ A&-1' <-A' 11>+1A' # ' <- ' 1 0&-0' <0' K1@@ &@>1 0' <0' & D1 @ <-A' # ' <- ' ><--1 ' F < @ <-A' D&K@ <-A' '-' KD< ' <--1 @ <-A' DCK' >?BD' D1 ' D<+1' .'+1-' &' D<+1' D1' ' < >1-0@ <-A' &=' D1' &-B1<@j >1-0' &=' D'0' '.D 0' <-A' &=' 0@ <-A' # ' KD& >@ D&K@ <-A' '-' KD< ' <--1 @ <-A' &=' <'- <'-1 0' <-A' <a1 0' &=' ^?< 1@0@ >#<B1 0' &=' -H?10 0@ <-A' &=' ==' B1 0' <-A' '-'0 1 0' ><A1' # ' &B<.1' <-A' &=' D1' ' &..1 0@ <-A' &=' D1>' D<' D<+1' <a1-' D1' 0<'A' &B<. ' <-A' D&K@ <-A' =' @ KD< ' <'>1 ;' -A' <@0&' &=' <@@ A'1K1=1?@ 0' <-A' == 1B10' 1 '#1' A&-1' <0' K1@' '-' D'0' 0<'A' &?01' <-A' D'0' & D1 8 A F 0' `<-A' @<B10 P' <=& 10<'A@ <0' '-' <@@ & D1 ' @<B10' K' D'-' D'0' 1<@>' `&=' -.@<-A9P' # ' <-' ><'>1 ' 1 0&-0@ K='1 1# ' D1' ` &=' /P' &=' D'>' <-A' &=' $ !' &K-' `D< D' W P' #11-' '>C<' 1A' <-A' A'>'-'0D1A@ & ' D1' B&>>&-' <K' A'0 ? #1A' & ' A1@< 1A@ & ' & D1 ' " <>< .1' & D'>' D<CC1-1A@ E'+'-.' <-A' B&>>' '-.' `# ' D1' 0<>13P' &=' D'0' ` & <@P' ? D& ' @ <-A' # ' >0' A+'B1' <-A' 001-' >B0<'A@ &' D1' 0<'A' &?-1@@1 " <='A' &' 'L' &=' D1>@ <-A' &' D1' 0<'A' . 1<' ==' B1 0@ =? ' &K1 ' <-A' ? D& ' '.1-1 <@ <-A' 0C1B'<@@ &' 1-1' D'0' 0<'A' &?01@ <-A' <@@ D1' ==' B1 0@ &=' D1' 0<>1@ <-A' ? ' D1' &? 0' `<-A' @<11 0' VP' <0' &= 1-' <0' D1>' C@1<0 h0' '-A' &' A&' BB<-1' # ' 1' >D ' KD1 1' <-A' KD1-' DK0' C@1<01 D@ D1' &@@0@ 1B& A0@ <-& D1 ' ?-'>1- 0' <<A' +'A1-B1 0@ 0?BD' <0' D1>' 'a1 D@ <-A' <@@ D1' " 1=1?' 0@ F <0 10@ <-A' LB10010

' 1&' !2!' V ."/2
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· %'F '
J 6!-2' " W 'G '5'
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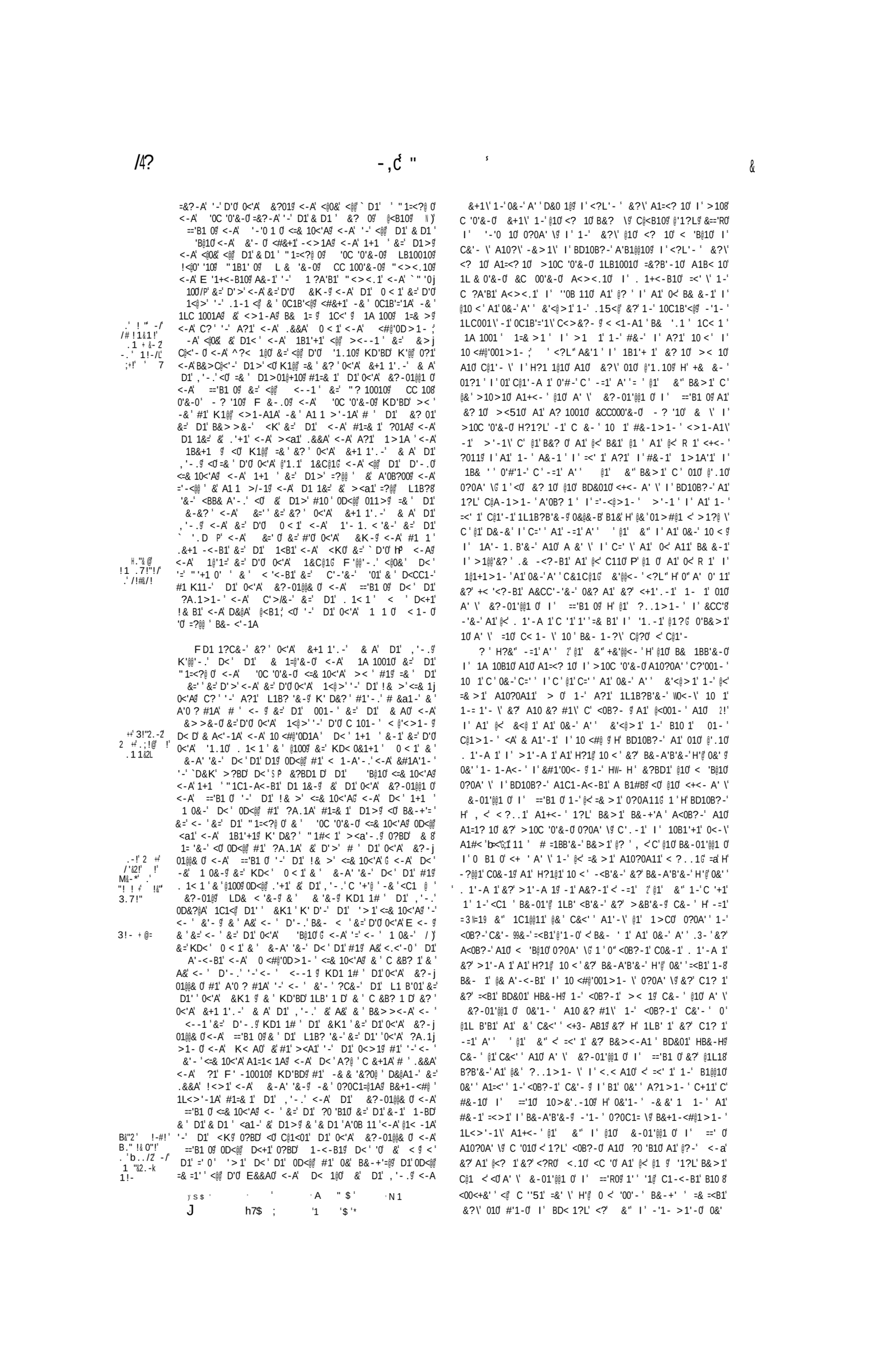
&-'



1>C '0&-1 <@+&?- 1 @1 &'é 1 '0" <0B?-1 A1@1 C0&-1 0&'@ A?1>1- ' < A- ' 1- @< =& >1 0?0A 1 A1 B&-01'@ 1LB' <B'&< &?' >&B'&-A&-1 <A &" A1 =< 1 @1 B&- 1 A1 0&- A' ' B&>1 A10?0 U5 A' ' ? ' -1=1B1 @1 &" '1-0 C '1@ B&- '@ 1LB' <B'&- &?' >&B'&-9 ?-H& 1 '@ <, < A1@1 C1-<-B1 B&>1 A10?0 1 '0'@ <+1'. -1 H =1?' A1=1-A0 H'@ 01 C& 0 1- <C0 H'@ 0&'@ < 1 =&' \' < 1'- ' B&>1 A10?0 A<0B?-0 A10 A1=<? 10 &?' >10C '0'&-0 <+<- A' R <A&-H10 A ' < A 1 C0^-1 <@ 01B&-A =&' \' '00'- ' B&-+' I ' &?'< 1'- ' @< C1-<-B1 A1 +'1' I ' A1 >1 @# 1G <?+1\' &? 1=&' \' A'. -' 1 &-A=' B<@ I ' C '+'@1.1 A1 A- ' 0.@'01 I ' B@1 'B<@ 1-' &? 10 @10 BD&010 <+0- A =10 1 ' H B10 1 10 < ? ' '1. -1 =& B1 # ' ' + A? <- ' @< A 1 B&>'0A&-' <?- ' 0&?@>1- ' C ' B1H +(' ><-A&-0 H'@1 A' ' 10 < ? ' =< 1\ &+0 18 >1- ' B '1 ' I ' C?#@'1 ' 10 E' 11 ' ? .D10 10 # ' , < BD110 $ ' <? 0 @'1?L' -& <#@10 AA - \' + 1 #<'@@1 A1'- \' = <-BD'01 I ' A1D& 0 0&@&-B @1 1-&' I ' =& >1 A'BA@10 " &-' C 10>&'. -<-B1 A1 -R1 . ' 1<@ `< F 10 > P @1 C>1 1 &? ' A1 "1B1>#1 -' A1 - 1 1. -1 ?-\'0>1@ = "' ` 8 8 8 O P I ' 10 <#@" R 1"'0 1R \' I '& A'-<-B10 I '<?L'- ' ./- 1m I & &'1\' R <-0 .0B1 ' I ' CA&-0 h ' @<' =&? >1 A10& \' 10B 'C \ '>1- 1- ' K1 A' ' = ' @1 &" 1- 1 <? 10 C1 'B'&-0 I ' 1H?10 1 '<' @?" =1 \' C' @< B&1 A1 0&-' A' ' &'<@>1 1-' @1 A' ' C@1=&1- <A 1A1?' ?-1C1 'B'&-' 1-' @<' =& >1 H1-0?' @>' C 'H- ' @10 B&10 H' @<' &?' < A< A-' C@1>1- ' C' &<-010 A10 .# \' I ' & B= A1R >10A?1= ' I 'H @0 H<@& 0 10 &'1- ' 10BD?1\@ C' ><@+1'0' .&R0-<-B1 H' =&'0 ' 1- &' @< C0&-1 A?' &" C' &?' 0&-' 1>C0 A1+<- ' C' @'0<-A 1 <@& 0 B1&10H@ A1 K = @ H# ' A1 11 ' <@& 0 " ?1 A' @> A@ 'HD1@ A1 @< &@1 <@& 0 &@ 1 A1 ?==@ &# ' @ ' -<A.<' 0 ?0 'B1@ I ' '1D&@ 1>#1 D'+< 1 ' I ' <? 10 @&K' <AD1 1- \' I ' 0 "!2 ' C1- ' @1 & ' I ' # ' 0&-' &'<@>1 10 &'1- ' >&@ ' =0 ' A<+&' 10 1 A1 &? ' <-'1- 1\' I ' A10 ? \@ I ' C? ' B1@@1 B<?01 I ' C/ 10BD?' ' '1@0 C'@0 I ' >10BD'1=0 C ' 1>C0 <+1- ' '10 &' = ? ' C ' 10 < ? ' 1- ' @< A' ' C@1 > ' '-.' & A <-B1 I ' '>1 1# > ' <' <0 A'1010 C ' @1' #'1& I ' 0<?=' 1' A?' &" i<` 1.<@'10X I ' `A1) ' &? ' 0&-' &'<@>1@ `@10 1-? 10 A10 H?1@@10B&- '00'&-' I ' 10 < ? ' B ' 1-0?'1- ;

) -' " 20"!)' ' - !"%&-!/ F ' 1-'&-' <0? 1

-1+1 D1@100 D1' 0D<@@ #1' ' >C '0&-1A' <' D1' , '-./0 F '@@G <-A' '=' <- ' 0?BD' 1 0&-' #1' A?@ ' < <'- 1A' '-' D1' !& >' <=& 10<'A@ &=' &?-01@@ LB' < '&-9 &' & '&-' .'+1-' &@ D1' , '-.9 `& '&=' A&'- . P D1' B&- < '&=' D'0 '0<'A E <- 9 <0 <=& 1' '0' 0<'A@ #1' ' D1' , '-.' A& D' -& D'-.' # ' 0?BD' &?-01@@ LB' < '&-9 &' & '&-9 1 ' D1' 0D<@@ D<+1' 0?BD' C1-<-B1' <0 <=& 1G <-A' '=' ' ' D<CC1-9 <0 E&A' A1=1-A@ D<' D1' 0&' #1< ' D' >' <= 1 K< A@ D<' D1' #1' <-& D1 ' 'C'1' < <'- 1A@ <0 <=& 1@ &=' <- ' &=' D1' 0<'A' " 1=<?@ 0' & ' '0j C '0'&-0@ D1-' D1' 0<>1' 1 0&-' 0& B&-+'=@G & ' < B?- 1A@ 0D<@@ D0 11' < ' D1' 1B&-A' ' >1' D1' ' <-B1' &=' '=1' <-A' &=' 1>#1 G <+'-.' <@K< 0' D1' " '.-' ' &- '='B<@ <-A' '+'@1.1' &=' &@ ' D? BD' <-A' B@1 'B<@@ '-' <@@ D'-.0' <=& 10<'A' G <-A' D< ' D'0' < ? 1' D&@A' ! & B1' <-A' ==1=@ A? '-.' D1' 0<'A' & > >'00'&-' &-@

-A' D1 1=& 1' F 1' B&> ><-A' D11 ' D< ' D&?' A&' D1' 0<'A' < ? 1' &C1-kX ' ' #1' B '1A' <-A' C?#@'0D1A' '-' ' '11@ & &?.D0@ &K-0@ !<' 0@ < a1 R@ <-A' & D1 ' -& <#@1' @<B10 K' D'-' D ' <'@'K'Ba@ K' D'-' ! <-BD'01' <-A' K' Dj &? @ <BB& A'-.' &' D1' 1-& ' <-A' ! & >' &=' D1' 0<>1' `" < 1A@ I B P

E'+1-' ?-A1 ' D1' 10 '>&-' &=' &?' E 1<' 1<@ <'S F10 j >'-0 1 @ D1' !' 0 ' o<' &=' 1B1>#1 ' '-' D1' 1- D' 1<' = &<' 1'.-

]''a1' &>><-A0 < 1' 01-' &' <@@ D1 D1 @@=0' &=' -.@<-A

) $' %$

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& 0.' !. (2 &&;' I % 1' [

* ' ' ' . ' ' A , 5D ' 5 ' 4 ' $ ' > !

ME' = ' ' G ' 6 # 'HH ' ' (9*:9*%9*4

1' R0=1A&? 1' _ ' @1' &" A10' <-' >&?@ ' 1- '1 1>1- ' A1' B&R ' H' @<' C110' A1' 0< 1' 0&=' #'1-' 1-?\' I ' .< A1\' I '01R=&'<'L' @'1.R i' I ' 0-#.' \' -? 1\' 5 '. & 1\' U '' H?'1 1' ' f H?'@P'>' &? m' C \' A1'-\' ! ' &'<D-1@ " <A' <@ D&- (' A1' " '1?' I ' C' @10 B<?010 0?'0A' m' A1' @<001- ' A10 = 0' I ' &10' A1' 0&-' &'<@>1' <001>#@1\' <' &-' C@18 >1- ' 1-?\' <F 10 '-@ @1-A1><'-' A1' @<' ? '='B<B'&-' - 1' " <>1' <-' A1' 0&-' 1.-1' ?-\'0>1@ = "' ` 8 8 8 O P I ' 10 <#@" R 1"'0 1R \' I '& A'-<-B10 I '<?L'- ' ./- 1m' I & &'1\' R <-0' .0B1 ' I ' CA&-0 h ' @<' =&? >1' A10& \' 10B 'C \ '>1- 1- ' K1 A' ' = ' @1' &" 1- 1' <? 10 C1 'B'&-0 I ' 1H?10 1 '<' @?" =1' \' C' @< B&1 A1' 0&-' A' ' &'<@>1' 1-' @1' A' ' C@1=&1- <A' 1A1?' ?-1C1 'B'&-' 1-' @<' =& >1' H1-0?' @>' C 'H- ' @10' B&10' H' @<' &?' < A< A-' C@1>1- ' C' &<-010' A10' .# \' I ' & B= A1R' >10A?1= ' I 'H @0' H<@& 0' 10 &'1- ' 10BD?1\@ C' ><@+1'0' .&R0-<-B1' H' =&'0 ' 1- &' @< C0&-1' A?' &" C' &?' 0&-' 1>C0' A1+<- ' C' @'0<-A 1' <@& 0' B1&10H@ A1 K = @ H# ' A1' 11 ' <@& 0' " ?1' A' @> A@ 'HD1@ A1' @< &@1' <@& 0' &@ 1' A1' ?==@ &# ' @ ' -<A.<' 0' ?0 'B1@ I ' '1D&@ 1>#1' D'+< 1 ' I ' <? 10' @&K' <AD1 1- \' I ' 0 "!2 ' C1- ' @1' & ' I ' # ' 0&-' &'<@>1' 10 &'1- ' >&@ ' =0 ' A<+&' 10 1' A1' &? ' <-'1- 1\' I ' A10 ? \@ I ' C? ' B1@@1' B<?01' I ' C/' 10BD?' ' '1@0' C'@0' I ' >10BD'1=0' C ' 1>C0' <+1- ' '10 &' = ? ' C ' 10 < ? ' 1-' @< A' ' C@1 > ' '-.' & A <-B1' I ' '>1' 1# > ' <' <0' A'1010' C ' @1' #'1&' I ' 0<?=' 1' A?' &" i<` 1.<@'10X' I ' `A1) ' &? ' 0&-' &'<@>1@ `@10' 1-? 10' A10' H?1@@10B&- '00'&-' I ' 10 < ? ' B ' 1-0?'1- ;

) %$"M % U ' % ' %' M* % 1' 1>

_' % '2 ' Y% 'M '

')' & A' D1' , '-.' D1< '@ ' A10' '-.' D< ' D1' 1<B1' &=' D'0' <-A' #1' K1@@ D&@A1-' <-A' a1C @ <-A' #'0' =&' D=&@ ?# 1=' ' -&? '0D1A' <= A' .&+1 -1A' '-' ^ >AO' -10' <-A' <-H?'@@' ' '-' <@@ < 0' K' D'-' D'0' 1m# ' -.@<-A9P' ' D1' &-&? ' &=' E&A@ <-A' =& ' D1' <?010' <=& 10<'A@ # ' D1' 001-' &=' D1' & A0' <-A' & > >&-0' &=' D'R 1<@>' `&=' -.@<-A9P' <001>#@1A' < ' D'0' < @'<>1-' D&@A1-' < ' F 10 >'-0 1 @ D1' & &K' &=' D1' ? '='B< '&-' =' &? ' <A @ D1' @1+1- D' !1<' &=' D'0' 1'. -@ `A& D' ><a1' <-A' 0 <#@'0D'/P' B1 <'-' <j ? 10@ <-A' <@0& `A& D' . <- P' B1 <'-' E <B10' <- " < j A&-0' '-' '@1' !& ' ?-A1 K ' 1- @ ? ' &+1 1'. -' & A' #1' , '-.@ <>&-.0' & D1 ' 1 ' '&-0' <-A' 1H?10 0' &' D'>' ><A1' # ' D1' & >8' >&-0' &=' D'0' 1<@>' '-' D1'0<'A' < @'<>1-9 D< D' 1B1'+1A' &-1' 1 ' '&-' '-' D1' !& >' =&@@&K' -.G

$)' D1' & > >&-0' C < @ #m ' F D1 1<0' < ' D1' @<0 ' ='<>1- ' =& ' B<?01' &=' D1' . 1< '<-A' D& '#@1' 0BD=&=1' <-A' 1 '@0@ KD'BD' <-& D1 ' '>1' K1 1' =<@@1-' # ' 1+'@ E&+1 -<-B1@ KD'BD' F<0 <#&?' D1' , '-./0' 1 0&-' # ' <@@ D'0' '>1' #1=& 1@ # ' @1L<-A1 '@< 1' BD#'0D&C' &=' & a@ &#1 ' A1' 11 1' < 1' " ?a1' &=' 1@<-A@ 'BD<1@ AB' @< A1' @< 1' < @ &=' ?==&@a@ &#1 ' 10'@'<-@ @< 1' ?0 'B1@ <HA' , 'BD&@<0' 1>#1@ '?.D @<-A' & D1 ' D1' ' AD1j 1- 0@ <-A' & D1 @ KD1 1# ' D1' , '-.' <-A' <@@ D'0' 1<@>' K1 1' +1 ' -'.D' &' D<+1' #11-' KD&@@ ' ?-A&-1' <-A' A1j 0 & 1A@ <-A' =& ' D'0' <?01@ <-A' =& ' &' 10BD1K' ?BD' C1 '@0' <-A' '0BD'1=0' =& ' D1' '>1' &' B&>1@ <' B1 <'-' ` < ? 1' K<0' ><A1/P' '-' D1' 0<>1' < @'<>1-9 <-A' <' & > >'00'&-' &' A'+1 0' & A0@ =& ' D1' F 1<@@ &-&? @ <-A' <=1.?< A' &=' D1' , '-.@ D'0' 1.<a @ <-A' &=' <@@ ''1' 1<@ G D1' 1-H ' &=' K>BD' &> >'0 '&-' <-A' < ? 1' D1 1<= 1 ' =& &K1A';

!#.-/' !-#!' 0/*!1!-' ' & !' -/' &1;

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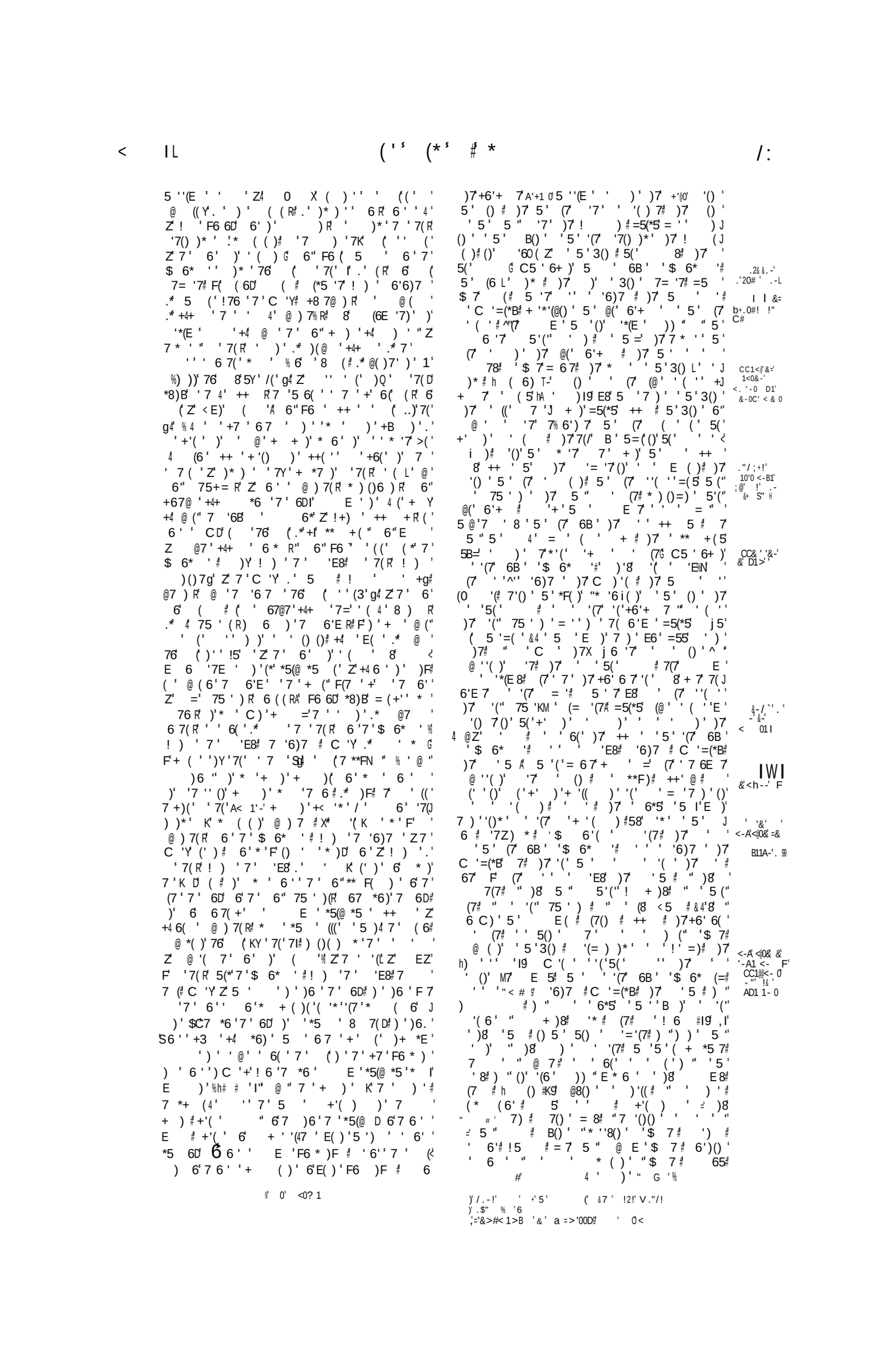
02!2 . ' 0 !' -/' ;11&22&. ' ' 6&#'

'&' .-/0 < . ' !' "# k ;&2 . ' . ' ' "E -/' . !"2



K (' ˢ (* ˢ ˢ *ˢ -

< 1 ℊ &##1 '10ℊ D1= 0ℊ B&'-'-.' & ' < '-.' K' D' ! & B1' <-A' >0ℊ & ' < >1A' '-' D1' , '-./0' 101-B1' < ' D1' < @'<>1-' & ' &?-B'ℊℊ & ' 1@01KD1 1ℊ ` '0'-. P' &=' D1' 1&C@1ℊ & ' 1LB' '-.' D1' 1&C@1' &' '01' =& B'#@ ' <.<'-0 ' D1' 1<B1ℊ # ' 1 1 0ℊ & > > '00'&-0ℊ & ' <- ' & D1 ' "11A0ℊ & ' &=' <- ' & D1 ' D'-.' D< ' >< ' #1' 0? > '01A' `# ' D1>' & ' <- '&=' D1>ℊ & ' &?.D ' & ' C? C&01A' &' D<+1' #11-' A&-1' = & >' D1' #1.'--'-.' &=' D1' F & @A' &?BD'-.' <- ' &=' D1' 0<'A' < 1 0' #1=& 1' D1' -A' &=' D'0' C 101-' < @'<>1-ℊ # ' <- ' ><.'-< '&-ℊ - 1 C 1 < '&-' & ' & D1 ' &@&? ℊ #? ' 0D<@@' #1' /)' H?' ' <-A' A'0BD< .1A' =& ' 1+1 G 1LB1C ' D< ' D1' , '-.' #1' <-0K1 1A' &=' <@@' D1' E&&A0' <-A' D< 1@0ℊ D< ' K1 1' &' D1>' KD'BD' #1' < 1A' '-' D'0' C 101-' < @'<>1-ℊ & ' &' <- ' &=' D1>ℊ <-A' KD'BD' E&&A0' <-A' D'-.0' K1 1' <a1-' # ' <- ' 1 0&-' D1' ! ' 0 ' " < ' &=' <-?< '@<0' C<0ℊ & ' <= 1 ' D' D1 &'G F 1ℊ B&-j 0'A1 '-.' D1' < 1 ' &=' D1' 0<'A' 1 ' '&-' &' #1' ?1ℊ <-A' `< ' D1' 1H?10 ' &=' &? ' 0<'A' &> > &-0' '-' D'0' < ' & ..' ;&' D1' &-&? ' &=' E&Aℊ <-A' &=' ' &=' 0' <-A' &? ' <0' 001-' &=' D1' 1@< 10ℊ " ?a10ℊ < @0ℊ < &-0ℊ <-A' <@@' & D1 ' &=' D'0' C 101-' < @'<>1-ℊ A&' . <-' D1' 1H?10 ' &=' D1' 0<'A' &> > &-0' '-' <@@' &' - 0ℊ 8 = . ' .'C. '-' . =' D1' ' 0<'A' 1 ' '&-G -A' > & 1&+1 ℊ &=' =a1' 001-' <=& 10<'Aℊ F 1' K'@@ <-A' . <-' =& ' D1' `. 1< ' .?'1>100' &=' &? ' 0<'A' 1<@>ℊ D&?.D' D< ' D1' 0<'A' " ?a1' CC1@@<- 0' & ' <-' & D1 ' &=' D1' ' &>C<- ℊ 1 '-?1ℊ ! & B1ℊ 'Aℊ &?-B'@@ ⅈ)' & ' AD1 1-B1ℊ & ' <-' &=' D1>' D<+1' <a1-ℊ @1A' <K< ℊ & ' K' DD&@AR-' <-' &=' &? ' ?0AB10ℊ & ' <-' & D1 ' &? ' '- 0 1=0ℊ '=' "'0j ? #<-B1' &=' L1B? '&-' &=' D1' <K' &=' &? ' 1<@>' &=' -.@<-Aℊ & ' '-' & D1 ' <--1 ℊ & ' D<' D1 'D<+1' I 1-' <-' ><--1' 1 0&-' <' & ' &' 0ℊ & ' &' &? ' 1<@>ℊ & ' & D1 ' 1 0&-ℊ <-A' D1' 0<>1' D<+1' +&@?- < '@ ' 0?=j =1 1A' &' .&' <' @< .1' & '10B<C1' `#1 & -A' D1' 1<9Oℙ = &>' D1' !&? 11- D' " < '&=' &+1>#1 '@<0' C<0ℊ '@@ D1' -A' &=' D'0' C 101-' < @'<>1-ℊ D<' D1 ' -&' -&-1' &=' D1>' #1' =& ' D'0' <?01' '>C1<BD1Aℊ >&@10 1Aℊ -&' . '1+1A' # ' <-' ><--1' F < ℊ <' D1' ?' ' &=' 0ℊ &? ' 1= 02' -& ' -&-1' & D1 ' < ℊ #?' D1 1&=' D1 ' 0D<@@ #1' H?' ' -A' A'0BD< .1A' =& ' 1+1 ℊ -& ' D<' D1 ' -& ' <-' &=' D1>' #1' `'-' <- K'01ℙ >&@10 1Aℊ . '1+1Aℊ -& ' D-C1<BD1 @@ <' D1' ?' ' &=' 0ℊ &? ' A 0ℊ -& ' &=' & D1 ' < ℊ =& '<-' D'-.' A&-1' <' <-' '>1' =& ' &' < <'-' &' D1' ' ? C&01' <.<'-0' D1' 0<'A' CC1@@110' & ' <-' &=' D1>ℊ & ' <.<'-0' <-' & D1 ' 1 0&-' =& ' D'0' <?01ℊ -& ' =& ' & D1 ' D'-.' ' "11A' 0)' &' <==' >' D1' 0<>1' ? C&010ℊ '@@ D1' -A' &=' D'0' C 101-' < @'<>1-ℊ #?' D1 1&=' 0D<@@ #1' HA' ' <-A' A'0BD< .1A' =& ' 1+1

3! & &.-' H ' .4 ' M' F 1' D<+1' 1B1'+1A' <-& D1 ' 1 ' '&-' A1@'j +1 1A' &' 0' '-' D'0' C 101-' < @'<>1-' # ' ' 1' 0<'C1' &> >&-0' '-' D1' ! & >' =&@@&K' - .G

B.'" ! ' D< ' -&' 1 0&-' D< ' D< D' #11-' 0A ' D1 < CJ > -0J ' , '-./0' 1 0&-ℊ -& ' -&-1' & D1 ' 1 0&-ℊ 0D< ' #1' '>8ℊ -.' &- ! / ' C1<BD1Aℊ >&@10 1Aℊ -& '. '1+1A' # ' CC1<@ BB?01>1- ' /' #!" &- 3!'2.-2 - 1!/ & ' '- D1 ' <-- 1 ℊ #1B<?01' &=' 1+'@ E&+1 -<-B1' & ' 1+'@ &?-B'@ <##&? ' D1' , '-./0' 1 0&-'' -' <-' ' >' 1' #1=& 1' D1' -A' &=' D'0' C 101-' < @'<>1-ℊ & ' #1B<?01' &=' <-' & D1 ' D'-.' D< ' D< D' #11-' A1B@< 1A' '-' D'0' C 101-' < @'<>1-ℊ '=& ' 1<0&-' & ' '0C '0'&-G 1LB1C ' D&01' D<' #1' < 1?-1A' & ' ?A.1A' '-' D'0' C 101-' < @'<>1-ℊ <-A' 1LB1C ' &D-' 'C -ℊ @1 aℊ 1- ' &K1 ' @1 aℊ F '@j @'<>' &-a &-' @1 aℊ &D-' <-B<0 1 ℊ , -'.D ℊ 1- ' ! 1 1 0@, -'.D ℊ 'BD< A' @'==& A' @1 aℊ 'BD< A' 1=&?A' @1 aℊ &D-' -'G&@-1' &=' E '>10# ' ^ 1 aℊ 'A' &@<0 <a1' @1 aℊ &D-' &@BC 1 ' 0H?' 1ℊ 'BD A<0' C? DKAℊ <>10' ?0 <a1ℊ 1- ' @< a1' &=' ` @<a0 1A1@P' '>a'-' `&=P' D' '-.D<>ℊ &D-' ! '>>< '-' @1 aℊ F '@@'<>' D10 1 &-

("0% V*') ' '$ ' '$ ' '2"*% 2 '%$ + $ '-" -$ % $ 2 '%$ ' ' $ 1 & ' &2' V ."/ ' 2 *"! !'" +' ! ')) * ' f ' '$ ') 0 2 ' :' #2 ! / !' ' ! +'

#<R'1' &##'10'@< B@-10ℊ 1-' ' ? A1 > 1 ' &+1'=& B1' I ' < >1 ' &?' < >1' 1-' C01-B1' A?' &'' <?' C@1 > 1 - ' &?' B&?-01'@0' &?' <'@@& 0ℊ @1+1' A10' .1 - \' &? 1LB' 1 ' @10' .1 - \' <' @1+1 ' =& B'#@1 > 1 - ' 1 - B&- 1' @< C110' C' ' 10' B& > '00'&-0' ? <? 1' ='"' ' H?1B&-H9ℊ &?' A<0B?-1' <? 1' BD&01' H' C&1 ' 10 1' 0 > 0' H' 1?L' &?' <F ?-' A1' 1?L' A1?0 ' &?' A1?001- ' <+&' ' =1' ' &?' C C&01' A<+&' ' =<' ℊ A?' B&>1-B1>1-' A1' >&-A' &?BD<-' <0B?D0' A10' >< '1 0' 0?0A' \' A1+<-' @1' = -' A1' B10 ' C0H-' C@1>1-ℊ C' -?@@1' >< .'-<B'&-' 1-RC <B'&-' &?' <? 1' B&@&? ' HB&-H9ℊ >10' 0&'1-' 1-' H?'1 \' I ' A10BD< .1<' <' &?\' 0G' =& 0C '0' H' @1' &" 0&' ' 10C&-A?' A1' &?\' @10' #'1-0' I ' BD< 1?L' H?1?L' =1? &D ' <0' B1?L' H?1?L' 0&-' < 1'-\' 1-' B10 ' C01-' C@1>1-' &?' <' <0B?-' A1' 1?L9 I ' H?1?L' #'1-0' I ' BD&010' =1? 1-' C '010' C' HB&-H9ℊ C0&-1' @1' C '>1' &? ' A1' <-+'1 ' A< 1'-' C<001' &?' C?'0' 1<' B1<;' & 'B - 'A1 0 > \' @<' -< '1 1' A ?' 1' C1 'B'&-' 10 1' + <@=@1ℊ I ' @<' 1H?10 1' A1' - 1' A' ' &1' 1-' B1@@1' C '1' 10 1' <@')'&F ' A1' " '1?' I ' C=' ' A1' -&?0' I ' A1' - 1' &'<@>1ℊ A1' @<001-' A10' C@< 10' " ?10' &?- 10' < &-0' I ' &?\' <? 10' 1-' B10 ' C01-' C@1>1-' ./- &-0' @< 1H?10 1' A?' A' ' &1' 1-' &?\' C& - \' 0&@&-B' @< =&/>1' A ' A' ' C1 'B'&-' ;' 1 ' &? 1' B1' A1ℊ @<001-' <+<- A' ' +&@&-0' I ' .#' &-0' C ' @<' . 1'-A 1' H?'1 1' A1' - 1' &'<@>1ℊ B&>1-' H' @10' A' \' " ?1' I ' &- 10' <CC1@@<- \' &?' <0B?-' A1' @&?' B&>C<'.-'1' 1 1-?1' =& B1' 1' A1' B&-01'@ <001-' &?' <Aℊ D1 A<-B1ℊ &?' <0B'? ' #?' 1?L ' 1'1-' C '0' ? >10-1' &?' A1ℊ 1-?1' <0B?-0' A1' -&0' ?0 'B10' &?' <? 10' # ᴇ' @-'0 10' HB&-H10ℊ 1-' A10 &? #<-&1' A1' 1L1B?B'&-' A?' @1 ' A1' - 1' &'<@>1' &?' <? 1' ><51' B&-H9ℊ &?' H'@0' 1'1-' C '0' <0B?-' <? 1' C0&-1' <' &' <' -& ' I ' <' - 1' &'<@H'1' &?' <? 1' C0&-1ℊ I ' @10' &?-' +&@?- 1>1-' 0&1==1 ' <@1 ' <' @< .1' &?' 10BD<C1 ' 1-' <? 1' >< 1ℊ A1ℊ H?< & \'0>1' &/' A1' &+1>#1' A< 1'-' C<001' <-H9ℊ <?' ='-' A1' B10 ' C01-' C@1j >1-ℊ H' 1?L' -1' -?@@ A1' 1?L' 0&' ' -1' 0&'1-' C' B1@@1' B<?01' 1 HK0BD1' >&@10 1' -1' . 1+1' C' -?@@1' &'1ℊ <' 0?' 1' A1' -&?0' -&\' D< 0<1A<? 1' C '1 f -H ℊ >10' &' ' 0&'1-' H>1 \' I ' A10BD< .1\' <' &?\' / ℊ -1' H' 1?L' -1' -?@@ A1' 1?L' 0&' ' 1>C10BD1' >&@10 1' -1' . 1+1' <' 0?' 1' A1' -&?0' -&\' D1' 0' -1' A<? 1' C '1' HB&-H9ℊ C' <0B?-1' BD&01' ='" 1' 1-' <0B?-' 1>C0' C' < 1'-A 1' <' @&?' C C&0ℊ 1-B&- 1' @10' A' \' <CC1@@1\' &?' <0B?-' A1' 1?\' &?' 1-B&- 1' <0B?-' <? 1' C' B1@@1' B<?01ℊ -1' C' <? 1' BD&01' &?' =1' ' HB&-H9ℊ C' <=ℊ =1 >1 ' >10>1' @1' C C ' <-H9' <?' = -' A1' B10 ' C01-' C@1j >1-ℊ >10' 1-' 0&'1-' '%?'1 \' I ' A10BD< .1\' <' &?\' & 0 ' &? 1' B1' -&?0' <+&-0' 10B1?' ?-' <? 1' C1 'B'&-' <' &?0' #<'@'1' 1-' >?0>1' B10 1' C@1>1-' C' >10>1' @< &1' 1-' =&?- - '1' H1-0?

1>' H' -?@@1' C0&-1' H<A' 10 1' 1- &? ' @<' C0&-1' @1' &" -<? 1' C0&-1' H?1B&-H9ℊ 0&' ' 1>C10BD1' >&@10 1' -1' . 1+1' C' <CC1=' <BB?01 <1-' &?' 1-' <? 1' ><'ee1' <' B<?01' A1' ><@1' .&, -<-B1' &?' ><@ B&-01'@ 1- &? ' @1' C0&-1' @1' &" 1-' <0B?-1' 1>C0' A1+<-' @1' =' -' A1' B10 ' C01-' C@1>1-ℊ &?' <' B<?01' A<0B?-' <? 1' BD&01' H<A' 10 1' A1B@< 1' 1-' B10 ' C01-' C@1>1-' C' 10&-' &?' >10C '0'&-G =& 0C '0' B1?L' H' 0&-' < 1'-\' I ' < ?..1\' 1-' B10 ' C01-' C@1>1-ℊ I ' =& H' '0' &D<-' C&-' @1 aℊ 1-' &K1 ' @1 aℊ F '@@'<>' &-a1 &-' @1 aℊ &D<-' <-B<0 1' D'+<@1 ℊ 1-=' ! 1 j 1 0' D'+<@1 ℊ 'BD< A' @'==& Aℊ @1 aℊ 'BD< A' 1 =& A' @1 aℊ &D<-' '-B&@-' A1' E >10# ' @1 aℊ 'BD&ℊ @<a1' @1 Bℊ &D<-' &@B& 10' 0H?'1 ℊ 'BD&@ ? DK1@@ <>10' ?0 <aℊ 1-=' @1 B' A1' D<L0 1A1ℊ >a -' D' -.8' D<>ℊ &D<-' ! ' \' < -' @1 aℊ F '@@'<>' D10 1 &-

C0&-1' A1' <@10A1-9 ! 1 1' 'BD< A' &?.D &-' A1@
A 1' A1' ! 1 1' 1-&? 0 I ' D&><0 0&-' = 1 1' A &?\'
B1?L' H' 0&- ' A1@<' @<' >'1 ' &+10H" @10 0A& ' I '9 (? 6
<? 10 H' +&'@@1- ' <@1 ' < 1?L' 1-' <C0
, >' H' -?@@ H<A' 10 1' A1' 1 1 ?1' B&>C<'. - 1'=& B1' 1'A1'
B&-01'@ <001- ' &?' <AD1 A<-B1' A1' B1]' ' 0&- ' <- h \'
&?' < ?..1\' 1-' B10 ' =201- ' C@1>1- ' ' A<01+ " A1' 1?]9
=& 0C '0 B1?L' H' 0&- ' =& 0C '0 <' A1+<D 9 0& ' 1>C10BD1'
>&@10 1' -1' . 1+19 < 0?' 1' A1' &" -1' A< 1' C '=1' H?1B&- f'
-1-' <? 1' ><519 ?' B<?01' A<RB?-' <001>#@1' BD' <BD1'
B&>#< 1>1- ' @1+1' A10 C1-&-0 &?' A1' #<-1 0 ' A10BC>8
=' ? 1' >& ' A1' D&>1' 1>C '0&-1>1 &' A<0 -1' C0&-19
C '01' <>10-1 '&?' A1 1-?1' A10 BD'+<@L' ?' A<? 10 #10 109
C '0 I ' 1>C& 1 ' A10 #'1-0 &C'0' < >? 0 D< 1?L' &?'
<? 10 >&1#@10 H?1B&-H109 < 0? 10 A10 > A0C-0 &?'
A<? 10 C&00100'&-0 &?' #'1-0 H? B&-H109 <00<?' #<= 1'
&#'10 @< B'-109 +1-' ' &?' A1> 1 ' &+1' =& B1' I ' < >10'&?'
< >11' 1-' 01-B1' A?' &" 1-' C@1>1- ' @01'@0 &?' <' & 9
@1+1 ' A10 .1- \' &?' 1LB' 1 ' @10 .1- 0 <' @1+1 ' =& B'#@1 '
>1- ' I ' 1-B&- 1' @< C110 C' 10 B 'D'00' 09 &?' <? 1'
=<' ' HB&-H' 1-B&- 1' @1- 1- ' &?' C0?' 1' A00 <+<- A' \'
" ?1' A1' E@&?B10 19 &?- 10 AC 1 # ' ?-AA='
F < =' I ' < 10B<@@ H?1@@1' 1- 1- 1' I ' C0?' 1' &- ' A1'
B@< 1\' C' @&? ' <CC1' ' 1-' B10 ' C01- ' C@1>1- 9 & ' A<0 ?-=1'
<? 1' BD&01' H' C&1 ' 10 1' 0 &C0' H' 1?L' &?' <0B?C' A1'
1?L' A1?0 ' &?' A1?001- ' <+&' ' "& ' C 2 01 A<+&' ' =1' 9
k>'0 @1' 1&>1-B1>1- ' A1' >&-A' &?BD<- ' <0B?-0 A10'
>< '1 0 1-B&- 1' @1- 1- ' &?0 C 0'< 1'0'@0A@ \' A1B@< 1\' 1-'
@<CC1 '0?0A' ;' ^?1@@1' C1AA& 'A1' @<001-=' < & A@ ' -&?0'
<C&-0 .0- 1' 1-' &?\' CK< \9 I ' &@&= ' I ' && 0'
kA1'0<1' CA&-' I ' 01- I 0a)-' < U?L' I ' <'1 10B? 'A1' 1?L <0'
H?1?L' '" <=A> 9 01@&-B'@<' B&-A-?1' A1' >10>1'@<' C1 'B'&-
' <?L" >&>0 <+&-0 10B1?' A1 L' <K 'C1AA&-0' <'
-&?0 #<'@@1\' 1-' >10>1' B10 ' 1>1-'C' ><0>1' @<' 1'
1-' =& &1' H1-0?
1>' H' @10 <CC1@@10 C 0?' 10 <BB?01>1-K" CB10010 ?.8'
.1>1- \' I '1L1B?A&-09 =<' \' I ' 1-A?\'1-' 10' C0 'C'1'
>1- 9 0&'1- ' <CC &+1\' <==1 >1m' I ' C0 <#@'\' #>1' BD&01'
=1' 1' A?1>1-' C' @1' #'1-' I ' C ' ' A?' &" -=1' A' ' @B' I '
A1' &?' 0&-' &'<@>1 -'1'-' BC- 110 1<-' ' 0 .5%
10C' ?1@10 I ' C1? < &0 A10 = 0' 1 C' ?1@10 0& ' <#01-8
1 &-' D& 0 A?' C@1>1-' <' 1>C0 A10 A' \' ?..1>1- \'
1-A?\98 C' @&-10 1' I ' 0<@+<A&-' A1' @&K' 10 < 9 B&>1'
B&- 1-?' 10 '1-' ?-1' C 10 <B'&-' C' >10>10 @10 = 0' 1 C' '8
?1@10 I ' C1? < &0 @',1' 1-' B10 ' 01-' C@1>1- G 1' H'
C' ><.'-<A&-' 1-RC <A&-' &?' <? 1' >&A& ' H?11&-H9
-?@@10 A1' B1@@10 0&'1-' 1 01\' 1 - = \' &?' <A-? 1\' 1-'
<0B?-1' ><519 1' 0" <0B?-' =<B1' C 0?' 1' A1-= 1'-A 1'
<A-?@@1 ' &-' 1C01 ' <0B?-0 A10 C&' m' ?0A' m9 H?1'@1'
C 0> 1' 01-' A1' 1B& A@9 0&' ' <?.. h' I ' 1L11?A&-'
8B&>1' <a&' I ' <'1> ' A?' A' I ' A1' &'<@>AX C 1?'
&? ' =B- \' H' B10 1' <BB1C &A&-' < 1' <==' =& -11' I '
10 <#@'001>1-0 &-BD0> ' @1<' <00U@=&@10 CA=&0' C0?' 10'
<BB?01>1- \' CB10010 ?..1>1- \' I ' 1L1 A & ' Aa\9
1'&-' I ' A1..-1-' =& B1' I ' + ?1' 1-' 10 10 <010' '00'-'
101#1?\' I ' <+1-?\' &?' A1B@< 1\' 80&?=&>1- 9 I ' -1'
0&'1-' A \' 1-' 1-0<>C@1' -1-' B&-01H?1-A1' ' 1>C0'
<+1-' G -1' H' @<' AQ1' B&>'00'&-' =<' 1' <' A F A-' C@1>1-'
0&' ' 1' 1' 1-' 1-0<>C@1' -1-' B&-01H?1-A1' 1=' 1>C0'
<+1-' 9 >10' HJ-H' 10 ' =1' 1' &?BD<-' @1 ' >1 '1 0' 0?0A110'
10 &'01' =1 >1>1-' /)' A10'B&>1' 1@10' 10 &'1-' 0" C= <#@10'
<?' &'9 0?0 1-<-B1' I ' >1 - 1-<-B1' A1' 0< C-1' I ' 0<@'
+<A&-' A1' &?' @1' &'<@>1' I ' =1' \' A1' 0" . ' -1B100' 1G
1 'B&>1-' H' A'1010' C&'- \' 0&-' A1B@< 1\' C' 10&-' 1'" B10'
C01-' C@1>1-9 <? 10' H' -1' =1? 1-' A1B@< 1\' C' 10 < ? '
A1+<-9 H' -?@@ ?0 'B1' 1' ' C&<' ' A1' 1-A 1' ..1>1-'
A<? 1' B<0' A1' 10&-9 -1-' <? 1' `>< 10P' H'@0' -<+&'1-'
A1+<-' @1' 1&>1-B1>1-' A1' B10 ')201-' C@1>1-

' 0'" ! 1 2' S' 22!' !2 ' *%' %' .$- +
)' - !"+&-!/' .-' !' 6.++

< 0&-' &=' <@10A1-9 ! '< ' 'BD< A' &?.D &-' &=' D1'
A1 ' &=' ! '< 0 '-& 09 <-A' D&><0' D'0 & D1 9 <-A'
<@@ D1 ' D<' #1' #1 &-A' D1' 1<' K' D' D1' & D1 ' <' & 09
<-A' <@@ & D1 ' D<' K'@@ .&' &' D1>' D1 1<= 1
' D<' -&-1' KD'BD' D< D' #11-' &=' D1' 1 '-?19
&>C<- 9 ! & B19 'A9 &?-A@9 001- 9 & ' AD1 1-B1'
&=' D1>' D<' #1' < <'- 1A' & ' ?A.1A' '-' D'0' C 101- ' < '
@'<>1- 9 & ' &=' <- ' &=' D1>9 1LB1C ' D&01' #1=& 1'91Lj
B1C 1A9 #1' '>C1<BD1A9 >&@10 1A9 -& ' . '1+1A' < ' D1'
?' ' &=' D1', '-.' -& ' & D1 ' < 9 -& ' '-' & D1 ' <' >1 9
#1B<?01' &=' <- ' 001>#@ 9 'A'-.9 ` 1< '-.9 P' 1+ '-.'
&=' 1-&-0' & ' &=' <-1 0 9 " '0B&>=' ? 19 " 1< D' &=' <' <-9
>C '0&->1-' &=' <- ' 1 0&-9 <a'-.9 @1<A'-.' <K< 9 & '
K' DD&@A'-.' &=' & 010' & ' & D1 ' 1<0 09 <a'-.' ' B< j
'-.' 0)' &=' E&&A09 < -1009 >&? 9 D< 1@09 ' D1 '
&+1<#@10 9 ? -'-.0' &=' &?010' & ' &=' & D1 ' &00100'&-0 '
& ' &=' <- ' E&&A09 00<?@ 9 < 1 9 &##1 '109 D1= 09
B&>'-.' <-A' < '-.' K' D' ! & B1' <-A' >0 & ' < >1A' '-'
D1' , '-./0 101-B1' <' D1' < @'<>1- 9 C?-B'@09 '
1@01KD1 19 <'0'-.' &=' 1&C@19 & ' 1LB' '-.' &=' #1' 1&C@1'
&' '01'=& B'#@ '<= A' <.<'-0' D1' 1<B19 # ' 1 1 0 9 &>8
>'0<&-09 & ' & D1 ' " 11A0 <.<'-0' D1' - 1-' & ' ? 0?' ' &='
D1' 0<'A' " ?a1' &=' E@&?B10 1 9 < @0' &=' " 1 # 9 8 = -A1@@9
F < K' Ba9 <-A' < 0D<@@ KD'BD' - 1-' <-A' ? 0?' ' #1'
A1B@< 1A' # ' D1' ' CC1<@ '-' D'0' C 101-' C< @'<>1- 9 & '
&=' <- ' & D1 ' D'-.' D<' >< ' #1' 0? >'01A' D<' D1 ' & '
<- ' &=' D1>' `&?.D ' & P' D<+1' A&-1' & ' C? C&01A' &' D<+1'
A&-19 = & >' D1' #1.'' >'-.' &=' D1' F & @A9 &?BD'-.' <- ' &=
D1' < 1 0' <.<'-0' D1' - 1-' <-A' ? 0?' ' <=& 10<'A'
A1B@< 1A' '-' $ '0<'A' CC1<@G F D'BD' 1' '&-' &=' D1'
001-' <=& 10<'A' F 1' D<+1' . <- 1A' '-' <@@ =109 <-A'
D1 1&=' F 1K '@@ <-A' . <- ' =?@@ < A&-' <-A' (( )' &'
D1>' <-A' 1+1 '&=' D1>9 &' KD&>' = ' C1 @ ?-1 DG <B1# AO'
>.' &' D1'B&-'-?1' &=' D1' 0<>1' 1 ' '&-
' F 1' D<+1' 1B1'+1A' K&' & D1 ' 1 ' '&-0' 8A1@'j
+1 1A' &' 0' '-' D1' 0<>1' < @'<>1-' # ' D1' . &
&>>&-09 '-' D1' ! & >' =&@@&K'-.;
' D<' D1' CC1<@09 ? 0?' 09 BB?01>1D 09
` &B10093P' ?A.1>1-09 <-A' L1B? '&-0' ><A1' <-A' .'+1-'
'-' D'0 C 101-' < @'<>1-' #1' <CC &+1A9 <==' >1A9 <-A'
10 <#@'0D1A' <0' <' D'-.' A?@ ' ><A1' =& ' D1' F 1<@ <-A'
&=' ' &=' D1', '-.' &? ' &+1 1'.-' & A9 <-A' &=' Re)' D1'
1<@>9 -& K' D0 <-A'-.' D<' D1' & A0' C=' -<@ <-A'
D1' ' &B? < & 0' B A'<#01-' D1>' &?' &=' D1' < @'<>1-'
<' D1' '>1' &=' D1' 0<'A' ?A.1>1-0' .'+1-9 =& '' &-10 '
<-A' <@+<' &-' &=' D1' ' 0 < 19 <0' '0' B&- <'-1A' '-' <' &j
10 < '&-' # ' D1' 0<>1' & A0' C' ' ?<@ <-A' &B? < & R'
A1@'+1 1A' '-' D'0' C 101-' < @'<>1-G <-A' D<' # '
><.'-< '&-9 - 1 C 1 < '&-9 & '<- '& D1 ' & '&-9 -&-1'
&=' D1' 0<>1' #1' 1+1 01A9 # &a1-9 & ' <A-? 1A' '-' <- '
<--1 ;' -A' KD&0&1+1 ' D<' ><a1' C? 0?' ' &' =1 &<a9
<A-? 9 & ' 1+1 01' <- ' &=' D1' 0<'A' &'- 09 KD'BD' ?+R-'@
'0' &=' 1B& A9 D1' <@@ #1' ?A.1A' <-A' D<+1' L1B? '&- '
<' <' & 9 <-A' -1> ' &=' D1' , '-.' 0<'A' D'0' 1<D G
&+'A1A' <@K< 0' D<' D'0' BB1C <-B19 #0' ' &@
==' ><-B19<-A' 0 <#@ '>1 ' &?BD'-.' D1' 0 1L=&@'10@
CC1<@09 ? 0?' 09 BB?01>1-09 ` &B10093P' ?A. '
>1-09 0? A' L1B? '&-0' <=& 10<'A9 D<+1' <-A' D&@A' & B1'
<-A' ' ?1' '-' D101' <010' 0&' =<@@1-' <-A' D<CC1-1A' & ' A18
A< 1A' &-@ 9 <-A' D<' D1 ' #1' -& ' A <K-' '-' L<>C@1'
-& ''-' &-01H?1-B1' '-' '>1' &' B&>1G -& ' D<' D1' 0<'A'
&>>'0 '&-' ><A1' <' D1' @<0 ' <' @'<>1-9 #1' A <K-',-'
L<>C@1' -& ' &-01H?1-B1' D1 1<=1 9 #?' <0' >?BD' .'0'
A&-1' &?BD'-.' D1' 0<'A' < 1 0' 0D<@@ 0 <-A' =' >@ 0' =& '
D1' '>1' D<' '0' C<0 9 011'-.' D1 ' K1 1' 0C' C &=' <#@1' &'
D1' ,'-.9 <-A' ?0 1-<-B1' <-A' <'- 1-<-B1' &=' D'0'
&K-9 <-A' <@+<' &-' &=' <@@ D1' 1<@>9 <-A' ><A1' &='
0&' . 1<' 1B100' ;' -A' D&?.D' D<' A'+1 0' &'- 0' #1'
A1B ' 1A' =& ' 1<0&-' '-' D'0' C 101-' < @'<>1-9 D1'
D<-' K1 1' A1B@< 1A' # ' < ? 1' #1=& 19 D<' - ' ?0 'B1'
D<+1' &K1 ' &' .'+1' ?A.1>1-'&=' & D1 ' <01' = 1K-9
-& ' '-' <-' & D1 ' <--1 9 D<-' D1 ' D<A' #1=& 1' D1'
#1.'--'-.' &=' D'0' < @'<>1-

Ñ E&"1@2 ' '! 'V')' O ' ' $"'*% ;' $ +

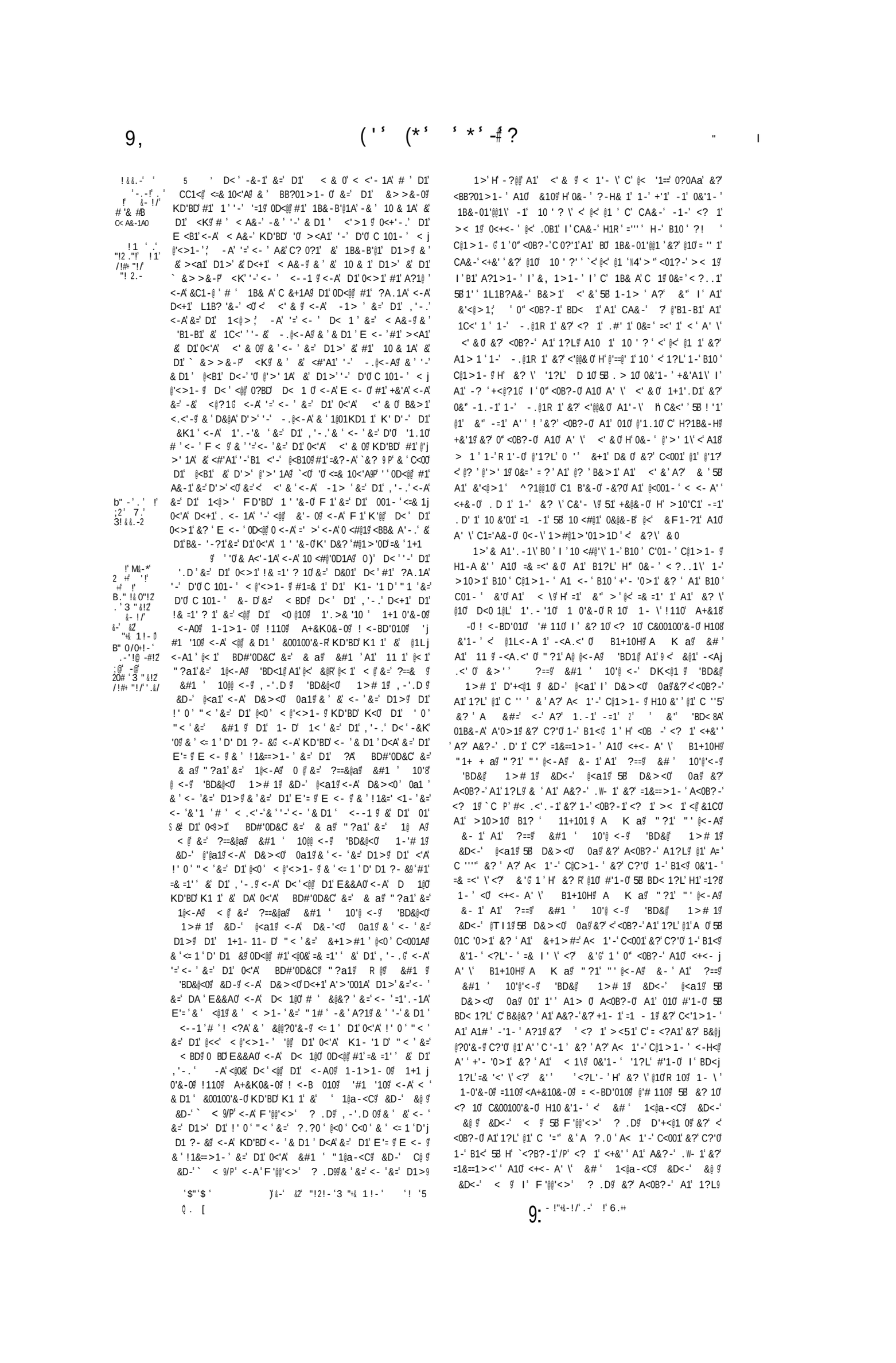
B."' !' -/!1-&@ .' / !"!-7 .' !' 3!"2.-2 &- !/

b" -'.' ' !' 3! & &.-

3! & &.-'"

3&.'& .' ' &2' &"1k -#!' &#L';!' -.'3"!#!/!-=

" &#0+ "+@' &-' 2!2 .' "! 2.-



&?' A1' A&?-' .3- 1'&?' =1&' ! 1>1- ' A<?B?-' <? 11' C@ #< .< -1' &?' 1-' <? 1' >< 1' <@ &1C@ A1' >10>10@ B1?L' &#1 ' 1<@a-<C@ &D<-' &@ @ &D<-' < @ B F '@@'<>' ? .D@ &?' A<0B?-' A1' 1?L' 1' A' ' C ''5' &? ' A ?.0 @ &?' C?'0@ 1-' B1<@ 0&'1- ' =& '<' \' <?' &'G 1 ' H' &? \' @10@ #'1-0@ I ' BD< 1?L' H?1?L' ='' 1- ' <0@ <+<- A' \' &#1 ' 1<@a-<C@ &D<-' @ &@ @ &D<-' < @ I ' F '@@'<>' ? .D@ &?' <' <0B?-' A1' 1?L@ @1' 0'0>1' &? ' A?' A' ' &'0@ A1' < \@ H?1@ &' '@0@ =1? 1- ' < ?..1\@ &?' C?'0@ 1-' B1<@ 0&'1- ' <?L'- ' =& =<' \' <?' &'G 1 '0" <?B?-0@ A10@ <+<- A' \' &#1 ' 1<@a-; @ &D<-' &@ @ &D<-' < @ I ' F '@@'<>' ? .D'0& '1' 'A1> 0@ A<0B?-0@ A1' 01<' #'1-0@ I ' BD< 1?L' C ' B&@&? ' A1' A&?-' &?' +1- 1' =K 1@' &?' L?1>1- ' A1' A1# ' -'1- ' A?1@ &?' 1-' <? 1' >< 1' C' (<?A1' &?' B&@@?0# -' C?'0@ @1' A' ' C ''5' &? ' A ?.0 ' <-H@ @1' A' ' 0'0>1' &? ' A1' < \@ 0&# - ' A1?L' #'1-0@ I ' BD< 1?L' =& D'' \' <?' &' ' Q ' <?L'- ' H' &? \' @10@ R 10@ ' 1- \@ 1-0'&-0@ =110@ <A+&10&-0@ = <-BD=<10@ @' 110@ I ' &? 10@ <? 10@ C&00100'&-0@ H10 &'1- ' <' &.1 ' !? D&'C@ D'+<@1 @ I ' &D<-' A1' &a &D' &?' <' < 'B?-' A1' 1?L' @1' + >' I ' H?'- ' &? ' A?' A' ' &'0 A ?.0 ' &?' C?'0@ 1-' B1<@ ŝ fH' <?B -' <? 1' <+&' ' A?' A&?-' ./- 1' &?' =1&=@18@ >1- ' A10@ <+<- A' \' &.1 ' !?@ D& C' I ' &D<-' A1' &a8@ &-' &?' A<?B?-' A1' 1?L@ &?' A1' A&?-' . 1 1' &?' =1&='18@ >1- ' A<0B?-' <? 1' C' #< .<'-1' &?' 1-' <? 1' >< 1' <@ &1C@ A1' >10>10@ B1?L' &.1 ' D& C' I ' #D<-' &a &-' &?' A<01<>' A1' 1?L@ @1' =' + - ' I ' H > ' &? ' A ?.0 ' &?' C?'0@ 1-' B1<@ 0&'1- ' =& =<' \' <?' &'' 1 ' H' &? \' @10@ #'1-0@ 'BD< 1?L' H 1?L'=1? 1<' <0@ <+<- A' \' &.' A1' !?@ D 'C' I ' &=< >' @ &a & ' &?' <' <?B?<' A1' 1?L' @1' 0'0>1' &? ' A?' A' ' &'0@ A1' < \@ H?1@ &? ' '@0@ =1? 1- ' ?..1\' &?' C? 0@ 1-' 01< 0&'1- ' <?L'- ' =& '<' \' <?' &' ' 1 ' <' <<B?-' A10@ <+<- A' \' &.' !?@ D& C' I ' &D'?'' &a & ' 0& ' 1=' A1> 0@ A<A1?-0@ A1' 010@ 1-0@ I ' BD< 1?L' C ' B&@&? ' A1' ? ' &?' +1- 1' Q?< 1' &?' C<'1>1- ' A1' A' ' -'1- ' A?1\' &?' ' <''@ 1' >< 1' C ' = <?A1' &?' B&@@?0'&-' C?'0@ 1' ' - ' I ' H?'- ' &' A ?' ' <-H@ @1' A' ' 0'0>1' &? ' A1' D=& \@ 0&'1- ' A1?L' #'1-0@ I ' < 1?L' =& '<' \' <?' &' ! 1'. /!&*-!j' !2' C' !2 ;+&j S' +!' 6Z:' / ' & ' ."& & !' /!2' .0 j' +!2 2+!+%' 4 / *- @.2' 6 ! *&.-2' $"!2 ! - j' B!!2' / '.!2.-2' B" -# &2!!2' & # !!2' J2' .0 !2' 0 "!2' .22!22&.-2' S!2 .&1 ' ' .-- 2' '!2S' / !' &!!2 "!)' @K 1 .-/' /!' 4 1+!@' 9&&' !"' . -' /!' 4! 0# 1 ' /!' .+ ' ' &!"' 1!2' 4!"-!"2' &' +!"' J# . -'4 !2L' ;0"@' &' +!"' -&%&-' /H0*"!j' !-'#! ' K2!-' <! 1 !-' .0' S!2 .&!-' ' 2! 1 &' /!' !0%' +!' C ' "" ' H. ' /. . ; ' +!' /&' -' DC - !' .0' S' 2#0-' 0 &4' '.E' /!' +.0"' / .0-' .0' !. &! 1 !-' .0' / 0#0-' /!' !0%' .0' /!' /.0-' *F- !' .]' !.& ! 1 !-' / 0#0-' 0 "!' ' ; "* &-!' .0' !-' 0 "!' 1 ZC ' '+.0" .0' + .! 2' / 0#0-' /!' !0%' +!' ^ ' && H. ' / . / . ; '.0' 0&2' -S +H.0"' S& 2' !0"!-' /L' H0**!j' !-#!2 '<2!-' +! 1 !-' <' 2.&!-' ." 0 j' 0' 6 .&-' J#S' .0 j' +.0" ;&.&2' S0!-%' &+2' ' / !-' .0' 2#0-' /!' !0%' '.& '+! / @2' J# 2! /21!' H.0"' /!' . '!- $' / "" -' 22!' .0' 0&2' -S + /&' H. ' /!' +.0"' H0**!1 ! 1 '2.&!-' 0%&-' ."& & j' 0' 6 .-' ' 2& 2#- -' /!' L!0%' 2.@' !&' /!-<2' /& 2#0-2' /!' 2!2' !-2' = '# !0%' ' !.+.-"' /!' / .0-' ' !- !' !&- !' &! 1 !-' /!' /!; ' 1 !-' /0!' .0' !-' 0 "!' 1 !' 'C 0/!' .0# .++02&. -' 0&2' !' /&' "& ' H. 0"' / . / . ; "!'+!' /& ' -' /&21!' -Z!' +!' H. 0"' S&+2' !2 .&!-' <-**!j' !-' #!2' <2!-' +! 1 !-' 2.&!-' 0%&-' ." && j' 0' 6 .@ ' ' 2& 2#0-' "!-' ! 0*!' 2. ' / ! 1 -/!j' /!2' /& j' 2 /%' !&*L' <!2' "!2' J# !- j' !-' / ! 1 !2-!' .0' "! 2&.-' ."C& j' #. 1!' / !' -' !2' / & ' #+!' "!-' !022!' * !' -! 1@' +!- & ' / 2 "!' 00!j' ' +!' * .0"' <! 0!+! 1 !-' 2/ .-# +!' .& ' /0/& !' *)0- !' S!-' &!+' # 2+!2' R & j' 2 !+%' _!2' !"!2' J# !- j' &22-' C"+ j' 2.&!-' !-' /!2! "*!j' C' & ! * V / !' -0 ' +.!

& ' &=' D1' E'= @ E <- @ & ' !1&==>1- ' &=' <- ' & D1 @ # ' < .<'-' & ' '-' & D1 ' <--1 ' &' D1' 01' &=' D1' 0<>1' &j #1 ' 1@a-<C@ &D-' &@ @ &D-' `  < @ P' <-A' F '@@'<>'  ? .D@ & ' &=' <- ' &=' D1>@ D1' 0<'A' !' 0 ' " < ' &=' ?.?0 @ & ' <= 1 ' D' D1 ?- &@ 0D<@@ #1' =& =1' ' &' D1' , ' - .G <-A' D<' <@@ D1' E&&A0' <-A' D< 1@0' KD'BD' K1 1' &' D1' 0<'A' &#1 ' 1@a-<C@ &D-' &@ @ &D-' ` < @ P' <-A' F '@@'<>' ? .D' D<+1' A' >'001A' D1>' &=' <- ' &=' D1' ' E&&A0' <-A' D< 1@0@ # ' &@&? ' &=' <- ' =1' . -1A' E'= ' & ' <@1@ & ' < >1- ' &=' <- ' " 1# ' -& ' A?1@ & ' '-' & D1 ' <--1 ' # ' <?A' & ' & ?0'& ' <= 1 ' D1' 0<'A' ! ' 0 ' " < ' &=' ?.?0 ' '@@' D1' 0<= " 'L D' " < ' &=' < BD@ 0?BD' E&&A0' <-A' D< 1@0' #1' =& =1' ' &' D1' '-.' -A' <@0&' D<' <@@' D1' <-A0' >A' 1-1>1- 0@ 1+1 0'&-0@ !110@ A+&K0&-0@ ! <-BD'010@ '#1 A10@<-A' <@@ & D1 ' &0010<&-0@ KD'BD' K1 1' &' &.1 ' !?@ D& C@ , - f # @ <-A' &D-' &a &-@& ' <- ' &=' 1>@ D1' K1- 8' =' = D' " < ' &=' D1' 0<'A' &- D' &=' ?.?0 @ & ' <= 1 K< A' D' D1 ?- &@ <-A' KD'BD' <- ' & D1 ' D<A' &=' D1' E' = @ E <- @ & ' !1&==>1- ' &=' D1' 0<'A' &.1 ' ! '@=" '& C' <-A' &D-' &a &-@ & ' <- ' &=' D1>@ & ' &=' D1' E' = @ E <- @& ' !1&==j >1- ' &=' <- ' & D1 ' # ' < .=' -' & ' > & D1 ' <--1 ' &' D1' 01' &=' A' 1' 0<>1' &. >G <-A' &D-@& ' &=' <- ' &=' D1>@ D1' 0<'A' K> 8 ;#" " < ' &=' ?.?0 @ & ' <= 1 K< A' D'8@ D1> - &@ 0D " #1' =& =1' ' &' D1' , ' - .G <-A' D<' <@@ D1' E&&A0' <-A' #< A@08KD'BD' K1 1' &' D1' 0<'A' &.1 ' <-A' &D-@ & ' &' > ' &=' D1>@ D1' 'L D' " < ' &=' D1' 0<'A' &- D' &=' < BD@ < ' KD'BD' " < ' D1 'K1 1' ?A.1A@ <-A' <= 1 K< A' D= =<1 ?- 1@ 0# A@ #1' <@0&' =& =1' ' &' D1' , ' - .G <-A' ' =' <- ' D1' U?A' &.1 ' !?@ D& C' <-A' &D-' &a8@ &-' D<+1' D1>' Aa>001A' &=' <- ' &=' DA ' E&&A0' <-A' D< 1@0' # &a> 8&=' =B' 1A' E'= ' & ' <@1@ & ' < >1- ' &=' <- ' " 1# ' -& ' A?1@ & ' '-' & D<;' <--1 ' # ' ! <?A' & ' @?0'& -' <= 1 ' 1' <?A' K1- 8='=&" " < ' &=' ?.?0 ' '@@ D1' 0<'A' ' D' " < ' &=' < BD@ 0?BD' E&&A0' <-A' D< 1@0' 0D<@@ #1' 1= ' &' D1' , ' - .

@ ' I ' & A<' -1 " <-A' 0 <##@'0D1A ' D<' D1' , ' - .' ' 0D<@@ D<+1' =&1 ' ! & '=< ? 1&=' <@@ D1' <0 @10@ A.-& '10@ 1+1 0'&-0@ <-A0@ 1-1>1- 0@ !110@ A+&K0&-0@ ! <-8@ &= D1 ' D&C' B 010@ =&1 '10@ <-A' <@@ & D1 ' &00100'&-0' KD'1=<' K1 1' &' '0D&C' &=' D'BD10 1 @ '>&-' >@1 @ , - '. D @ &D-' 1<?BD<>C' &=' &@ @ , - '. D @ <>10@ 1 -1 0@ , '? @'=&A' &D-' <@10#? @ , - '. D @ <@0&' ?A.1A' '-' D'0' < @'<>1- @ & ' KD'BD' K1 1' &' <- ' &=' D D1' 0<'A' ! ' 0 ' " < ' &=' ^ &#1 @ D1'0<'A' 1- D' 1< @'& 'KD'BD' > ' & D1 ' D<A'&=' D1' 'E' = @ E <- @& ' !1&=' >1- @ & ' &=' <- ' &=' =&1 > @ & ' T=' D1' E' = @ E <- @& ' !B& '-1<' &=' <- ' & D1 @ # ' < .<>C' & ' '-' & D1 ' <--1=' &' D1' ' 01@ & ' &' =&1' 01&=' <- ' &=' D1 > @=&1' 0T?T=! ' 0 ' " < ' &=' A &#1 @ & ' F '1 @ '@@'=&1' " < ' D<' D1 ' K1 1' ?A.1A' > ' D=1' = ' I ?-1- @) G' <-A' =&<' <' @' D1' E&&A0' `<-A' D< 1@0P' KD'BD' D1 ' & ' <- ' &=' D1 > ' D<A' D1' 1+1 - 11 -' " < ' &=' D1' ' ?A. > 1- @ =&<' @ #1' <@0&' =& =1' ' &' =&1' , > .@ <-A' '=' <- ' &=' D1 > ' D< D' A' > '001A' > ' &=' 0) ' D'0' E&&A0' <-A' D< 1@0' # ' A&? ' &=' <- ' =1' . -1A' E'= ' & ' A1@ & ' < >1- ' &=' " 1# ' -& ' A?1@ & ' '-' & D1 ' <--1 @ # ' ! <?A' `<- A P' &@@?0'&-@ A 1 ' D1' 0 > A' ! ' 0 ' " < ' &=' E ^ &#1 @ D1' 0<'A' 1- D' 1< @ '@@' D1' " < ' D<' D1 ' K1 1' ?A.1A' > ' D'0' C 101- ' < ='<>1- @ D1 ' 0D<@@ #1' <@0&' =& =<' &' =&1' , ' - .;' 8 -A' ==' <- ' 1- 8D< .1' #1' A1 > <- A1A' &=' D1' 0<'A' <0 @10@ 1' . -& '10@ @<- A0@ <- A' 1-1>1- 0' ' < " 1 > 1 > ' & ' 1+1 0' < 0&' =& =1' @ <0' <=& 1' '0@ 0<'A@ <- A' D1' 0<'A' 1- 'K1 1' . <- 1A' -& ' &' D1' - 1- 8 H' #1' C<'A' # ' D1' E <- & '1==1B@ @ @ `- & ' <= 1 ' P' D1' ? j C& ' &=' D1' 0 A' E <- @ D<' ' -' 0? BD' B<01' D1' 0<'A <= @10@ 1' . -B==' 10@ <-A0@ <-A' 1-1>1- 0' 0& ' =& =1' @ 0D<=' #1' D1 1&=' A'0 '< .1A@ <-A' 0? BD' E <- ' & ' -&' <@?1

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&? =B' B1' & A1'. -1<' 10 I ' 10 <#@'\' CBD?-<B'&-' 0&'@
='A 1' 10 &- 110@ H' BD10B?-' H<A' <?B? ' A1' @10 #'1-0 I '
BD< 1?L' '00' - ' =& =1' \' B& @1' A10?0 10 ' A' @ &?' <' H" >< -0
'1?L' #'1-0 I ' BD< 1?L' A1+'1-A 1- @H'@ A1' - G A1?L' & 0
<000 @<' CB@<><B'&- 00> ' =1@ 1@ +A. -1' ' '=' 1' 1- ' <?'
B&-01'@ A?' &'@ I ' 0'@ -1' =<B1' I ' A1' B1' '' A?1>1- '
< 1'- ' 0&' ' 1-?\' A1' 1-A 1' <?' & ' >10>10 @10 #'1-0
I ' BD< 1?L' '00' - ' B&-B1@1\' &?' @1' C '0 A B1@@1 @ I ' &? 1' B1'
<' <- ' B& &1' &10>10 @10 #'1-0 I ' BD< 1?L' '00' - ' B&-B1@1\'
+<'@@1- @ I ' `1 ' P' @1>C '0&-1>1- ' A?-' < ' ' C +1?' &? 10@
=&' \' H' 0" <0B?-' A10 A' \' < ?. . 1\' 0&' ' &?' =1?0 ' 01'01\' &?'
C&00100'&-1\' A<0B?-0 D< 1@L@ '10 ' 10@ 1- \@ 1 8@
0'&-0 ' !110@ A+&10&-0@ ! <-BD'010@ '# 110@ &?' <? 10
C&00100'&-0 H?1@B&-H10 C' =1&==1 &1- ' A&?-' &?' .0- 1' A1'
H '1@11&-H@ C0&-1@ <@ & 0' I ' C=' ' A<0B?-' <?= 1' H<@ & '
I ' C=' ' A10 A' \' <A ?. . 1\' ? A<?B?-' A ' 1?L@ H' '1?L'
D<0 1@]@ 1' . - '10@ 10@ 1'' \ ' 1-0'&-0@=110@ <A+&10&-0@
= <-BD'010@ @'# 110@ I ' <? 10 C&00100'&-0 H?1@B&-H10@ -1'
0&'1-' =& =1' \' 1-' -?@@ -'< 1@ -1' H' B10 1' & A'-<-B1' &?'
10 '#@'001 &1- ' A1' =& ='? /1'01L 1-A1' <' 11 @10

B" -# &2!2'
'@ I <-A'
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, B1J '

' &? 1' B1' 10 ' & A1'. -1\' I ' 10 <#@'\' H' @1' &" 1' '
&? 10 @10 =& ='? ? 10 <+<- A' \@ 0'#'1-' A1'-\' = <-BD'01'
B&>1' A1D& 0; <+<- ' @1' A &' ' A10 1'. - 0' A10' A' \' ! <-j
BD'010 0" <0B?-' A &' ' <' 1?L' <CC '1- ' 1-' B1@@1' C '1 '
' -10 ' ' 1- 1-A1-' A?' &" -1' A10 '. - 0 I ' &10
A?' C@1-@1- ' H' C' =& B1' A1' B10 1' & A'-<-B1' I ' 10 <#@'0018
>1- ' @10 '00?10 1-' @<' <'@@1@ &?' B1?L' 1-' 1 0'&-' &?' 18
><'-A 1@ &?' =1>10 A1' =&? ' D1 ' <.1@ &?' &'- ? 1@ &+1'
@&? ' #< &-0@ A10 A&?-0 . & 110 &?' =1&==1>1- \' =1' \'
A1+<- ' @10' A' \' 1>C0 @@>' 1\' A1' =& =1' 1' 0&'1- ' #< 1\'
&?' =& B@&01\' A1' @1'>' A & ' H<- ' =&? ' 1>C0 +1-A <'
01@&-B' @<' B&1' @1 1

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1>' H' &? \' >< 10 A10 = '10@ 10@ 1- \@ 1- 10@
+'B10@ #'1-0@ C&00100'&-0 I ' BD< 1?L' H?1@B&-H10 =& =1' \'
<?' &" C' B<?01' A10 ?. . 1>1- \' 1-A?\' A1 0 @10
C0&-10 < . . 1\' 1-' B10 ' C i1- ' C@1>1- @ I ' <?L'- ' &? \'
<? 10 10@ 1- \@ 10BD1 10@ =& =1' 10@ .< A10@ ><-<.10@
I ' <? 10 C=' \' H?1@B&-H10 H?1?L' 0&- ' &?' A1+'1-A &- '
1-' @<' >< -' A?' &" C' H?1@B&-H@ B<?01@ A1>&1 .1- ' 1-8
'1 >1- ' 1 ' @<' >< -' A?' &" A? <- \' @10 .?1 10 C '
<BH?' 1 '010 A1 10 I ' 1-' <'A1' A1' >< - 1-' ' 0&-' 10 < @ I '
1-01>1- ' 1-' 1<01' I ' 0?CC& <B'&-' A1' 010 C& 10 B&10 A?'
&'<@>1@ D'1- ' B&- 10 1<- ' <0B?-' .< <- ' &?' . & 1' =<' '
<' <0B?-' <+<- ' B10 D1? 10 ' H' -? ' D&>1' . 1'-A 1'
-1' >< -A 1' 1-' @&0 1@ A?' & ' -1- &? ' @<' C0&H1' A?' & @
<<? 1' H?1@B&-H@ A1' H?1@ 10 < ' &?' B&-A'B'&-' H'@ 0&' ' 1-'
C '+1' -1 " <C1 ' 0&' ' 0" D< A ' <' A1><-A 1' &?' C-A 1' A1'
A&?-' @1' & ' <0B?-0 A10 = '10 ' 10@ 1- \@ 1- 10@ +'B10@
V#'1-0@ C&00100'&-0@ 10BD1 10@ =& =1' ? 10@ .< A10@ ><-<.10@
BD< 1?L@ &?' C=' \' 0?0A' \' &?' <? 10 C=' \' &?' 1+1-?10
H?1@B&-H10 A? <- \' @10 .?1 10 B&>1' A10?'0@ 0? ' C1'-1'
A1' =& 0=1' 1' @1' A&?#@1' A1+0 @1' & @ I @ 1C1@@1' A1' >10>1'
@<' BD&01' '00' - ' A1><-A11@ I ' 10 1' 1'- ' I ' 1>C '0&-1\'
<' @<' +&@ ?- 1' A?' & 'G =& 0C '0 &='B10 I ' #<'@'10 I ' #1-1j
='B10 I ' <+<-B1>1- \' A1' 01'- ' 0 .@'01@ I ' =& 0C '0 B1' H'
@1' & '<A' A1'K\' 1-' B10 ' C@1>1- ' 00'- ' H1-A & ' ' A10
=& 0='? ? 10 < ?. . 1\' 1-' B10 ' C@1>1- @ 0" <0B?-' ? # '
A<+&' ' A & ' ' &?' ' - 1001' 1-' B1@@10@ 0?1' <?' B&-01'@ 0" '? '
01>#@1' <'=1' 1' I ' A & ' ' @?@ M <' =1' 1G 1 ' H' @10 . & \'
='B1 0' A?' &" C' <+ 0' A10 <? 10 0' A?' B&-01'@ 1'1-'
C&<' ' A1' +1-A 1' CB1@@1' A1' @10' A' \' =& 0=<' ? 10' C' @'1? '
#&-1' A'0B 1B'&-' I ' H' `@1/P' A&?-' I ' .W- 1' <==<' 0' 0? ' '1@
+1- 1' 0&'1-' =1 >1' I ' 10 <#@1

H' IN - !"+&-!/'. -' !' 6 .+

' & 1&+1 ' ' ' '0' & A<'-1A' <-A' 0 <#@'0D1A ' D< '
&B@<>< '&-' 0D<@@ #1 ><A1' '-' D1' &?- '10@ D<' 1+1 '
1 0&-' D<' D< D' <- '&=' D1' E&&A0' <-A' D< 1@0' 0&' =& 8@
n ' 0 [01' <-A0' 0?BD' E&&A0
<-A' D< 1@0' 0D<@@ B&>1@ D<' D1' K' D'-' K&' &- D0'
<= 1 ' D1' &B@<>< '&-' 0&' ><A1@ 0D<@@ B&>1' <-A' B1 '= '
D1' 0<>1' &' D1' , '-./0 &?-B'@0' <-A' '=' D1' A&' -& @ <-A'
#1' D1 1&=' A?@ ' < <'- 1A@ D1' 0D<@@ #1' D&@A1-' &' `<-0K1 '
&' D1' , '-.@ <-A' P' D1' 0<>1' E&&A0' <-A' D< 1@0' 0&' B&-j
B1<@1A' & ' D1' 'B1' &=' D1' 0<>1@ <-A@ #10'A10' D< @ <0
>?BD' <0 D1' 0<>1' E&&A0' <-A' D< 1@0' 0&' B&-B1<@1A' #1'
K& D@ <-A' D1' 0D<@@ <@0&' D<+1' -1' 1< /0 >C '0&->1-' G
&+'A1A' <@K< 0@ D<' '=' <- ' &=' D1' 0<'A' 1 0&-0' <A8@
?A. 1A@ #1' & ' K1 1' 01'01A' & ' '-' &00100'&-'/ &=' <- '
<0 @10@ 1' . -& '10@ <-A0@ 1-1>1- 0@ 1+1 0'&-0@ 110@
A+&K0&-0@ ! <-BD'010@ '#1 '10@ & ' & D1 ' &00100'&-0
' !1&==>1-' E'=' & ' E <- ' &=' <- ' 1 0&-@ & D1' 01'
<-A' &=' ' &=' <- ' & D1 ' D<-' &' D1' 01' <-A' &=' ' &='
D1' 0<'A' 1 0&-0' <A ?A. 1A' & ' &=' <- ' &=' D1>@ D<' 0?BD'
<0 @10@ /) <-A0@ 1-1>1- 0@ 1+1 0'&-0@!110@ A &K@
0&-0' ! <-BD'010@ '#1 '10@ <-A' <- ' & D1 ' &00100'&-0@
0D<@@ '-' -& <- -1 ' #1' =& =1' @ -& ' D<' D'0 A'-<-B1'
& ' <#@'0D>1- ' &=' !& =1' ? 1' 0D<@@ 1L 1-A' & D1>

B" -# &2!2'
'@ I <-A'
.&-0"!2(. '
, B1J '

" ' & 1&+1 ' ' ' '0' & A<'-1A' <-A' 0 <#@'0D1A ' D<
D1' , '-.' 0D<@@ D<+1' <@@ D1' 0<'A' !& =1' ? 10@ <' K1@@
K' D'-' ! <-BD'010' <0 K' D&? G <+'-.' D1' '. D ' &=' D1'
= [WA0' &=' D1' 0<'A' ! <-BD'010@ '=' <- ' '. D ' &' D1>' C1 8'
<'-' '-' D'0 1D<@=' -A' ' ' '0' -H ' D1' - 1-' &=' A'1'
& A0' <-A' & > >&-0' &=' D1' < , <8
>1- @ D<' # ' =& B1' &=' D'0 ` < ? 1' /P' D1' 00?10' '-'
<'@@ & ' D1 ''-' 1+1 0'&-' &' '-' 1><'-A1 @ & ' F &>1-'
&=' D1' ' 1 ' <.1' & ' &'- ? 1' K' D' D1' ' ?0#<-A0@ &='
E'= 0' E <- 0' <-A' !1&==>1- 0' ><A1'#1=& 1' D1' 0<'A' '>1'
@'>' 1A' &=' !& =1' ? 1@ 0D<@@ #1' #< 1A' & ' =& 1B@&01A@ &='
D1' ' '. D @ KD1-' D1' ' '>1' 0D<@@ B&>1' <BB& A'-.' &'
D1' &>>&-' <K

. -!' 2 +'
! & &. -' .'"
b" - 2'. '
20# ' .'" !& ! /'
2 !2'
/ 0"!2(. '
V "

@ D<' '<@@ <--1' &=' 1'. -& '10@ <-A0@ 1-1j
>1- 0@ 1- 0@ 1 +'B10@ E&&A0@ <-A' &00100'&-0@ <-A'
<@@ ><--1 ' D< 1@0' =& =1' ' &' D1' - . @ #1B<?01' A='
?A. 1>1- 0' .'+1-' <. >-0' D1' 1 0&-0' <A ?A. 1A' '-' D'0'
< @'<>1- @ <-A' <@0&' <@@ & D1 ' <-A0' <-A' 1-1>1- 0@
0BD1< 0@ !& =1' ? 1R@ F < A0@ < '<. 10@ <-A' & D1=' &j
=' 0' KD'BD' #1' & ' 0D<@@ B&>1' '-' D1' , '-./0 <-A' # ' <-'
<?01@ 0D<@@ <#'A1' KD&@@ ''-' D1' , '-./0 <-A' A? '-.'
D1' F < 0@ &' <BH?' ' D'0' " 1# 0' <-A' '-' 'A' &' ><'- <'-'
D'0 0 < 1@ <-A' <@0&' '-' <01' <-A' <CC& < '&-' &=' D'0'
C&& ' &>>&-0' &=' D1' 1<@>@ -& K' D0 <-A'-.' <- '
F < <- ' & ' E <- ' ><A1' &' <- '#1=& 1' D'0' '>1' -A'
D<' -&' E 1< ' <-' -&' 0><@@ '-' D1' -./0 &?01@ -& '
<#&? ' D1' -./0 1 0&-@ -& ' -&' & D1 ' &=' KD< ' 0 < 1' & '
&-A' '&-' D< ' D1' #1@ C '+'@ ' -& ' <C1 @ @ #1' 0&' D< A ' &'
<a1' &=' D1' -./R E'= ' <- ' &=' D1' 0>A' 1'. -& '10@
<-A0@ 1-1>1- 0@ 1- 0@ 1 +'B10@ E&&A0@ &00100'&-0@
0BD1< 0@ !& =1' ? 10@ F < A0@ < '<. 10@ ` <0 @1093P' & '
&=' 0@ & ' <- ' & D1 ' &=' 0' <-A' 1+1-?10@ A? '-.' D1'
F < 0@ <0' <=& 1 ' C&-' <'-' &' =& =1' ' D1' " &?#@1' &' D1'
-.@ <-A' 1C1<@ &=' D1' 0<>1' D'=' .' 0&' A1><-A1A@ <-A'
&' #1' <-0&>1A' 'A' '>C '0&-1A' < ' D1' -./0 F '@@'

%#! ' ."
&6#!2' -/'
0"# '
4!-! &#!2 C#

LB1C ' ='B10' <-A' <'@'K'Ba0@ 1-1='B10' <-A' A+<-B1j
>1-0 &=' &@ ' D- BD@ <-A' 1LB1C ' D<' D<' D1' , '-.'
D< D' .'+1-' '-' D'0' C 101- ' < @'<>1- ;' &' D<' '-' D1'
. D ' &=' D1' !& =1' ? 10' ?A. 1A' '-' D'0' C 101- ' < @'<j
>1- @ '=' <- ' C 1 1-A' &' D<+1' '. D ' & ' - 1 10 ' &' D1'
0 -1@ D1' 0D<@@ 0?1' &' D1' &?-B'@@ '=' D' >' 0&' @'a1 D@ <='A'
'. D ' 0D<@@ #1' A&-1' &' D' >@ <-A' D<' D1' - . /0 . 1<'
='B1 0@ # ' A+'B1' &=' & D1 ' & A0' &=' D1' &?-B'@@ 0D<@@
D<+1' &K1 ' &' 01@@ < B1@ &=' D1' 0<'A' !& =1' ? 10' @' '
D1' ' /)' " '0B 1 '&-@ <-A' @'<' D1' E'= ' <-A' E K?' &' #1'
><A1' ?C&-' 0?BD' <@1' 0D<@@ #1' =' >' <-A' 0 <#@'0D1A

i' % ' $' 'E 1' ' 1 $" ' ' ! 'V
/' A -<-B1'<-A' 0 <#@'0A'1>1-' ' ! '6
0 D< 1@0 ' ! '6' 0 .&&A1' ' ! '6

=' > ' B& > 1' C-10 < ? ' =1' ' <' +0K a' @<<' A?' 1. -1' @1' & ' AK< A' '1 B1' @<'1@ - 1' _ ' @1' & ' H& 10 ' -&1='0 > 1@ & A1' . -1\' =1?0 ' I ' 10 <#@'\' H' &? \' BD<- \' <@'1-0@ I ' A1 - \1' -0@ I ' &? \' <? 10' I ' BD10B?-' A1' 1?L' A1' H?1@ 10 < ' &?' B&-A'B'&-' H'@0' 0&'1- @ H" <BD< 1' &?' +1 - A 1' +1?@8 @1 - ' #@110' +' -0' <+&' ' A1' C&''0' BD< 1' C100&-' I ' &? \' <? 1' +'+ 10' I ' +' <'@@10' @1 -0' A <C0' I 1 0' ='BD<-A'010' I ' &? ' > <51' A<? 10' BD&010' +1-A<#@10' A1' H?1@1' C 1' H'@0' +1' . -1 - ' C' =& 1' -0' &?' C' A1' -\1' -0@ <' H?1@ 17' H" B1' 0&' @ 0&' ' 'é ' 11' ? . D' +'@@1' C& ' A?' > 11 ' =&' ' > < BD11' &?' <? 1' @'17' AA - \' > 10 > 1' @1' &'<@ > 1' A1' -\' = <-BD'01' ' A1D& 0@ @10' C?'001 - ' = <-BD1 > 1 - ' I ' 0 <- \' A10 &? #1 ' +1= A 1' <' H" H' =&? ' C@10 ' <?\'#'1-' <0' =& 1=&0' B& > 1' <0' A1' - \1' -0' =& 0C '0' @10' 1-1 > 0' A1' -=1' I ' @1' &'' I ' AH 0&-' &'<@ > 1 ' ' 0" C ' B<0' A10 &? #<-B1' 0&' ' =1' 1' <' -?@ ='BD<- ' <@'1-' &?' A1' - \1' -' &-' <? 1' 0 ' @<' +1 - 1' A10' '1@10' BD&010' 1-' ' 11' ? . D' +' 1' C& ' A1' > 11 ' &?' <? 1' @'17' H' = <-BD'01' 1' @ I ' @10' <' ' <'@@'=1' &?' <? 10' H& - ' . < A1' A1' @<' A' 1' = <-BD'01@ 1H?'0' C' @10' & \' BD< - \' &?' <? 1' A1 - ' =<' 1' 1 > 1A1' I ' '@ -1' @1' =<B1' I ' A1' B1' 0&' ' < @' 0&' ' @<' =1 > BD'01' C ''0' @<' > < D1' @1' & ' I ' ''1 - >1 -0' 0&' ' 1 - ?\' @?" I ' @10' <? 10' H" <+1 &- ' =1' ' B1@@1' A10 &? #<-B1' B1 - 1' B10 ' 1 < ? ' `A1' /P' 1 - A 1' I ' 10 0 & 1 ' <?' A' ' ='CD<- ' 010' A< > <. 10' H'@ <, <' 1? == 1 ' C ' B1@@1' 1<1# ?0&-1' <?' A&?#@1 ' ' 0" '1@@1' A10 &? #<-B1' 0&' ' ='@' 1' <0' '1@L' BD<- \' &?' `<0' <? 10' 10 +'@@10' &?' @'1?L' '&?' = <-BD'01' -1 @ I ' @1' = ' 0'@ 0&' ' C01 - ' &?' 0&-' <'@@'=' &-10 <#@1@ &?' <? 1' E< A1' -' A10' A' \' +'@@10' I ' @'1?L' 1-' <#01 - B1' A108 0@ 1 - ' 1H?' ' A1' =1' 1' A &' ' - 1' @1' =<B1 - ' I ' A1' B1' 0&'1 - ' < 1' - \@ 1 - A1 - ' @10' A< > <. 10' <?' C@1' - '= <?' A&?#@1' <?L" B& > 1' A10?'R' 1< ' A' @ I ' @1 ' A1 &? #&? 0' 1-' @?-' B<0' I ' U ' @<? 1' <?L'#'1-' AA - \' = <-BD'010' B& > 1' A1D& 0@ 0'@0' 0&'1 - ' < 1' - \@ 1 = &- ' @<' C '0&-' A?-' < - I ' <A1' -1? 1' 0&'1 - ' 1' - \' <' @<' +&@1 - 1' @1' &' ' ' H' ? ' <@'1-' -1' A1' - \1' -' 0? ' > 10 > 10' @10' C1' -0' 0&' ' A10 &?#1' H?'@' -1' C?'001' = <-BD1 > 1 - ' <BD< 1' @10' BD 010' 0?0 - & > 1\' 10' @'1?L' 0?0A' \' I ' B< '1 ' @<@ &?' @? ' C@1 <' <' 0&- ' &1C0' A1 > 10 - 1' &?' <@' ' A?' &" I ' A10' .J - \' I ' A?' C&1C@1' A?' A' ' &'<@ > 1G =& 0C '0' H' @10' BD<- \' <@'1-0' -1' <> 100' - 1K' +' -0' D& 0' A1' -<10 > 1' @1' &'<@ > 1' B& > 1' 10 ' B&- 1-?' 1-' &? ' BD< 1@ I ' H' @10' A' \' D&010' 0&'1 - ' h ?\' . < A1\' I ' C=& - 1\' 1-' BD10B?-' ' 11' ? . D' +'@=1' C& ' A?' > 11 @ I ' <? 1' @'17' A1' -\' @1' A' ' &'<@ > 1@ -'<' ' B&-0' 110 1<- ' BD< 1' A1' = <-BD'01' <' 1?L' ./?- 11' <' B&- 1@ -1' ?0<.1' -1' B?0 ?>1@ &?' ?. . 1 > 1 - \' 1 - A?\' 0? ' @1?' BD< 10' ?0<.10' -1' 1?0 ?-<10@ ' 1?L' C= &-1' 1. . 1 G @10' H?1?L' BD< 10' ?0<.10' I ' B?0 ?>10' 0" -?@@10' 0&'1 - ' @1' A' ' &" @<'1@ =@@< 10' &- 10' < &-0' I ' .0 - \' I ' &<@ 110' <+<- A' \' '1. -1K' A1' -?@@ =& B1@ B&>1' BDA 10' .W - 1\' ?01\' &?' <B?0 ?>1\' <?' A< > <. 1' A?' & @ < \@ &- 10@ < &-0' I ' . \' A1' 0&-' &'<@ > 1' I ' &CC#0'&-' A1' 0&-' C&1C@1;' <?+1\' &? 10=&' \' <?' & ' I ' <0' <? 10' @10' B?0 ?>10' A?1\' A10' A' \' ='BD<-A'010 ' ' <?L'- ' H' @1' #<-B1@@1 ' 10& 1 ' I ' ?0 'B10' <00' . -1\' <' 1 - ' ' @10' C@110' @1' & ' 10' 1?L' &?' '@0' +1' . -1 - @ 1 - H?1 . 1 - ' A10' '1@10' A10 &? #<-B10' ' . 1+<-B10@ I ' =<B1 - ' C?- '001 > 1 - ' 01@&-B' B1' H10 ' <+<- ' & A1' . -1\G I ' - '1 - >1 -0' H' @1' & ' =<B1'<00' . -& ' C' B& > '00'&-' A1' 0&-' .W - ' 01 A' R 1' -0' .1 - \' &?' I ' H<- ' @? ' C@1 <@ A1 - H?1 ' A10' '1@10' A1 &? #<-B10' . 1+<-B10' I ' A1' =<' 1' C?-' 01 > 1 - ' B& > 1' A10?'0' 10 ' A' @ ' C?'0' C' 10 < ? ' =1' ' 1 -' C@1 > 1 - @ 1 - ?\' <' F 10 '-' <-' +'<' I ' 8H?' - ' A?' 1. -1' @18A' ' &" AK< A' @<'1@ C@< 10' &- 10' < &-0

- !"+&-!/' . -' !' 6 . ++

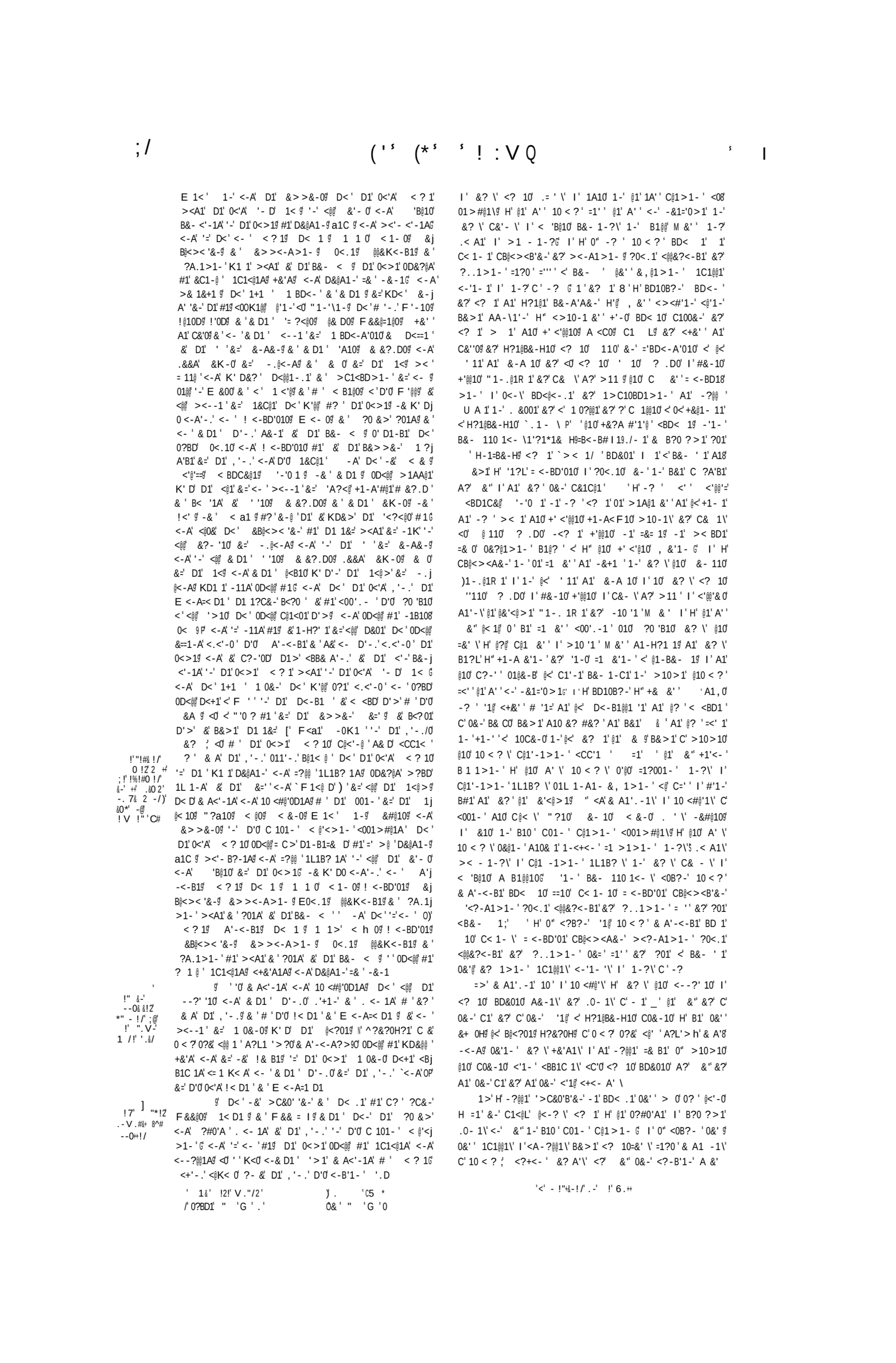
*4

& '

@ F D1 1<0' # ' <' < ? 1' > <A1' < ' & a@ D1' F @ ' '- D' 1< ' &=' , '-.' AK< A' ' E <-A=< D1 ' &=' D1' , '-.' D< ' -&K' '0@ ' ' K<0' & A<' -1A' <-A' 10 <#@'0D1A@ D< ' AK ' ' - ' <@@' 1 BD<- 0@ <''.1 0' <-A' " 1 - '\1 - 0@ <-A' <@@ & D1 ' ?< ' ' ' : * ' <-A' 1+1 ' &=' D1 > @ &=' KD< ' 0 < 1' & ' &-A' '&-' 0&1+1 ' D1 ' #1@ D< ' K'@@ #? ' & ' 01@@ & -@ F ' -1@ +&' ' A1' C&'0 ' !@10D@ ! '0D@ <-A' <@@ & D1 ' '+'-.0' <-A' 'B ?<@09 F &&@0@ @& D0@ F< 10@ 1 BD<-A'010@ <-A' <@@ & D1 ' D' - .0' +1-A'#@1@ = & >' KD1 - B1' 0&1+1 D1 ' B& > 1@ # ' ! & 1' . -1 0' & ' " 1 - '\1 - 0@ < ' KD< ' @<B1' 0&1+1 ' ' ' #1 ' @ & &?. D@ &K - @ & ' &=' D1' 1<@ ! <' @ < a1 @ & ' 1@01KD1 1' K' D' -' D1' 1<@ > @ K' D' -' ! <-BD'01' & ' K' D&? @ > < ' = 11@ ' K' D&? ' - 1 ?C '&-' 01@@ D1 > ' & KD< ' 1 0&-0' ' ' 0D<@@ C@1<01' D1 > @ <0' K1@@ & ' ! &@ A. -1 0' < ' " 1 '?\1 - 0@ 1LB1C ' <@K< 0' D1' -1 > '1@ &=' &? ' & A' D1' , '-.' <-A' &=' D'0' 1<@ > ' -A' '=' D<C@ ' <'' " '0 ? #<-B1' #1' A&-1' &' <- ' 1 BD<- @ <-.1 ' & ' " 1 j - '\1 - @ & ' <- ' & D1 @ =& ' D1' <@1' &=' ?BD' D' - .0' '-' <- ' ' @ & &?. D@ &K - @ & ' &=' D1' 1<' & ' & D1 ' @<B1' KD'BD' D< D' ! <-BD'01@ <-A' D1' < & 0' <-A' <'@'==0@ & ' & D1 ' KD'BD' D< D' D1' ?@1' &=' 0?BD' ! <-BD'01 > #1' - .' 1H?' 1A' # ' D1' 0<'A' 1 BD<- 0' & ' & D1 ' D1 1&=' &' C &j +'A1' 1' - @ 'A' A&' - & @ <-A' #1' D1' 1&=' < <' - 1A@ D1' ! <-BD'01' 0D<@@ #1' 01'01A' ' - &' D1' , '- ./0' <-A0G <-A' -1+1 D1@100' D1' <-A' #1' & D1 ' KD'BD' D< D' A&-1' D'0' " '0 j ? #<-B1' <.<' -0 ' D'0' < ? 1@ 0D<@@ #1' #&?-A' &' '1@A' <-A' 10 & 1' &' D1' 0<'A' 1 BD<- ' D' i' A&?#@1' " <> <. 10@ KD'BD' D1' D< D' D1 1# '0?0 <' -1A ' 'A' '=' 0?BD' " '0 ? #j <-B1' & ' - 1 ?C '&-' #1' A&-1' &' 0?BD' 1 BD<- 0@ & ' &' & D1 @ '-' ?BD' &K - 0' & ' @<B10' KD1 1' -&' ! <-BD'01' '0@ <-A' D1' & A@ '=' D1' #1' C 101 - @ & ' D'0' <'@'==@ &-0 <#@1@ & ' & D1 ' ?@1 ' &=' D ' ?A' &K - 0' = -A' @<B10@ '-' # j 01-B1' &=' D1' & A0@ #1' - .' D1 1' -' 1H?' 1A' &' A&' ' . D @ <-A' A&' -& @ <-A' D1 1&=' #1' < <' - 1A@ D1 ' 0D<@@ '1@A' &' D1' < ' C@<' - '==' D'0' A#?#@1' " <> <. 10@ <0' <=& 1' '0' 0<'A@ <-A' D1' " '0 ? #1 0' '-' D1' &-1' <01' <-A' D1' & D1 @ <0' K1@@ K' D' -' ! <-BD'010' < ' KDD&''=@ '=' D1 ' #1' < <' - 1A@ 0D<@@ D<+1' -1' 1< /0' > C '0&- > 1 - @ <-A' -1+1 D1@100' #1' <-0& > 1A' < ' D1' , '- ./0' F '@@ ' =@A' D< ' -&' @'1 - ' & ' " 1 - '\1 - @ ?C&-' D1' 0< > 1' <' - @ 0D<@@ #1' &?#@1A@ #? ' D< ' D1' > < ' = 11@ '#? ' ?BD' D' - .0' <=& 10<'A' '-' D1' <'A' @<B10@ <-A' B< ' D1 > ' KD1 1' ' ' C@1<01 D' D' > @ &' D'0' &K - ' 01@ & ' &' D1' &=' ' &=' D1' , '- .@ & ' &=' D1' E 1< ' 1 - ' & ' D1' & > > &-0' &=' D1' 1<@ > G 0<+' - ' D< ' 0?BD' 1 BD<- 0' @'1 - 0' 0D<@@ B< ' -&' F ' - 1' &?' &=' D1' <> 1' 1<@ > @ <0' '0' B&- <' -1A' ' - '8 D1' ' D< 1 ' ' <-A' D< ' D1' D' - .0' <=& 10<'A' 0D<@@ #1' &#01 +1A@ C1 =& > 1A@ <-A' a1C ' '-' 1+1 ' ' @ & &?. D ' &K - @ & ' &=' D1' 1<@ <-A' & D1 ' @<B10' K' D' -' D1' 1<@ > @ -& K' D 0 <-A' -.' D< 1 0' &=' ! <-BD'01' . <- 1A' ' D1 > ' & D1' B&- < 0' -& ' 0<.1@ -& ' ?0 & > @ -H ' ?A.1 > 1 - ' .' +1 - ' ?C&-' D1' ' D< 1 0@ 0<.10@ & ' ?0 & > 0@ D< ' D1 ' B<-' <@@1A . 1G KD'BD' D< 1 0@ 0<.10@ <-A' ?0 & > 0@ '=' <- ' K1 1@ D1' 0<'A' , '-.' D1' E <-A=< D1 @ D1' 1@< 10@ < @0@ < & -0@ E 1< ' 1 - ' <-A' D1' & > > &-0' <=& 10<'A@ D1@A' D1 > ' & =' -& ' ! & B1@ <0' D' - .0' . <- 1A@ ?01A@ & ' <BB?0 & > 1A' & ' D1' " <> <. 1' &=' D1' , '- .' <-A' D'0' 1@< 10@ < @0@ < & -0@ <-A' E 1< ' 1 - ' &=' D'0' 1<@ > @ <-A' & ' D1' CC 100' & -' &=' D1' & > > &-0G <+1A' <@K< ' & ' D1' , '- .' <-A' & ' & D1 ' D1' ?0 & > 0' A?1' &=' D1' 0<'A' 1'BD<-AD10 ' -A' <@0& D<' D1' D<-B1@@& @ 1<0? 1 @ <-A' D1' ?0 'B10' <0 . -1A' & D&@A' D1' , '-./0' @1<0' '-' @<B10' FD1 1' D1 ' B& > 1@ 0D<@@ '-H?' 1' &=' 0?BD' " '0 ? #<-B10' <-A' E '1+<-B10@ <-A' D1' 0<> 1' 0D<@@ C?-'0D' <BB& A' - .' ' '0' #1=& 1' & A<' -1A' ! <-A' -1+1 D1@100' D1' , '- .' 0D<@@ <0 .-@ # ' & & > ' > '&-' &=' D'0' E 1< ' 1<@@ B1 <' -' 1 0&-0' FD1 1' <-A' KD1 -' ' ' 0D<@@ C@1<01' D' > @ &' '-H?' 1' &='80?BD' " '0 ? #<-B10' <-A' E '1+<-B10@ <-A' D1' 0<> 1' &4' C?-'0D' <0' #1=& 1' '0' 0<'A -A' <= 1 ' # ' <' < ? 1' &4' <' <' < '<>1 - ' #&@A1 - ' <' F 10 > '-0 1 ' D1' K1 - 8='= D' 1< ' &=' , '- .' AK< A' D1' D' A@ ' K<0' <BB& A1A' # ' D1' 0<> 1' , '- .' AK< A' D1' E <-A=< D1 @ D1' 1@< 10@ < @0@ < & -0@ <-A' & D1

1B' <@ &=' 0<'4' B@4

F @ ' AK ' ' - ' ?< ' ' ' : * '



1>' & A1 -1' 10 ' I ' 10 <#@ ' H' ' 10' A1' <. - 1 8' - 1' A?' 01B 1' 01<@ > 1' = ' @1' & ' -1' 0A1 - ' A10& >10' 1-+&'1\' 1-' A<><.1' -1' ?A'B1' A1' &'<@>1' -1-' @10 &>#<-B1' A1' @<' @& 1

1>' B&>1' -<A.<' 0' 1-' @10 < ? ' =<' ' <' F 10 >' <-' A?' 1. - 1' -=1' A' ' = ' @1' & ' 0'0>1@ 1- 1' <? 10' BD&010@ & A1 -1\' 0&' ' I ' <BB& A1\' H' ?0 'B10' <00' . - 1\' I ' <00' .8 -1 0' <0' <00'010' A 1' I ' . <&@ ' A1@'+1 ' 1-A &'1 - ' @1? ' 100'&-0' 1-' @10' C ' - AC<@L' I ' BD'1=1' +'@@10' A1' BD10B?-' &- 11@ 10 ' <00<+&' ' @<' &?' @1' &- 11' A1' >10>1' @10' &- 110' 0&' ' &?' 1-' I ? ' M &' ' 1-?\@ =1' ' @1' & ' B&-0'A1 <- ' B&>1- ' @1' A' ' 10 < ? ' 0" 10 ' 1-' CA1' A<><8 .1&?0' I ' . 1+&?0' <0' .1 - \' A?' C@?0&? 0' &?- 110' " 1-8 .@1R 1@ +&1 ' B .J- 1' A1' @<001 - ' 0?0A' @ <@ 1H?10 ' A10' A' \' &10@ H' @1' ED<-B1@@1 ' " 1 - .@1R 1' C ' @1' 1>C0' 10 1<- @ <' ' C&<' ' A1 - ' >1 1' B =<' 1' 1>1A1' C' <A+ 0' A10' A0 'B10' A1' 1>C0' 1-' 1>C0' H<- ' >10A1 ' M <@ '1 - ' B&< 110 1<- ' @10 < ? ' <+<- A'

' > 0' HA' CB@<><B'&' '0 '?0' 0 < ? " =<=@<' =?' ' '-' 0' - .?@'0' &>' -

@ ' '0' & A<'-1A' <-A' 10 <#@'0D1A' D< ' -1' D1 ' 1 1 0' &=' D1' '. -1 @ -& ' &=' D1' , '- ./0' '+ ' 1<@@ 0D<@@ #1' = &>' D1 - B1=& D' 01 - ' '-' " <><.1' & ' 1 ?A'B1' &=' D1' 1<@>@ -& ' '-' " '0 ? #<-B1' &=' D1' <K

@ F D1 1<0' @< 1' '-' <' < ? 1' ><A1' < ' F 10 j >'-0 1 @ D1' 'L D' 1< ' &=' D1' , '- ./0' 1' . -' D<' -&K' '0@ <>&-.0 '& D1 ' D' - .0' ' ' K<0' & A<'-1A' <-A' <BB& A1A@ D<' D1' ?0AB10' <00' . -1A' <-A' &' #1' <00' . -1A@ &' <a1' 0A010@ <-A' A1@'+1 ' <&@0@ 0D&?@A' D&@A' D1' ' 100'&-0' '-' D1' BD' 1=' <-A' C '-B'C<@ &K -0' &=' 1+1 ' &?- @ D<' '0' &' 0< @ KD1 1' D1' D' 1' &? 0' &=' D1' 0<>1' &?-A10' #1' & ' D1 1<= 1 ' 0D<@@ #1' D&@A1 - G ? ' & A' D1' , '- .' B&-0'A1 '-.' D&K' D1' 0<'A' < ? 1' '0' '-' < ' C 1 ?A'B'<@ <-A' . '1+&?0' &' D1' 1&C@1' &=' A'+1 0' &?- '10' &=' - . j @<-A@ K'@@ <-A' . <- ' &=' D1' 001 - ' <=& 10<'A@ <' D1' 1H?10 ' &=' D1' 0<'A' &> >&-0@ D<' D1' D<-B1@@& ' &=' - .@<-A' =& ' D1' '>1' #<-.' 0D<@@ D<+1' &K1 ' D1 1&=' &' ><a1' <-A' C &+'A1' 1>1A '# ' A+'B1' &=' D1' ?0 'B10' = &>' '>1' &' '>1@ KD1 -' 11A' 0D<@@ #1@ -& K' D0 <-Aj '-.' D1' 0<'A' < ? 1

-A' 1' ' ' 1>1>#1 1A' D<' &B@<>< '&-' &=' D'0' < ? 1' K<0' ><A1 '-' D1' 01+1 <@ &?- '10' &=' -.@<-A

W !+ @Z . ' 7' ;@ 3"&'@ ! ⁄ .";&//!-

W 6!#& ⁄ . ' 0 !' ' 6&#' ' # !'" J

-#!++.'" -/' 02 &#!2' 1 @ 2! +!' !' 3+ #!2' .'" .+/&-*' ! 22&j!2

&;!" &!2' . ' !' 0"# @' !' <& 72' -/' 0 !2' #. -P&--!/

' 8 .' &#!"2' 2 +⁄ ;!' .&-!' .'" b& @ 5

)) ʼ -?Iʼ ! ⁄ ʼ -9. .

-' < .'-1' & ?@'0

6)/ ' < & 1# -ʼ <C?# <- 1= -<./ʼ ; --& =

* ' ' ' ' ' C , (5 3 F .' 5 ' ' ' > !

BE' = ' ' ' G '6 #'HH' '*4@*4

' B&1' C=' ' I ' ?-', 01@ #'1 -' A1' &?' @1' &'<@>1' -=1' @1' &" <' 0&-' C@1>1-' 1-?\' <' <- 1#' @1-A1 '< -' A1' @<' < '+' 1' A1' -=1' A<>1' <-' A1' 0&-' 1. -1' A&?\'0>1' A1@ <001-' ! I ' &10' '@@&1H0' <001>#@1\' <A' =1' ' R 1'-0' 10 < ? \' I ' & A1-<-B10' 1-' @<' =& >1' H1-0?'

'>1 >1-' <BB& A1\' 10 ' I ' <001- ?m' H' 01@- 1' 10.@'01' 1' ' & 10' 010' @'# 110' B = <-BD'010G B ' @<' .W-A1' B=1 1' B @<' BD< 1' A1' @<' =& 10 1' B &?\' <? 10' 10 < ? \' B & A1-<-B10' <+<-' B10' D1? 10' =1' \' ' -'1-' 1C1@@1\' 0&@1-' A?1>1-' 1-?\' B =1 '-1-' .< A1\

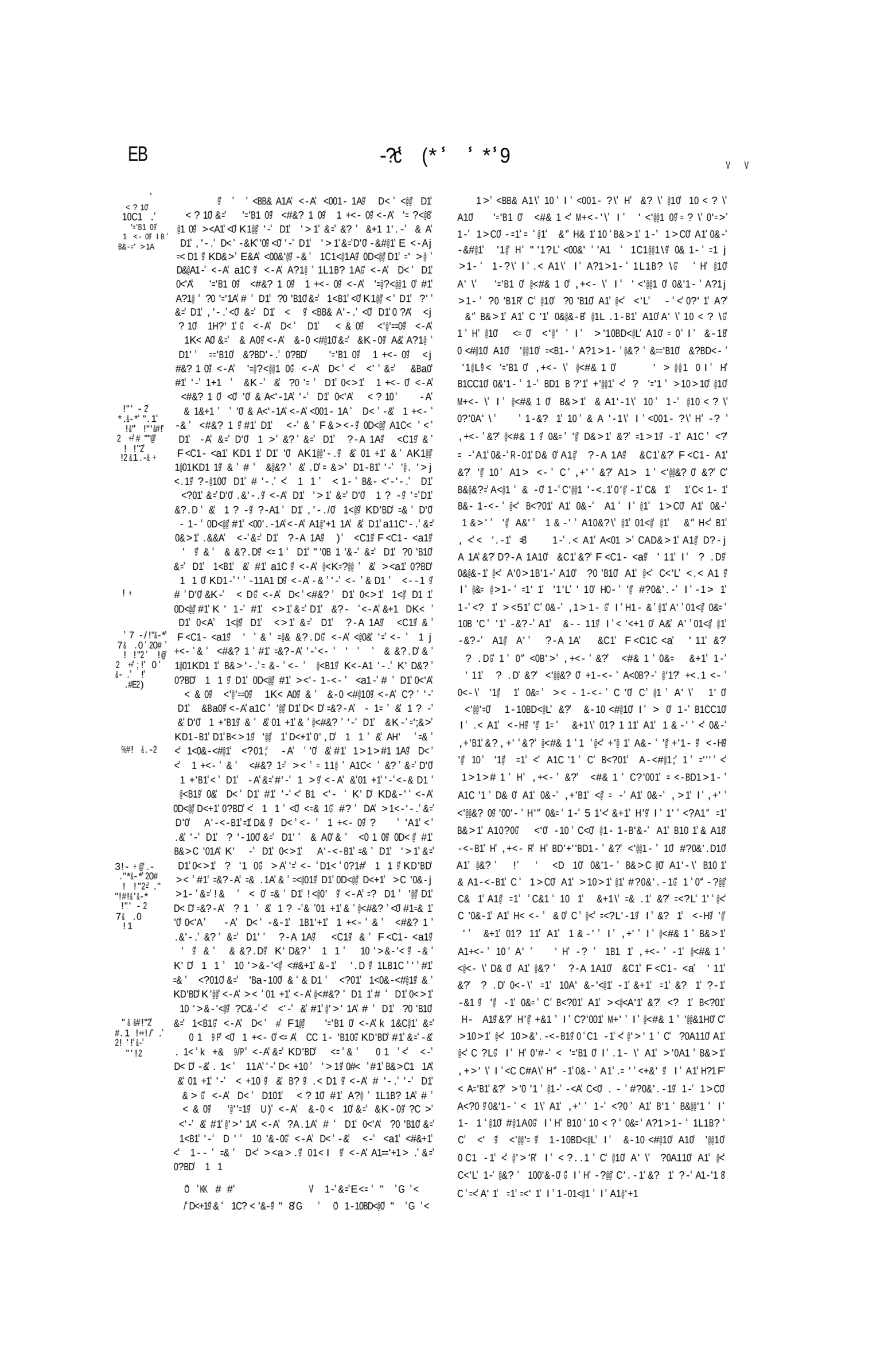
1>'%'BB&LA1\' 10 ' I ' <001- ?\' H' @1' ED<-B1@@1 ' 18' 0& 1 ' E< A1' ' A?' C '+1' 01<@ 1-10BD< ' A1@ &0 1@ @1' &" D<?>#@1 -' A?' &'@ @1 B' A10' &?@@10@ ?0 'B10' A1' @? ' <-B' R A1' @<? B1' < &-0' A1' @10BD1a1 ' B &? \' <?R0' H" M &-' <CC1@@1\' A& A1'-1 ' -&>1 ' &?' =<' 1' ?0j 'B10' A1' @<' <'L@ '0B&- \' 0BD1 &? 0' ?0 ?>1 0@ &- 1 &@@&? 0' &?' <0B?-' <? 1' &=='B1 ' &?' - '-=1 1' A?' &'@ 0&'1-' =1 '''1-' ? 1\' B M1>1- 1m' H'@0' -& AA-1-' -&>1-' -1' =<B1-' ?0 'B1' A1' @<' C<'L' '0B&-' 0BD1 &/ ?0 ?>1 @ &- 1 &@@& ' -1' - @' <? 1' ==' B1 ' -1' '8' -'0 1' `A?' &' P' C' -?@@' > 1' A&?-' `-1' # &. <. 1' =1+&' -<==' 1BB' &-@ -1' H' -? " H' C 0?1' C' 5 ' '?' <? 1' 1-' C '+1' &?' 1-' <C1 ' A10 1' 1-' <0B?-1' >< 1' &==' B1' 0&' ' > 0' 1-' >10>1' @&==' B1' &?' 1-' <0B?-' <? 1@ 1'-\' H' @0' =1B1 - ' &? \' '1 'L' &==' B1 0' B -?-'0 10' A1' @10' C@>' #&-10' B @&' <@L' B @10' C@?0' 0?==' B1<- \' <' @&?' 10B'1-B1' B @&?' B&-0B'1-B1

') '() 7 '5'

' D1' B&> >&-' &=' ' <-A' ?-'+1 0<@ F 1<@ D' &=' <@@ D1' 1<@>' &=' -.@<-A@ &? ' &U=' D1' , '-.' <' D'0' < @'<>1-' D&@A1-' <' ` <- 1 #? D1' & &K' <= 1 ' D1' < '+' '&=' &? ' @ <A @' D1' K1@= D' 1< ' &=' D'0' 1'. -@ # ' D1' 001 - ' &=' D1' & A0' <-A' &> >&-0' D1 1@ <001>#@1A@ D< D' ><A1' B1 ?-' < ? 10' <-A' A' -<-B1 ' '-' D1' ! & >' =&@@&K' -.

! @' '0' <BB& A1A' <-A' <001- 1A' D<' &@ ' D? BD' D<+1' <@@ D1 ' '#1 '10' <-A' ! <-BD'010G <-A' D<' D1' E 1<' D< 1 @ <-A' D1' D< 1 ' &=' D1' ! & 10 @ <-A' <@@ & D1 ' < ? 10' <-A' A'='<-B10' ><A1' '-' '>10' C<0 @ <-A' -& ' 1C1<@1A@ 0D<@@ #1' A+@@ ' D&@A1-' <-A' =' >@ ' a1C @ @' ' '0' <BB& A1A' D<' D1' D<-B1@@& @ 1<98@ 0? 1 ' , 11C1 ' &=' D1' '+ ' 1<@@ 1K<' A' &=9 D1' , '- ./0' &H01@ D1' , '- ./0' D<>#1 @<'-@ @1 a' &=' D1' &@@0@ D1' ?0 'B10' &=' D1' &-1' 1-BD' <-A' &=' D1' &D1 @ < &-0' &=' D1' LBD1H?1 @ <-A' <@@ & D1 ' D<' 0D<@@ #1' B<@@1A' &' & A<'-@ -<>1@ &' ' ><a1' ?0 'B10' &=' 1<B1@ D1 '==09' 0BD1< & 0@ ?0 &>1 0@ &>C &@@1 0@ &' <- ' & D1 ' ='B1 ' & ' D=' -'0 1 ' &=' D1' , '- .@ 0D<@@ ='1'=' >@ ' 0K& -@ D<' D1 ' 0D<@@ -& ' & A<'-@ -<>1@ &' ><a1' ?0 'B1' &=' D1' 1<B1@ D1 '==@ 0BD1< & @ ?0 &>1 @ & H & 1 @ -& ' & D1 ' ='B1 ' & ' -'0 1 ' &=' D1' , '- .@ =& ' <- ' E'= ' & ' &B<.1@ !<+&?' & ' ==1B '&-G' -& ' D<' -&-1' KD'BD' C? 0?1 D' # ' D'>' & ' # ' & D10@ C '+'@ ' & ' &C1-@ @ &' #1' '-' <- ' ><'>1 ' ='B1 ' 0D<@@ ' ? ' '-' D1' 0<>1' ='B1@ & ' '-' <- ' & D1 G #?' D<' D1 ' ><a1' <@@ 0?BD' ='B1 0' <-A' '-'0 1 0' &=' D1' #10 ' <-A' >&0 ' @<K=?@ 1-@ <-A' 0?=='B'1-' &' D1' ' 0 '>< '&-' <-A' , -&K@1A.1

80. %1



' 1-&? 1' <' B<?01' H' @1₡ M+<- \' I ' <#& 1 ₡ -1' +&' 1- ' -1' C'@&-.' 1>C₡ &- ' &@?\',+' ' I '@<#& 1 '0<-\' &? .1&?01' I ' 1LB100'+1' @&K1 ₡ I ' >&?@ ' . 1'-A 1' H' -<A' 10 1' A&-1' <₡ '1@L' +<- \' I '@<#& 1 ₡ 1-' <0B?-' 1>C₡ C<001' 0' f ' C ' BD'1 1' A1₡ A' 6' @<#& 1 ₡ I ' M+<- \' @1₡ D?0#<-A1₡ I ' R 1 1-<- \' -1' C&1- ' C<@1 ' @&? ' &? 1₡ -1' <C1 -1' +@+ 1' 0' @&? ' R 1₡' <' 0. - ' A<>.1' I ' CA1' 0'#-' A1₡ _ ₡ B&>1' A1' &? 1' @<' &1₡ ' <?L'- ' <' <?01' H' @1₡ @&K1 ₡ A1₡ A' \' <#& 1 ₡ I ' ,+<- \' -&? ' 10 1' > ₡ 1-' R 1 -' A1+<- ' B1₡ D1? 10₡ BB& A1\' 10 ' I ' <001- ?\' H' @1' #<'@@@-' C ' D?0#<-A '1' '. -1' C' <-' L'' '0 ' @'' ' A ' I ' 0<' +10 ? 1' ?-' =' 1' C' <-' <' C@ 0₡ @1' <'0 1' D -1₡ L0₡ BD< 1 1 ' L ' ₡ #1 BD1 ' L'0₡ #&+1 ' +'' 0 ' +'' ' A₡ +<BD1 ' +' 0 ' +'' ' A₡ C& BD1 ' +' 0₡ =1=11' @<#& 1 ' +' 0₡ A1 1' +' 0₡ BD<B1 ' A1' BD< ?1' +' ' 0 ' <?' C@?0₡ I ' BD10B?-' <? 1' @<#& 1 ' =1' ,+<- ' 0&@&-B' 0&-' A1. 11₡ I ' -1 -0' 1-' C<'@0' &?' >1 -0' 0&@1' ' 10 1' A&-1\' 0<-\' +10 ? 1' B? &'0'1' &?' <? 1' 1.< A' C' B&+1-<- ' ' H' -?@@ +<- ' A1₡ < '='B1 ₡ -1' A1₡ +' <'@@1 ₡ A1'-\' ' 11₡ C .D₡ -<? 1₡ +'@@10' -1' . -1' C@?₡ '@1 ' @<#& 1 ₡ I ' M+<- \' A10?0-&>1\' 0&@&-B' @&' 10 < ₡ 0<= \' +10 ? 1' B &'0'&' &?' <? 1' 1.< A1' C' B&+1-<- 1' B& -1' A10?0' 10 ' A' ' ' 0" -?@@ ' A&- -1' &?' C' . -1' C' B&+1-<- ' C@?0' H' -10 ' 10C1B'='1\' C< -&- ' H<@ C '=''=&' \' H'@0' , &- ' 1- ' < 1'- \' C<'1- ' 0'#-' @1 ' A&-&0' B&>1' @1₡ C-&0' @<' +<@?1' A1' @1LB1001' '00@-' A&-1' &?' C '0₡ ! ' GA' 01B&-A' =&' \' A1' @& ' < A 1₡ @<' A&?#@1' +<@?1' A1' A1 1' 1LB1001' I ' <@ '1 B1' =&' \' @<' 1#@1' +<@?1' A1' '1@@1' 1LB1001₡ 1 ' <' @1' C-&' '00'- ' < ' -1' ' '1-0' A&- ' C<'1 ' @1' A' ' 1LB1001' 1@ ' @<' C @0&-1' A1' H< <- ' &? 0

1>' & A 1\' 10 ' I ' <001- ?\' H' B1@? ' &?' BA@1' H' ?01' A1' @<#& 1 ' <' # ' BD< ?1' ' BD< 1 1' & ' <? 1' D#&? ' &?' ,+' B1' A1' D?0#<-A '1' <-H' @ &' ' A1@ <.1' A1' L' ₡ <-0₡ H' A1@& ₡ 1-<+<- ' '@ A1>&1 .1' <' B1@@ @<#&? ' 0\-\' 10 1' > ₡ <' >'0A1 ' &?' < A=' B1₡ I ' 0" <0B?-' B&+1-<- ' &?' ,1-' A<= -AB# ' <&' ' ='? ' ! ' 1-<+<- ' <' & & - ' 0?' ' 1-?\' C ' -?_

1>' <BB& A1\' 10 ' I ' <00<' ?\' H' -?@@ ,+<- ' A1' D?0j #<-A '1' &?' @<#& 1 ' -1' ,+<- ' A1' < A='B1 ' -1' A1' +' <'@@1 ' -1' C& 1' A10& 1' 1-<+<- ' #<0@< A' A<..1 ' -10C11' 0 ' =1 #' ? 1A 'B ' 0'-& ' 1<' A1' . -< 1' C ' A1=1-01 A?' &'<@>1₡ AB' B1' C' 0+1 F 1' A1₡ < <'& ₡ C ' @1' 1>C₡ 10 1<- \₡ &?' <'@@<- ' C' C<@'₡ &+10H' @&? ' >10 1₡ &?' 1-' @1' >100<.1' A1' @&? ' >1'0 1₡ ⁝ >1₡ 1'1- ' A1@L' 7+<- \' I ' @<#& 1 ₡ < a1₡ I ' 0<10' I ' @1₡ ?01- ' @1₡ A >1-.1₡ I ' & ₡ A1₡ =10 10₡ I ' @1001- ' &? ' &? 1>1- ' @1₡ 1?1 i' ⁝ C1@& 1₡ 0'#-' <' >1 -' B&>1' <' C'11₡ I ' 1₡ <? 1₡ 1?1₡ <CC1@@1\' & 1₡ A B1₡ .1 1' A1' C1 1' a1 @1₡ I ' <? 1₡ '1@L' 1?1₡ ' >C& ?-1₡ ' I ' H' @1₡ '0B&- \' <' ₡ <'@@'=0' I ' &-10 <#@1₡ <'1- ' C&<' ' A< 10 1 ' I ' < 10 1- ' &?\' @1₡ B&- 1+1-<- ₥' I ' @1₡ #<0@< A1₡ A<..1 ₡ I ' 10C11₡ 0?0₡ A' \₡ I ' @1₡ A' \' #<0@< A1₡ A<..1 ₡ I ' 10C11₡ 01' 1 ' I ' .< A1 ' <-H<₡ 0100'&-' A1₡ ?0AB ₡ A1' @<' C<'L₡ I ' @1₡ 01- 1-' A1+<- ' @1₡ A' \' ?0 'B1₡ 1-' @&? ' 0100'&-₡ 1-01>#@1>1' ' &+1' @1₡ -&?-₡ A1' B1?L' H' @1₡ C&K1 1- ' ' -10 ' C<₡ @1C 1-B'&-' A?' &ê H' C 1 ?A'B1' 0&' ' =1?' <₡ = <-BD'01₡ A1₡ = 0' &?BD<- \' @1₡ =& ='' 1₡ <' 1?L' A?10

] ₡ 1B<?01' D<' 1 +<- ₡ <-A' <#&? 1 ₡ K'@@ -& ₡ -& ' # ' <' @&-.' 1<0&-' K&?@A₡ 01 +1' <-A' @<#&? ' K' D&? ' &? <.1&?₡ <-A' 1LB100'+1' ' 1₡ <-A' >?BD' >& 1' D<-' D< D' #11-' C+1-' &' 0?BD' 1 +<- ₡ <-A' <#&? 1 ₡ '-' <- ' ' >1' C<0 ₡ 0&' D<' =& ' B< B' ' &=' D1' 0<'A' 1 +<- ₡ <-A' <##? 1 0₡ D1' ?0#<-A₡ <-A' <-A 1-<- ₡ >< ' -& ' C< ' D1' ' 1- 0₡ -& ' `?- -1 D10 'P' @'+1' ?C&-' D1' ' <-A0₡ &' D1' . 1<' " <>< .1' <-A' &0₡ <₡ K1@@ &=' D1' & A₡ <₡ <@@ D1' & > >& -0₡ @0&' #1B<?01' D<' D1' ' 1₡ &=' D1' 0<'A' 1 j +<- ₡ <-A' <#&? 1 ₡ D<+1' -& ' #11-' C?' ' '-' B1 <'- ' #1=& 1' D'₡ ' >1 ;' ' '₡ <BB& A1A' <-A' <001- 1A' D<' D1' <'@'=='=& ' ?0#<-A '0D<@@ <a1'# ' 1< ' <' D1' >&0 ' D1' <0 1 ' '-1L0 ' D1' < 1 ' L0 ' D1' D1CD1 A' L0 ' D1' LD1 A' '0 ' +'' ' A ' D1' &KD1 A' + ' 0 ' +'' ' A ' D1' K'-1D1 A' '0 ' <' F & > <-' <#&? 1 ' + 0 ' <' ` " 1 10P' + 0 ' <' " '+1 ' &=' D1' @&?.D' +' ' 0 ' <' D1' >&0 ₲ <-A' 1+1 ' & D1 ' <#&? 1 ' <-A' 1 +<- ' <BB& A'-.' &' D'₡ " 1. 11₡ <-A' @100' '-' D1' &?- ' KD1 1' @100' K<₡ K&-' &' #1' .'+1-' K' D&? ' @& Dj '-.₡ &? 1<1₡ & ' & D1 ' 1K< A' # ' &+1-<- ' -A' D<' -&' 1 +<- ' &=' '='B1 ' -& ' '='C<@@1 ' K' D'-' ' ₡ & &?.D₡ -& ' & D1 ' &K-₡ 0D<@@ <a1' >& 1' D<-' D1' 1 +<- ₡ <-A' <#&? 1 ₡ <#&+1' -<>1A' <= 1 ' D ' ' 0 < 1₡ K' D&? ' 10 ? 1₡ &? 1<1₡ & ' & D1 ' 1K< A' # ' &+1₡ -< ' <'₡ '0' <=& 10<'A ' -A' '=' <- ' .'+1' & ' <a1' # ' &+18' -<- ' >& 1' D<-' '0' <#&+1' 0C1B'='1A₡ <' D1' =' 0 ' '>1' D<' D1 ' 0D<@@ #1' D1 1&=' < <'- 1A₡ <₡ K1@@ D1' E'+1 ₡ <0' D1' <a1 0₡ 0D<@@ C< ' D1' <@?1' &=' D1' LB100' 0&' .'+1-' & ' <a1-₡ <-A' < ' D1' 1B&-A' '>1' &=' D1' ' <'-A1 ₡ D1' " & =&@1' <@?1' &=' 0?BD' LB100₡ <-A' < ' D1' F A' '>1' D1' 1#@1' <@?1' &=' 0?BD' LB100₡ <-A' '=' D1' <a1 '0&' < <'- 1A' D<+1' -& D' -.' KD1 1&=' &' C< ' D1' 0<'A' LB100₡ D1' 0D<@@ D<+1' ! & ' " < ₡ >C '0&- >1-

' ₡ ' '₡ & A<'-1A' <-A' <001- 1A' D<' D1' & ' 0D1₡ KD'BD' ?01' &' @<#&? ' <' D1' @&?.D' <-A' < ₡ & ' & D1 ' <#&? ' & ' 1 +'B1' &=' <-A ₡ @@ ' D1 ' #1' ' D1' .1' &=' K1@+1' 1< 0₡ D<' = &>' D1-B1=& D' D1 ' 0D<@@ <#'A1' <' D1' 0<>1' <#&? ₡ K' D&? ' #1' -.' C? ' &' <- ' 0 1 ' & ' <-A'B <= ₲ <-A' '=' <- ' &+1-<- ' & ' &-A' &=' CC 1- 'B1' #1' = &>' D1-B1=& D' ><A1' &' D1' B&- < ₡ D10' -1 <@@#1D&@A1-=& & 1 '

₡ ' '₡ <BB& A1A' <-A' <001- 1A' D<' -&' 1 +<= ' &=' ?0#<-A ₡ & ' <#&? 1 ₡ -& ' 1 +<- ' `& '0P' '=' B1 ₡ -& ' &=' '=@?<@@1 ₡ 0D<@@ = &>' D1-B1=& D' #1<' <- ' ` ?Ba8' @1 9OP' K& A₡ -& ' " <. .1 ₡ ?C&-' !& => ? 1' &=' D1' 0<>1₡ #? ' '-' D1' '>1' &=' F < ' =& ' " =1-B1' &=' D1' 1<@>' &=' -.@<-A₡ <-A' D<' # ' D1' 0? + '' ' &=' D1' 1 1 ₡ =& ' D1' '>1' #1' -.₡ & ' <+<'@' -.' # ' D1' &?- ' K' D' DU ' <0 1 ₡ & ' '-' D1' ' <0 1 /₡ 100<.1₲ #? ' 0?BD' 1 +<- ₡ <-A' <#&? 1 ₡ 0D<@@ D<+1' &K₡ <-A' &K0₡ <-A' ?01' D1' 0<>1' D1' ?-A< ₡ <-A' &@ A< 0₡ <-A' @1<+1' `< ' C@< '-.' <' 1- -'0' & ' !&& #<@@₡ <-A' & D1 ' E<>10' B<@@1A' E&' 0₡ " B1₡ <0 '-.' &=' D1' & 1₡ `, <D10₡OP' <-A' & D1 ' 0?BD' '>C& ?-1' E<>10₲ /P' <-A' D<' D1' D1 '==0₡ < & 0₡ <'@'==0₡ <-A' &-0 <#@10₡ 0D<@@ D<+1' &K1 ' & < 10 ₡ <-A' 0D<@@ < 10 ' <@@ " & 1 ₡ <.<'-0 ' D'₡ < ? 1₡ /)' <-A' 01'\1' D1' 0<'A' ` ?Ba@1 0₡OP' K&=A0₡ <-A' " <. .1 0₡ a11C' D<-' '@@ D1' 10<&-₡ & =' D1' ?0 'B1₡ & =' 1<B1₡ <-A' D1' 0<>1' C 101- ' #1=& 1' D1' 0<>1' ?0 'B1₡ '-' D1' ' 100'&-0₡ &.1 D1 ' K' D' D1' <>10' &=' D1>' D<' A'A' #1<' D1' 0<>1' -A' ' ' '₡ -& ' D1' , '-./₡ '-A' D<' '<- ' .?A'B1' #1' A&-1' &' D1' ! <-BD'01₡ & =' & A0₡ &?BD'-.' D1' & =1' ? 1₡ A?1' &' D1>

\' #?' &'. 1 1'C1 -1' " G '6;Y 0B< B1@ ' UA1 '1' K&><-)' &=' @ <01@< A' N @' *(4:' ! ' 6 0 D1' C@1 1₡ <' D1' #< 1' -& D1 ' D<-A' -& ' =&& 1₡ <-A' D'101 & D1 ' C@<'1₡ B& 1 ' A'B1' B<0 -.' &=' D1' 0 &-1' a<'@1₡ <-A' 0?BD1' & D1 ' C@<'1₡ ?-B&+1-<#@1' ⁝ ' ! ' 6' Ó D * ' %' 'Q % 'A 11 ' %' 0$ % ' (% %+)' <0 '< A₡ N ' *(4₲ ! ' 6

. &* ' "&#!' ;.0"

V *!2' . ' !"' - 2' &-' 02; -/"@

3!- +@' .-' *&'&-*' .'" E&-*' &* !" V *!2

3!"2.-2' "&-*'2!"'!/' &-' 02; -/"@' &+⁝ 7!+'!' 2 +⁝ #.-&-0!' .'/.'2.

!"' - 2' 2 +⁝ 02!' .-+@' 4.7' 2' -/' "".72' -/' +! '!'&/+!' b 1!2

C' @&? ' A'0B 1B'&-Ɠ I' C0.-1' BD10B?-' A1Ơ A' \' ?0j 'B1Ơ C ' @&? ' .<.10Ơ "'' '0' @1' & ' C ' @1' 1>CƠ A1' @&? ' A' \' 0100'&-Ơ I ' @&' B@1 Bᵍ A1?L' 0 ' @1' & ' A1Ơ = -Ơ I ' <' A18ᵍ >1- \' 0 A<- \' I ' C+1-<- \' A1' >10>1Ơ @1Ơ 0100'&-0ᵍ C' >< -Ơ A1Ơ '0B&- \Ɠ 1 ' H' @1Ơ = 0' A1Ơ = <-BD'010Ơ 0&'1- ' B&- '#? &' Ơ <Ơ A' \' .<.10Ơ 0&@&-B' @<==1 <- ' A1' @&? ' C ' A1Ơ = -Ơ I ' <' B' >1- \' 0?0A' \Ɠ 1 ' H' -?@@ 1-10BD<@@ A1' = ' 0&' ' <00'.-1' 1-' -? ' A1Ơ A' \' B&>'00'&-Ơ I ' H' -? ' <00&B'<B'&-' 0&' ' =<' 1' <Ơ ?0 'B1Ơ A1' @<' C<'L' ?!' @&? ' C ' >1 ' B&>'00'&-' ' -10 ' C<Ơ @1- 1-B'&-' A1' B10 ' 10ᵍ < ? ' H' @1Ơ ?0 'B1Ơ A1' @?-' #<-a' I ' A1' @<? 1' -1' @1Ơ .1<- \' A1' @1 ' 1-' B<Ơ H'@Ơ 0&'1- ' -&>1\' 1-' @1Ơ A' \' B&>'00'&-Ơ 0&'1- ' 1-?\' C' =& B1' A1' B10 ' 10 < ? ' A1' 1-' ' @1Ơ A' \' 0100'&-Ơ H?< 1' =&' \' C' <-' B&>1' 0&- ' @1Ơ <? 10Ơ C>'00'&-1 Ơ H" 0&- ' B&- '-?1@>1- ' A1> <- \' 1-' C<''Ơ >10Ơ H'@Ơ @1' =<B1- 'H<- ' '@Ơ <' B1' C&1- '#&-1>1- ' 1- 1-A 1ᵍ

L ᵍ 1>' B&>1' B&- 1-?\' 0&' ' 0'#-' 1-' @10 < ? ' A1' F 10 '-' C ' >1 ' B&>1' 1-' @10 < ? ' =<' ' <' E@&?B' <-' A?' 1. -1' -=1' ' @1' &'' H& 1' 10 ' 01B&-A' H' -? '0&' ' 0" D< A ' A1' B&>' &+1 ' A' 1' &?' B1- 1 ' `<0B?-1 P' =<?L' -&+1 ' >1-0#-.1ᵍ &?' <? 1' '1ᵍ =<?L1' BD&01' A1Ơ 1@< \' "?10Ơ &?- 10Ơ < &-0ᵍ I ' <? 10Ơ -&#@1Ơ I ' .D' \' A?' &'<@>1' I ' <?L'-' @1' D<-B1@@1 ' 10& 1 ' @1 B' A?' '+1' 1<@ᵍ 1-10BD< ' A1@ᵍ &0 1@ - 1' I ' @1' &'ᵍ ?0 'B1Ơ A1' @?-' #<-a' I ' A1' @<? 1ᵍ I ' A<? 10Ơ . \' ==''B1 0' A?' &'<@>1ᵍ I ' H" @1' = <' &' ' C 'Ơ I ' 1>C '0&-1\' 10H1Ơ <? <-' H'@ 1' ' &+1' 1@? ' A&- ' <' C< &@1' <' >&1+1\'\ BB& A1\' 10 ' I ' <08' 0H- ?\' 1-' B10 ' C@1>1-' H' H ' <0B?-' '1é 0&' ' C 'Ơ I ' 1>C '0&-1\' I ' -1' C&1 ' &+1 ' B1@? ' A&- ' @1' C&@1' M <' >&1+1\' B&>1' A1+<- ' 10 ' A' ' H'ᵍ 0&' ' C?-'\' C' <A+ Ơ A?' B&-01' '-'1- ' B&- 10 1<-=\' @1Ơ 0 < ? \' <+<- A' \

L' ' 1>' 1-A=&' ' A1' @<' @1+11' A1Ơ A10C1-B1Ơ A1Ơ D'+<@1 Ơ +1'@<- \' <Ơ C@1>1- \' C ' @1Ơ B&1Ơ A1Ơ &?- 110ᵍ <BB& A1\' 10 ' I ' <001- ?\' H' @<' A11' @1+11' 0&' ' =<' 1' B&>1' <A' 10 1' ?01' <+<- ' B1Ơ D? 10Ɠ < &?0 1' <' B1 ' H' 0" <0B?-' ' &?' <? 1' D&>1' 10C' ' ?1@ &?' 1 <C& 1@ 1' ' C BD<B1\' <0B?-Ơ R 1Ơ &?' 1D' &?' <? 1Ơ C&00100'&-Ơ H" 0&@1'1- ' 10 1' B&-j '#? &' Ơ <Ơ A1@Ơ A10C1-010Ơ A1+<- ' @1' 1>CƠ A?' A' ' C BD<B1ᵍ H' >10>1Ơ @1Ơ 10Ơ 1-1>1- \' I ' C&00100'&-Ơ I ' @1Ơ 1-<- \' A'B1@@1Ơ 0&'1- ' B&- '#? &' Ơ <Ơ A' 1Ơ A10j C1-010Ơ B&>1' @1Ơ A' \' 10Ơ 1-' I ' C&00100'&-Ơ @1Ơ 1-<- \' A'B1@@10 P' 0&'@1'1- ' =1' 1' A1+<- ' @1' 1>CƠ A1' >10>1' @<' C BD<B1

L'' ' 1>' C B1' H' <- \' A1Ơ = >1Ơ I ' <? Ơ & A? 1Ơ A1Ơ ?1Ơ I ' 1- <'@@1Ơ 0'#-' A1Ơ #10 1Ơ ?1\' B&>1' A1Ơ < 1Ơ B& ?CB'&-Ơ - ' .G1 1\' I ' > Ơ 1-' =&00109ᵍ +1 Ơ I ' <? Ơ 1K1Ơ I ' <?L> ' C@?0&? Ơ <? 1Ơ @'1?L' A1A1'-\' 1- &' I ' ' A'+001Ơ ' 110Ơ ? .DƠ I ' ''@1Ơ A?' &'<@>1' I ' @10

M 0?#? #1Ơ A'B1 1Ơ H' @<' 1' ' &1HƠ 10' .#'A>1- ' B& ?C ' 1 - = ' I ' C@?0&? Ơ ><@<A'1Ơ I ' <? 10Ơ A'01<010Ơ -'1-' ?== <#@1Ơ <+1'.-1-' A1' &' 1-' <? 1' 0'#-'<' @1Ơ '-#' <- \' I ' B&- 0<- \' 1Ơ A11Ơ ' 11Ơ ? .DƠ ''@1Ơ I ' 0?#? #1 ' B&>1' <Ơ <? 10Ơ '@@&1H1Ơ 1C<' <- \' I ' C<00<- \' <' 0. ' <-?0<-B1' A<><.1' I ' C'ᵍ A1Ơ '-#' <- \' B&- 0<- \' 1C<'j <- \' I ' C<00<- \' 0?0A' \;' BB& A1\' 10' I ' <001- ?\' ' CB@<><B'&D' 0&' ' =<' 1' 0'#-' 1-' @<' ' 11' A1' &-A 10' B& '1' 1-' <? 10Ơ ' 11Ơ ? .DƠ I ' ''@1Ơ C> ' @1' &'<@>1' &?' '@ #?0&' .-1' 0'#-' A1'-\' = <-BD'010Ơ B&>1' A1D& Ơ ' ? \' B1?L' H' '1@L' <-?0<-B1Ơ = >10Ơ '00?1Ơ 1- <'@@1Ơ I ' <? 10Ơ & A? 10Ơ &-' .1 1\' I ' > Ơ 1-' =&0010' ,Ơ 1K1Ơ I ' <? 10Ơ @'1?L' 0?'0A11Ơ @1Ơ ='B1-' &? 1>1-' 1>?1

' -!"+&-!/'.-' !'6.++

' ħ Z± ' %' ? ! &>'

' D1' ' "'0B 1 '&-Ɠ <-A' 1+1 ' &=' D1' 0<'A' ?0 'B1Ơ 0D<@@ <a1'=& ' D1' ' F<.10' !&? ' D'@@'-.Ơ D1' "' <' =& ' D1' ' >1' &=' D1' ' 0<'A' 100'&-0ᵍ <-A' D1' ' @1 a' K&' D'@@'-.Ơ V)ᵍ &=' D1' !'-10' <-A' >1 B'<>1-Ơ '0'-.' <-A' B& >'-.' &=' D1' 0<>1' 100'&-0ᵍ # ' D1' <-AƠ &=' D1' D1 '==Ơ ' <-A' D<' D1' & AƠ &=' ! <-BD'010Ơ 0D<@@ #1' B&- '#? & ' Ɠ D1' 0<'A' F<.10ᵍ <= 1 ' D1' < 1' &=' D1' ' < ' &=' !'-10' <-A' >1 B'<>1-Ơ <=& 10<'AƓ <-A' D<' -&' 1K< A' &=' <- ' & A' #1' <00'.-1A' '-' <-' '&=' D1' 0<'A' & > >'00'&-0Ɠ <-A' D<' -&' 00&B'< '&-' 0D<@@ #1' ><A1' &' D1' ?0 'B1Ơ &=' D1' 1<B1' <= 1 ' D1' '=' 0 ' &> >'00'&-' -A' ' 'Ơ -& ' D1' - 1- ' &=' D'Ơ < ? 1ᵍ D<' D1' ?0 'B1Ơ &=' D1' &-1' 1-BD' & ' &=' D1' & D1 ᵍ -& ' D1' 1 1<-Ơ &=' D1' <Kᵍ '-' B<01' D<' D1 '0D<' '#1'-<>1A' '-' D1' 0 'A' &> >'00'&-0ᵍ 0D<@@ #1' #&?-A' # ' ! & B1' &=' D'Ơ < ? 1' &' D&@A' D1' 0<'A' 100'&-Ơ !&? ' ' >10Ơ '-' D1' 1< ᵍ <Ơ D1' & D1 ' &> >'00'&-1 0ᵍ D1' F D'BD' #1' B&- '-?<@@ ' AK1@@'-.' '-' D1' &?- ᵍ #? ' D<' D1 '0D<@@ A&' ' ' KD1-' D1 ' >< '#10 '< 1-A' '

ᵍ F D1 1<0' ' ' 'Ơ B&- <'-1Aᵍ <Ơ K1@@ '-' D1' <j ? 1' &=' F 10 >'-0 1 ' D1' ! ' 0 ᵍ <Ơ '-' D1' < ? 1' ><A1' <' E@&?B10 1 ᵍ D1' 1B&-A' 1< ' &=' D1' 1'.-' &=' &? ' & A' D1' , '-.' D<' -&K' '0ᵍ D<' -&-1' #1' 0&' D< A ' &' '-+1- ᵍ &' 0< ᵍ & ' &' 1@@ <- ' =<@01' 1K0ᵍ '10ᵍ & '0?BD' D1 ' =<@01' D'-.0ᵍ &=' D1' 1@< 10ᵍ " ?a10ᵍ < @0ᵍ < &-0ᵍ <-A'& D1 ' &#@1Ơ <-A' . 1< ' 1-'&=' D1' 1<@>ᵍ <-A' <@0&' &=' D1' D<-B1@@& ᵍ 1<0? 1 ᵍ @1 a' &=' D1' '+ ' 1<@ᵍ D1' 1K< A' &=' D1' , '-./Ơ &?01ᵍ D1' ` ?0j 'B1/P' &=' D1' &-1' 1-BD' & ' &=' D1' & D1 ᵍ <-A' & D1 ' . 1< ' ==''B1 0' &=' D1' 1<@>ᵍ <-A' D1' D<' A& D' 0&' 0D<@@ #1' <a1-'<-A'' >C '0&-1Aᵍ '@@ D1' D< D'=&?-A' D' >' `&=' KD&>' D1' C11BD' 0D< '#1' >&+1A;' P ' 'Ơ <BB& A1A'<-A'<. 11A' I ' D'Ơ F=@'<-@1 ᵍ D<' KD1-' <- '0?BD' 'Ơ <a1-'<-A' ' >j C '0&-1Aᵍ <-A' B<--&' `=' -A' D' >' # 'KD&>' D1' C11BD' #1' >&+1A9O P' <Ơ #1=& 1' 'Ơ 0 ?Aᵍ D<' D1'#1' C?-'0D1A' # ' D1' A+'B1' H=' D1' &?-B'@ᵍ -& + ' D0 <-A'-.' D1' 0<'A' < ? 10

ᵍ -' D1' '.D ' &=' D1' @1+ '-.' &=' D1' LC1-B1Ơ &=' D1' , -'.D Ơ B&>'-.' &' D1' < @'<>1-Ơ =& ' D1' &>j >&-Ơ &=' D1' &?- '10ᵍ ' 'Ơ <BB& A1A' <-A' <001- 1A ' D<' D1' 0<'A' 1+ '-.' #1' ><A1' <Ơ ' ' D< D' #11-' ?01A' #1=& 1' D'Ơ '>1Ơ &'-'-.' &' D1' 0<>1ᵍ D<' '=' <- ' & Aᵍ &' <- ' & D1 ' <-' C' ' ?<@ & ' 1>C& <@ᵍ D< D' C? BD<01A' <- ' <-AƠ & ' 1-1>1- 0ᵍ & ' & D1 ' &00100'&-0ᵍ D<' F1 1' K&- ' &' #1' B&- '#? & ' &' 0?BD' LC1-B1Ơ #1=& 1' D1' '>1' &=' D1' 0<'A' ? BD<01ᵍ D<' D1' 0<'A' <-A0ᵍ 1-1>1- 0ᵍ <-A' &0010<&-0ᵍ <-A' D1' 1-<- Ơ &=' D1' 0<>1ᵍ #1' B&- '#? & ' &' D1' 0 'A' LC1-B1Ơ <Ơ D1' 0<'A' <-A0ᵍ 1-1>1- 0ᵍ <-A' &00100'&-Ơ 0)' K1 1' K&- ' &' A&' #1=& 1' D1' '>1' &=' D1' 0<>1' ? BD<01

ᵍ !& ' D<' 0&' >?BD' "?-.' <-A' !'@ D' &=' D1' E< #<.1' <-A' - <'@Ơ <Ơ K1@@ &=' 1<0 Ơ a'@@1Aᵍ <Ơ &=' & D1 ' & ?C '&-0ᵍ #1' B<0 ' <-A' C?' '-' "' BD10ᵍ '+1 0ᵍ <-A' & D1 ' F < 1 0ᵍ <-A'<@0&' K' D'-' ><-' & D1 ' @<B10ᵍ K' D'-ᵍ <#&? ᵍ <-A' -'.D' ?- &' A'+1 Ơ ' '10ᵍ & &?.='0ᵍ <-A' &K-Ơ &=' D1' 1<@>ᵍ <-A' D1' ?#? #Ơ &=' D1>ᵍ D<' D1' ' ' D1 1' 'Ơ . 1< @ 'B& ?C ' <-A' '-=1 ᵍ <-A' ><-' <@<A'1Ơ<-A' & D1 ' '- &@1 <#@1' "'01<010Ơ A&' A<'@ ' D<CC1-ᵍ <Ơ K1@@ &' D1' -D<#' <- 0ᵍ <-A' D&01' D<' < 1' B&-+1 0<-' '-' D1' 0<'A' ' '10ᵍ & &?.D0ᵍ &K-0ᵍ <-A' ?#? #0ᵍ <Ơ &' D1 ' 1C<' '-.' <-A' <+1@@'-.' D' D1 ᵍ &' D1' . 1<' --& <-B1ᵍ "<>< .1ᵍ <-A' 1 '@ &=' D1' -D<#' < <- 0ᵍ " K1@@1 0ᵍ 1C<' 1 0ᵍ <-A' <+1@@1 0' <=& 10<'A;' ' 'Ơ <BB& A1A' <-A' <001- 1A ' D<' &B@<>< '&-' #1' ><A1' <Ơ K1@@ '-' D1' ' '&=' &-A&-ᵍ <Ơ '-' & D1 ' ' '10ᵍ & &?.D0ᵍ <-A' &K-0ᵍ D &?.D' D1' 1<@>' &=' -.@<-A9 KD1 1' ' ' 0D<@@ #1' -11A=?@@ <Ơ K1@@ K' D'-' ! <-BD'010Ơ <Ơ K' D&? ᵍ D<' <@@ D1 ' KD'BD' A&' B<0 ' <-A' @< '<@@ 0?BD' --& <-B10ᵍ " ?-.ᵍ E< #<.10ᵍ - <'@0ᵍ <-A' & D1 ' A? 1' '-" "' BD10ᵍ '+1 0ᵍ F< 1 0ᵍ <-A' & D1 ' @<B1Ơ <=& 10<'A9 0D<@@ B<?01' D1>' ? 1 @ ' &' #1' 1>&+1A9 <+&'A1A9 <-A' B< '1A' <K<

' ' ')' "

(7 &# '7 2' !' &"2' 0 .'". ' !' +!Ơ ' O ' ');"&-*' &1' ." ' '/&/'2 ! E' !' 2 1!' N$ ' '" %' '! '$ ' '

V *!2' . ' 02 &#!2' -/' !&" +!"E

.' !7 "/' C#' 2 +' ;!' 22&*-!/

0/*!2' C#' -!!/' -. ' !-/' !' !22&.-2' "!*0+ "+@

W ' V!2 1' ' A B Ɠ 5 6+ ' ' '#' J

6! ." !"2' . ' &!2' * &-2' 3!!"2' ##' 2 +' ;!' 0-&2 !/' ;@' !' .0-#0

W % !-#!2' . ' M-&* 2' . 3 "+& 1!-' 2 +' ;!'+!'&!/' .-' +' -/2 .'"&- ++@

L'- 0&2 -#!2'&-' -/' ;.0' & &!2' .7-2'2 +' ;!' "!1.'!/' ;@' &#!"2' C#

G&' > -' ' S

)) ' -94 ! # ' -9.Q<Q,

-' &"*&-!'
6. 0+&

' < %% '

' *=' ' ' > !

ME' = ' ' 'G '6 #'HH' ' & ' '5 -
' B10' C@1>1-' 1-?\' <' F10'-' ?-A ' D1'-'
<C0'@1' =10'A1' 1'-' '@@1' <-' A?' 1.D1' - 1' '
@1' & ' 'BD< A'01B&-A' C?'0'@1' &-H?10' 10\'0 <1@ -=1'
A' ' ' @1' & ' <@ D&-&'A1' A'1?' I' A1' 1'-' 0.@'01' I'
C'B&1' C=' ' A1' 010' @'.10' A1' 0&-' A' ' &'<@>1' A1@ <001-'
A10' C@< \' ?!' 1>C& 1@ ' I' B&10' 10 1<- \' 1@ A' ' C@1>1-'
<A'A A1'-1\' I' 10 <#@'\'@10' BD&010' A10&?\' 1a 'C \
<' C '>10' B&>1' & A1'-1' 0&' ' C' 10 < ?' =1' ' <-' A?'
1.-1'A1@ '1@ - 1' B?' @1' & ' +'>' I' H?'- @ J' D' H?1@@1'
'1? 1' H' @1' & ' =1 <' B&@@<B'&-' &?' C01- 1>1-' <' -?@@
#1-1='B1' 1-' <? " A &' ' H' @1' ' @1' 0' H?&" '@ 0" =&-A <'
0&' ' #'1-' 1L<>>1' H'@ 0&' ' + < ' I' <' H?1@@1' D1? 1' H'
< <-' ?..1>1-' 1-A?' @1' ' @1' 0&' ' &+1' C' #&-1' 1-=& @
><B'&-' -'1-' + < ' -1' &?0 @' 0&' ' @<' B&@@<B'&-'&?' C01-@
1-'>' ' 1-' ='''' 1C1@@1\'G' 1' -'1-' B&- 10 1<-' @1' A' '
10 < ?' <0B?-0' C01- 1\' A?' & ' C' =<+&? 'A10' H A'-<' 0'
0&-' '-0A ? \' I' >A? <' 1-' #1-1='B10' A1' 1'-' 1' 0.@'01'
0<-\' A?1' CB1001' @10' CA10' -'1-' .<>'\' -1'<CC1@@1\@' I'
<0B?-' =&' \ C' 1-H?10 10' >1 -0' + <'0' =1+& <#@1>1-'
C '0@' I' @10' '-B?>#1-' <' 1-' A1@1' >< 1'&?0 1\'G' C A1>1\'
1i' I' <001- ?\' H' @1' A' '10 < ?' 0&' ' =1 >1>1 ' 1-?\' I'
.< A1\'G' I' 1-&- 1'-=1' ?'@1' & '<A' 1 1-B1' A1' A'1?' I'
AH' 01'- 1' Q10.'01' ' +&1' I' . @' 1@' H' 0'@ C01- 1' <' <0B?-'
#1-1='B1' H' 0&' ' C@1'-' A<0B?-' '-B?>#1-' H' @1' C01- 1' A?'
& ' -1' 0&' ' 1B1?' C' @& A'- ' <' A1@ #1-1='B1' <-H@ @1'
& ' 1' ' 1B&+1' 0&-' C01- 1>1-' C' C110' A?' @1 ' 1-' 0<'
> ' A1>10-1G' 1' 0" <0B?-' C01- 1' A?' & ' 0&' ' <? @
>1-' 1B1?' I' @'-B?>#1-' &?0 1' 0<-\' A?1' C'10' B&>1'
A10?0' 10' A' @ B&>1-B1' @1' A' ' '-B?>#1-' 0<' 0?' 1' A1'-\'
?-' <-' <C0' @'-A?BB'&-' A?' ?! ' A?' & ' <' C@?0 < A
1>' C? ' B1' H' @<' B&1' =10' .L1+&?01>1-' B&-'C@1'-' H'
@<' &? ' A1@ &-10 <#@1' I' < 10BD<'" <A' < B BD1' <'
@? ' I' <BB &BD1' A1' 1>C0' 1-' 1>C0' B&- <=\' B&+18'
-<-B10' 0C<001' A1 10' I' A1 1-?10' I' C@?0&0' <? 10'
< B'&-0' C@1A<#@10' C' @<' B 1' @1 ' 1-' .0-' C ?A'B1' A?' & '
I' A1' 010' &? 10' I' <' .> ' . 1+<-B1' I' &C 00'&-' A?'
C&1C@1G' -=1' = ' @1' & ' +&'@@<-' & A1'.-1' 1>1A1' 1-@
B&- 1' @10' C ?A'B10' I' . 1+<-B10' 0?'0A' \@' <A' A1B@< 1'
)' B10' C@1>1-' C' <A 0' I' <001-' A10' _0' 10C ' ?1@10'
I' 1>C& 1@10' @1' C&<' ' I' ? '0A'BB'&-' A?' A' ' &-10 <#@1'
1-' @<' =& >1' H1-0-' ' ' @' &-10 <#@1' <CC '1-' A<+&' '
-'00<-B1' A10' B&- <= \' &BD<- \' A< -10' I
A1' .?1 1' D& 0' A?' &'<@ -1@' I' <?L'-' A10' BD&010' H'
&?BD1-' < >10' &?' .?1 1' A1'-\' @1' &'<@>1'H?1?L' -1'
C&1-' 10 1' >'-1m' -1' A'0B?0' C' @<' B&1' @1 ' &+1' <? 0'
?0<.10' I'B?0 ?>10' <' B1@@10' >< ' 10' <CC 1-<- \@ H?1?L

' 4 ' 6
' = D1 P' < @'<>1-' D&@A1-' <' F10 >'-0 1' D1'
&-A< ' -1L ' <= 1 ' D1' ! 1<0 ' &=' <'-' '@@< @ D1'
D' 11- D 1< '&=' D1' 1'. -'&=', '-.' 'BD< A' D1' 1B&-A'
<= 1 ' D1' &-H?10 @&? ' & A' D1', '-.@ &' D1' &-&? '&='
E&A' <-A' &@ ' D? BD@ <-A' =& ' D1' B&>>&-' &=' ' =
D'0' @'1.1' 1&C@1' &=' D'0' 1<@>@ &=' D1' 001- ' &=' D1'
1@< 10' <-A' & A0' 1>C& <@@ <-A' &>>&-0@ #1'-.' '-'
D1' 0<>1' < @'<>1- @ D< D' & A<'-1A' <-A' 10 <#@'0D1A' D1'
D'-.0' ?-A1 8K ' 1-
! @ F D1 1<0' ' '0' & A<'-1A' # ' <' < ? 1' ><A1'
D1' K1- 8='= D' 1< ' &=' D1' >.-'&=', '-.' AK< A' D1'
E <-A=< D1 ' &='&? ' & A' D1', '-.' D< ' -&F' '0@ D< ' <'
KD<' '>1' D< ' D1', '-.' 0D<@@ ><a1' &@@< '&-' & ' 10'
01- >1-' &' <- ' 1-1='B1' '-' <-& D1 /0' '.D @ D< ' D1'
' @1' ?C&-' KD'BD' D1' . &?-A1 D' D'>01@=' 0D<@@ #1' K1@@
1L<>'-1A' D< ' ' #1' ?1G' <-A' <' KD< ' '>1' #1=& 1'
?A.1>1-'.'+1-@ D1' ' @1' #1'=&?-A'# ' .&&A' -=& ><j
'&-' ?- ?1@ <-A' -&' ?0 @ D1' &@@< '&-'& ' 101- >1-'j
J' D1 1?C&-' ><A1' 0D<@@ #1' 1C1<@1AG -A' -& K' D0 <-A'-.'
D1' 0<>1' < ? 1@ 0&>1' &=' D1', '-./0 101- 110@ # '
!<+&? '&=' D1' A'-< '10' #1' '-0 ' ? 1A' <-A' >A?A@1A' '-'
1-1='B10' &=' &@ ' D? BD' + ' D&? ' A?1' &B100@ D1'
< '10'-& ' F< -1A' -& ' B<@@1A@ <-A' 0&>1 '>1' ` <a1-'# '
= '@01' -H?10 0' =<+&? <#@ 9 P' <-A' D1' -B?>#1-0' '-' 0?BD'
' <--1' C? ' &? G ' '0' & A<-1A' <-A' <001- 1A' D<' D1'
0<'A' < ? 1'#1'=' >@ ' D&@A1-' <-A' a1C G -A' >& 1&+1 '
&? ' & A' D1', '-.@ =& ' D1' 1+1 1-B1' &=' E&A' <-A'
&@ ' D? BD@ A& D' K'@@ <-A' . <- ' D<' '=' D1' C 101-'
&' <- ' 1-1='B1' D<' '0' =?@@ &=' <- ' -B?>#1-@ D<' D1'
101- 11' &=' D1', '-.' 0D<@@ -& '#1' 1B1'+1A' # ' D1' j
A'-< ' &' D1' 1-1='B1@ '@@ D1', '-.' D< D' 1B&+1 1A' D 0'
101- '-1-' # ' &B10' &=' D1' <K' '-' D'0' &K-' &? G
-A' '=' <- ' 101- 11' &=' D1', '-.' #1' & D1 K'01' 1B1'+1A@
<-A' D1' -B?>#1-'C?'&?' K' D& @ 'A?1' &B100@ <0'<=& 1''0'
0<'A@ D1' 0<'A' -B?>#1-'0D<@@ #1.'-'D'0' ?' 'K' D'-'<' 1<'
<= 1' D1'-A?= '&-'&=' D1', '-./0 101- 11' `<' D1' @1<0 /P'
@ 1B<?01' D<' D1' &>>&-0' A&' ><a1' <
. '1+&?0' &>C@<'-@ D<' D1' &? ' &=' D1' &-0 <#@1'
<-A' D1' < 0D<@ D<' D'-B &<BD1A' &' D'>@ <-A' A<'@ 'A& D'
'-B &<BD - <<0@ &+1-<- 0@ 10C<0010@ "1# 0@ <-A'
"1 '-?10@ <-A' ><-' & D1 ' <=&-0' C@1<A<#@1' <' D1'
&>>&-' <K@ '-' . 1<' 1 ?A'B1' &=' D1', '-.' <-A' &='
D'0' &? 0@ <-A' &' D1' . 1<' E '1+<-B1' <-A' CC 100'&-'
&=' D1' 1&C@1G' &?' & A' D1', '-.@ K'@@'-.' &' & A<'-' <
1>1A '<.<'-0' D1' 1 ?A'B10' <-A' E '1+<-B10' <=& 10<'A@
D< D' A1B@< 1A' '-' D'0' < @'<>1-@ # ' D1' A+'B1' <-A'
001-' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@@ D1' &K1'
<-A' ? '0A'= '&-' &=' D1'0<'A' &-0 <#@1@ '-' D1' ! & >' D<'
=&@@&K1Ae;' &' D1' &-0 <#@1' ' 'C1 <'-1 D' &' D<+1' &. j
-'0<-B1' &=' &- < 0' &?BD'-.' "11A0' &=' >0' <-A' &='
F < '&? '&=' D1' 1<@>@ <-A'<@0&'&=' D'-.0' D<' &?BD' 0)'
F < ' K' D'-' D1' 1<@>@ KD'BD' B<--&' #'1' A1 1 >'-1A'
-& 'A'0B?001A' # ' D1' &>>&-' <K@ K' D' & D1 ' 0<.10'
<-A' ?0 &>0' &' D1' 0<>1' < 1 0' C1 <'-'-.@ KD'BD'
(D'0' ! 'G '6' 0' 'H [!' ; & ' 4
L' <' D1'=? D10' ?0' ?' ^ >10' " ' ''?

!' M&-*(2
3"!2!- !!'
2 +' -.';!'
/1& !/'.'
-@ 4!-! &#!'
0+' .' -'
-#01;!-'
&+' !' M&-*'
''"!/';@' 7
-#01;!-'
"!1.'!/2 +'
20!' 7& &-' '
A! "

0"%2/& &.-.'
!' .-2 ;+!'
-/' "2 '

'7 .2!'
.-" /+2
!', .-2 ;+!'
' .*-&

5 -' ' &C '&=' D1' !' 0' < ? 1'&=' D'0' 1<' '0' C 101 +1A' <' D1' &K1 '&-'<' a'-'&=' < BD>1-@ '<CC< 1-@ 'C 1C< 1A' <0' <-'
L1>C@' 'B<'&-' =& ' &B@<><'&-', D1' < '&?0' 1<A'-.0' &=' D'0' &C '<1' >< a1A' ME ?

& @

!#E" &.&&2 !"!.

3". &;&&.-' .' !' .-k 2 ;+!' -ƒ "2

&1&Z. ' !7 "ƒ -ƒ "2 +(2 0"&2/& &.-

0 @' . ' !' +!"E . ' !' "E!' . ' !' M&-*(2 .02!ª 2 .' V!&* 2' +

3!- + @' .'" &2#. -/0/

"&2/& .-' . ' ! /1&" ª -ƒ &Z ! 0 @

01;!"'. ' ' !S! - 2 ' -02' &" @

3!- + @' .-' !1' .'" % ." &.-' B&-!' -ƒ 6 -2.1

0 !' 5 6&# ' #' .'"!#& !/' V .L'2 +ª ;!' 02 &#!Z. ' !')! #!D

D1 ' &-' <#@10' D1 1 &=& 1' D<+1' A?@ ' <-A' 1<0&-<#@ ' ?01A' '-' D1' ' '>1\' &'-'-.' &' D1' 0<>1ƒ D<' 1+1 ' @<'- '=ª0D<@@ A1B@< 1' C@<'-@ ' D'0' < 1 ' '-' D'0' 1 ' '&-ƒ #1=& 1' D<' <- ' <-' #1' 01- ' =& ' &' <-0K1 ' D1 1?- &' -A' '=ª<- ' +'@@ B&>C@<'-ƒ D<' <- ' @1<' #1' B&>>1-B1A' #1=& 1' D1' &-0<#@1' <-A' < 0D<@ƒ D<' >'.D ' #1' '1A' # ' D1' &>>&-' <K' &=' D1' <-A ƒ D1' 0<>1' @<'- '=ª 0D<@@ D<+1' <)' '+ ' 1<@ &=' D1' , '-.' K' D&? ' "'='j B?@ ƒ A' 1A@1A' &' D1' 0<'A' &-0 <##@1' <-A' < 0D<@ƒ &' 0? B1<01' '-' D<' @1<ƒ ?- 'ƒ ' '#1' A'0B?001A' # ' D1' , '-./0' &?-B'@ƒ '=' D<' < 1 ' &?.D ' &=' '.D ' &' C1 <'-' &' D<' &? ƒ & ' & D1 K'01' &' #1' '1A' # ' D1' &>>&-' <K' &=' D1' 1<@>' &=' -.@<-A ƒ <-A' <@0&' D<' D1 ' 0? j B1<01' '-8 D1' >1<-' '>1

ƒ ' '0' <BB& A1A' <-A' <001- 1A' D<' D1' &? ' &=' D1' 1K< A' <-A' < 0D<@ƒ &=' D1' , '-./0' &?01ƒ -& ' <@0&' D1' ? '0A'= &-' D1 1&=ƒ 0D<@@ -&' C<0' D1' C<B1' &=' K1@+1' '@10ƒ &' #1' B&?- 1A' `= &>' D1' @&A. '-.'\ Pª &=' `&? ' 0<'A' & A']' D1' , '-.

ƒ ' D1' 1H?10' &=' D1' 0<'A' &>>&-0' ' '0 & A<'-1A' <-A' <001- 1A ƒ D<' D1' @1 a' C=' D1' < a1 ' &=' D1' , '-./0' &?01' 0D<@@ A&' D'0' ='B1' K1@@ <-A' A?1@ G <-A' D<' <@@ =<@01' 1<0? 10' <-A' F 1'. D 0' 0D<@@ #1'#? -1A' <= 1 ' D1' !& >' &=' D1' 3 < ? 1G <-A' D<' D1' 0<'A' @1 a' <a1' -&' B&>>&-' !'-1ƒ #?' D<' 1+1 ' 1 0&-' KD'BD' '0 =&?-A' '-' " 1=<?@ ' &?BD'-.' D1' 0<>1' ='B1ƒ #1' C?-'0D1A' <BB& A'-.' &' D'0' "101 ' ' <-A' D<' D1' 0D<@@ -&' 'A1' #?' K' D' 'L' & 01O' <' D1' >&0 ƒ <-A' D<' D1' 0D<@@ -&' < ' 3> <-' &K-' -&' &=='1' @<B1' @&-.1' D<-' D1' 1B100' ' &=' D'0' ?0'-100' 0D<@@ 1H?' 1G <-A' '=' D1' A&' <-' D'-.' B&- < ' &' D'0' < ? 1ƒ <-A' #1' D1 1&=A?1@ 0' B&-+'A ƒ D1' 0D<@@ C< ' C' D1' , '-.' <' D1' =' 0' '>1' D<' D1' 0D<@@ #1' B&-+'A ƒ <-' '0' <-A' <' D1' 1B&-A' '>1'] ' <-A' <' D1' D' A' '>1' LL '

ƒ !& <0>?BD' <0' <. 1<' <-A' B&>>&-' @<>&? ' <-A' &>C@<'-' D<' D' #11-' &=1- '>10' ><A1' #1=& 1' D'0' '>1ƒ <-A' 1' '0ƒ =& ' D<' D1' A>' <@0' <-A' D1' ' "1j C? '10' D&@A' D1' ' 100'&-0' K' D'-' A'+1 0' @<B10' &=' D'0' 1<@>' <0' K1@@ K' D'-' ! <-BD'01' <0' K' D&? ƒ <BB &<BD'-.' &' D1>' . 1< 1 ' ? D& ' ƒ D<-' #1@&-.1 D' &' D1' ' ='B1ƒ '-' 1 ?A'B1' &=' &?=' & A' D1' , '-.ƒ <-A' D1' B&>j >&-' <K' &=' D1' 1<@>ƒ <-A' '-' A'>'-'0D'-.' &=' A'+1 0' ! <-BD'010ƒ <-A' '-' "10 ?A '&-' <-A' '>C&+1 '0D'-.' &=' D1' B&>>&-' 1&C@1' '0' <BB& A1A' <-A' <001- 1A' D<' D1' A>' <@0' <-A' D1' ' "1C? '10' 0D<@@ -&' >1AA@1' = &>' D1-B1=& D' &=' <-' D'-.' A&-1' K' D'-' D1' 1<@>ƒ #?' &-@ ' &=' < D'-.' A&-1' ?C&-' D1' 1<ƒ <' ' ' D< D' #11-' ?01A' 'C' D1' '>1' &=' D1' -&##@1' '-B1' , '-.' AK< A ƒ E <-A=< D1 ' &=' &?' & A' D1' , '-.' D<' '-&K' '0

ƒ ' D1' . '1+&?0' &>C@<'-' '><A1' # ' D1' &>j >&-0' &' C? ' & A' D1' , '-.' '-ƒ D'0' < @'<>1-ƒ &=' D1' 1LB100'+1' <-A' 0?C1 =@?&?0' ?>#1 ' &=' 1 1<-0' <' >0ƒ <-A' &=' ><-' . 1< ' L & '&-0' <-A' CC 100'&-0' A&-1' # ' D1>' &' D1' 1&C@1ƒ D1' , '-.' D1 1=& 1' A& D' K'@@ D<' D1 ' 0D<@@ <@@ #1' A'0BD< .1A@ <-A' D<' &=' D1>' <-A' & D1 ' D1 1' D<@@ #1' <a1-' &=' .&&A' <-A' 0?='B'1-' 1 0&-0' &' D1' ?>#1 ' &=' D' ƒ <-A' -&' >& 1'= &>' D1-1 =&-D@ <-A' >& 1&+1 ' D1' , '-.' C &D'=<' 1 D' D1>' &' >1AA@1' K' D' <C ' D'-.' D<' &?BD1 D' -&' D1' ' ==' B1@ <-A' D<' D1 ' A&' -&' L & '&-' -& ' CC 100'&-' &' D1' 1&C@1ƒ ?C&-' C@ -' &' @&01' D1' ' ='B1ƒ <-A' &' ><a1' < ! ' -1' <-A' <-0&>' <' D1' , '-./0' @1<0? 1ƒ <-A' =-@@ < '0=<=a'& ' 0 &' D1' <

ƒ F D1 1<0' ' ' '0' B&- <'-1A' '-' D1' @<0 ' < ? 1' ><A1'<' ` <- 1 #? 9 P' D<' -&' 1K< A'&=<- ' & A'0D<@@ #1' <0<.D1A' '-' D1' &>>'00'&-' &=' D1' ?0 'B1' &=' 1<B1' ' -1+1 D1@10' =& ' B1 <'-' <?01O' 0D1K1A' '-' D'0' < @'<j >1-ƒ ' '0' <BB& A1A' <-A' <001- 1A' D<' ?0 'B10' &=' 1<B1' 0D<@@ #1' ><A1' &=' -1K' '-' <@@ D1' &?-A1O' &=' -.@<-A9

Ô ! ' ' . /1 9' Z '<#&?' D1' &-1@@ = ! '* 4' 3`<D&? 1' D1' D&?0D&@A' J G '6

<?R0' &-10 <#@10' A1+<-' & 1' &-' A?1>1-' 0 10C-<#@18 >1-' ?01\' 1-' @&? ' 1>C0G <&?0 <-' '<' B1@@ H' BD10B?-' C@1'-' '=ª A1B@< 1' C@<-1>1-' 0<' >< ' 1' 1-' 0<' C1AB'&-' <+<-' H' 0&' ' 1-+&'1' C? ' <0B?-' D&>1' <' 10C&-A 1' <' B1@@ ' 0" <0B?-' 0&" +&1 ' C@1'-A 1' H<0B?-' C@11' 0&' ' B&>1-B1' A1+<' ' @1' &-10 <#@1' I ' < 10BD<@@ ' C &' ' 10 1' '1' C' @<' B&1' @1 ' A1' @<' 9 1' 1' ' B1@@ C@1'- '=ª # '1=ª A1' C '+1 ' 01<@ A?' &" 0<-\' A'=='B?@ 1' A' 1=' <0' A' \' &-10 <##@10' I ' < 10BD<@@ A1' 0? 011 ' 1-' B1@@1' C@11' <-H'" 0&' ' 'D0 0' C' @1' &-01'ƒ A?' &" 0" B1@@1' >< ' 1' A&' ' A1' A &' ' <CC= 1. -1 ' <' B1@@1' &? 1' &?' <'@>1' I ' H'@0' 0? 011D ' 1-' @<' >10-1' 1>C0 '

1>' <BB& A1R' 10 ' I ' <001- ?\' H' @<' &? ' A1' 1-10@ BD< ' I ' < 10BD<= ' A1@ D&0A1@@ A?' & ' -1' @<' ? '0@ A'BB'&-' A B1@@1' -1' C<001' @10C<B1' A1' A&?0\1' @1 10 ' <' B&?- 1 0' 1- &? ' @ ' 1-1@@ A?' &'

1>' <' @<' 1H?10 1' A1' @<' A' 1' &1' & A1'-1\' 10 ' I ' <001- ?\' H' @1' @1 a' A1@ < BD1' A1@ D&0 '1 ' - 1' ' @1' & ' =<B1'#'1-' I ' A?1>1-' 0&-' &==' B1G I ' H' &? 10' =<?L10' >10? 10' I ' C&'0' 0&'1- ' < 1' 0&&-B@ @<' =& >1' A1@ 10 < ? 9ª 1 ' H' @1' A' ' @1 B' -1' C 1' . -1' -?@@ B&1' @ -' <10H@ BD10B?-' C0&-1' H10 ' &+1' 1-' A1=<? ' &BD<- ' @1' B=@' &==' B1' 0&' ' C?-'\' 0&@&-B' 0&-' A101 G I ' H' @ -1' BD'+<BD1' >10' &+1' 0 0' B@''+<@L' <?' C@?'0' I ' H' @ -1' A1> .1' 1-' -?@@1' +'@@1' -<? 1' @'1?' CD''0' H' @<' -1B100' 1' A1' 0&-' =<' ' A1 > <-A1G I ' 0' @ ='B1' @1-0' <' B&- <' ' A1' B10 ' 10 < ? 9 I ' 1 - ' 0&' ' A?1>1-' B&-+'= \' C<'1' <?' & ' <@ C '', ' =&' \' H' @ <' '00' - ' B&-+'<' 1 - ' 0&?@A\9 I ' <@ 01B&-A' =&' \' A 0' , 0' I ' <@ '1 B1' =&' \' +'- ' @'1 0 ' V

1>' C? ' B1&' H' .3 - ' I ' B&1' B@<>&' I ' C@1'- ' &- ' 10 1' +' 0&+1- ' =<' \' A1+<- ' B10' D1? 10' I ' ?-H& 1' 0&- ' A1' B1' H' @10' A>' <@L' I ' @&? ' A1C? 110' '1. -1- ' @&? ' 0100'&-0' 1-' A'1010' C@<B10' A1'-\' @1' &'<@>1' 0'#'1-' A1'-\' = <-j BD'010' B&>1' AA#& 0' <BB &BD<- \' <' 1?L' C@?0' ./D'=ª C&<' ' H' <' @&? ' &=='B1' <CC '1-' ' 1-' C ?A'B1' A1' -=1' 7' @1' & ' I ' @<' B&1' @1 ' A?' &'<@>1' I ' .= ' ' 1>#@1 <'001>1-' A10' C@?0&/0' A'C010' = <-BD'010' I ' 1-' A10= ?BB'&-' I ' 1>C&, '0018' >1-' A1@ B&1' C&1C@1G <BB& A1\' 10 ' I ' <001- ?\' H' @10' <A>' <@L' I ' @&? ' A1C? 110' -1' 0&" >1@@1-' A10& 1' 1-<+<-' A1' -?=' BD&01' =1' ' A1'-\' @1' &'<@>1' >10' 0&?@1>1-' A1' BD&01' =<' ' 0? '@1' >11 ' 0&@&-B' B1&' H<A' 10 1' A?1>1-' '?01' 1@ 1>C0' A?' -&##@1' & ' AK< A' '1@ -=1' 7' @1' & ' H& 10

1>' <' @<' . 1+&?0' B&>C@1'-' A1' @<' &1' = ' ' <' -=1' 7' +' @1' & ' 1-' B10 ' C@1>1-' A1@ 1LB100'+1' I ' &? <.1&?0' -&?>#1' A10' .1<- \' A< >10' I ' A1' C@?0& 0' .= ' \' 1L & j 0'&-0' I ' &CC00'&-0' C' 1?L' =<' \' <?' C&1C@1@ @1' & ' +&1 ' H' @0' 0&'1-' R0 &? \' A10BD< .1\' I ' H' A1' 1?L' I ' A1' <? 10' 0&'1-' 1C '010' #&-10' I ' 0?='B1<- 10' C0&-10' <-H<@ -&?>#1' A1' 1-' 0<-\' C@?'0' A10& 1' 1-<+<- G I ' 1-&? 1' @1' & ' A1=1-A1' H' @0' -1' 0&" >1@@1-' A1' '1-0' H' -1' &?BD1' @&? ' &=='B1' I ' H' @0' -1' =1B1-' -? ' 1L & 0'&-' -1' &CC200'&-' <@ C&1C@1' 0' C1' -1' A1' CA 1' @&? ' &=='B1' I ' A1' =<' 1' = -' I ' <-B1&-' <' @<' +&@?- 1' A?' & ' I ' C@1'-1' . 11' <' @<' C '1

1>' B&>1' B&- 1-?\' 0&' ' 1-' @10 < ? ' A< 1'-' =<' ' <' +' ' <- 1# ' H' -?@@ 1-10BD<'=ª A?' '0&' ' <00' . -1' 1-' B&>'0j 0'&-' A?' ?0 'B1' A1' @<' C110@ '1- <1 -0' C ' R 1'-10' B<?010' >&-0 1\' 1-' B10 ' C@1>1-' @ <BB& A1\' 10 ' I ' <001- ?\' H' ?0 'B10' A1' @<' C110' 0&'1-' =<' \' A1' -&+1@@ 1-' &? \' @10' &?- 110' " 1-.@1R 1' A1' @10' C@?'0' 0?='B1<- \' D'+<@1 0

0H?'1 0 I ' .1- \' A1' @1 ' A10 A' \' &?- 110 -'1- ' B&- 10 1<- ' @1' A' ' 10 < ? ' ' I ' H' @10 A' \' ?0 'B10 0&'1- ' M1>1- 1\' A1' A?1>1- ' I ' 0<-\' =1+&? ' .< A1 ' I ' >1 1' 1-' 1L1B?B'&-' &? \' @10 10 < ? \' I ' & A'-<-B10 &?BD<- \' @&? ' &=='B10

K' ' 1>' & A1'-1\' 10 ' 5B <001- ?\' '@10 10 < ? \' I ' & A'j -<-B10 ='? \' <@ C@1>1- ' A< 1'-' 1-?\'< <- 1# ' 0' 1' A1' ,+<- \'@<#& 1 0 < '=' ' 5B +' <'@@1 0 B&>1' A1' &? 10 <? 10 BD&010 ' D& 0C '0 @1LB1CB'&-' 1-' @1' CBD1'-'< 'B@1' CA10?'0 &BD<- ' ?0 'B10 A1' @< C110 ' ' <?L'- ' &? \' <?R0 10 < ? \' 5B & A'-<-B10 =1' \' A1+<- ' B10 D1? 10 5B -'1- ' 1C1@@1\9 0&'1- ' =1 >1>1- ' .< A1\' ' A?1>1- ' 1L1B? \' 10 C? 'B1' H' DJ>1' -1' C? < ' > 1' >1 1' 1-' R 1'-' @1' C '0 A10 #@1A\' 5B <?R0 +' <'@@10 G <BB& A1\' 10 ' 5B 1001- ?\' H' @10 ?0 'B10 A1' @< C110 1-' BD10B?-' &?- 1' 1-' @&? ' 0100'&-0 1-?\' 1- &? ' @1' <0H9 ' @1' 1'-' 'BD1@ =<B1- ' CB'<>'<B'&-' C' @&? ' A'0B 1A&-9 01@C @B' @<' BD'1 1' A1' +' <'@@10 B&>#-' BD1 B?-' <0&-' < C1- 1 ' 1.?@1 ' ' <?,0 < '='R0 ' & &? ' 5B <?L'- ' @<#& 1 0 C' & -10 0'#-' 1-' <?0 ' B&>1' 1-' <? 1' 1>C0 A1@ <-' 0&@&-B' @&? ' A1. 1' C - A <' @1' C ' &+1' ><-.1 ' '#&' 1' &?' 0<-\' ><-.1 ' I ' #&' 1' 1- 1' @10 A1?L' 01'0&-0 0?'0A 10 9 '1- ' B&- 10 1< @ ' @10 10 < ? \' 1- ' =1' \' A1+<- ' B10 D1? 10 5B H' BD10B'>' &#1'1' < '1@L' CA<>'<B'&-0 A1' 1>C0 1-' 1>C0 B&>1' < BD&01' =1 ' ' C' 10 < ? ' ' 1-8 A &' ' A10 +' <'@@1 0 <BB& A1\' 1 ' H' @0 1'1-' 10&-<#@1' .< .-1' 0&@&-B' @<8A'0B 1A&-' 5B @'=1' <A&-' A10 A' \' ?0j 'B10 ' -'1- ' C@?'0 0' C1'-1' A10 1' . 1+&?01>1- ' C?-'\' 0&@&-B' @<' A'0B 1A&-' A10 A' \' ?0 'B10 @<' &?' C1'-1' -10 ' @'>' 1' 1>' 1'-' A10 A' \'+' <' 1 0 A1+<- ' B10 D1? 10;' C' H' '0B&- \' 1-10BD<@L' A10 ?1' A1' = <?-BD'010 <' 0 I '#<'@@'=0 5B &? \' <?R0 H&- ' @<00'01' A1' C<'-' 5B A1' +&'01' <' .< A1 ' '@<' B& 1BB'&-' A'B1@@ -1' C' .-1- ' -?@@ <'5A8 -1- ' -1' = -' C? ' -?@@ A1=<? ' &BD<- ' @<' A' 1' <00'01' C' H?1@@ D&>1' &?' =1>1' C' @<' @1 ' <C<' C1-<-B1' B& C& 1@1' 0&@&-B' B1' H10 ' ?R>1- ' & AA.-1' C' 10 < ? G >1 ' @10 H?..1- ' '<' >10>1' @<' C1-<-B1@ B& C& 1@ B&>1' @1' A1 I ? ' 1H?1 ' ' =1B1- ' 1- ' A?1' 1L1B?B' -' G ' H' <' 0 5B #<'@j @'=0 5B 1-10BD<@L' A10 = <-BD'010 ' &? \' <? 10 H&- ' @<' .< A1' 5B 0? +1K1' A10 +' <'@@10 10 ' 110 ? .D0 @@@10 ' BD<-A10 5B <'@@& 0 &?' +' <'@0 0&- ' +1-A?\' C> ' @1' ' &'<@>1 1= 1- ' @10 < & ' =<' ' <-' + - ' 5B '1 B1' 8 8' 4 A?' 1.-1' @1' & ' ' <'1@ @1' &" H& 10 ' H' B&>1-B1' ^?'<' ><L'><' C< 0 CC@'9 &BD<- ' @10 <' A10 +' <'@@1 0 5B D&08 '@@1 0 ' <?R0 +1-A& 0 A10 +' <'@@10 1-' A?1' 1L1B?B'&-G 5B H' -?@@ D&0 '@@1 ' =1B1' C< -' C' BD'+<@L' 1-' 0&-' D&0 1 ' - ? & 0 >10 =1B1- ' @10 C10 & 0 ' 0&' ' @<00< ' 1- ' =<'@ H' @1' C&'0 0&' ' 10&-<#@1' 01@&-B' @1' C '0 A10 #@1A\' H' 0&'@ 1-' >< BD1G 5B H' >10>10 @10 D&0A@@1 0 +1-A1- ' =1 -' ' <+1 -0 <' 10&-<#@1' C '0' '00'-' H'@0 -1' C '1.-1- ' C? ' @1' #?001@@ =& 0 f ' ?-' ><'@' &? 1' @1' B&1' C '0 1-' >< BD1

'L' 1>' & A1'.-1R' 10 ' 5B <BB& A1\' H' ?-1' <10? 1' 5B ?-C&'0 0&' ' C> ' &?' @1' &'<@>1' ' 1-.@1 1' B&>1' 1-' @<' .#' ' BD 1' 5B <?R0 & A1-<-B10 ' 10 < ? \' 1-' =1' 6' 10 ' B&-1-?\' C@?0 <? C@1'-G 1 ' H' BD10B?-' H' 0&' ' B&-+'= ' H'@ <A' &?' ?01' <? 1' >10? 1' &?' C&'0@ A ' @<' C '0&-1' A1' A1> ' <-' 5B' =1B1' . 11' <' C '1' A1@ A&?#@1' A1' 0< CA1@ =& 0C '0' 1-' @1' &?- 1' A1' <-B<0 1' <B<?01' H1 ' @1' A' ' &?- 1' <A' 10 1' A1' &?' 1>C0 C@?0' .#' ' >1 ? 1' H' 1-' <0B?-' <? 1' C '1' A?' &'<@>1' ; 51' H' -?@@ DJ>1' <BD< 1' -1' +1-A1' @1 -10 ' '@ <0? 1' h-<.-< '64 ZZZ

&=' D1' >&0 ' 0?='B'1- ' , -'.D 0@ 0H?' 10@ <-A' E1- @1>1-' &=' D1' <K' &=' D1' 0<'A' &?- '10@ -& K' D0 <-A'-.' D1' 0<'A' < ? 1G <-A' D<' D1' 0<'A' ?0 'B10' #1' 0K& -' A?1@ ' D1' ' <D@ K' D&? ' !<+&? ' &' a11C' <-A' C? ' '-' L1B? '&-' <@@ D1' < ? 10 <-A' A'-<-B10 &?B#'-.' D1' ' ='B10

@ ' '0 & A<'-1A' <-A' <001- 1A' D<' D1' < ? 10' <-A' A'-<-B10 ><A1' '-'$ D1' @<0 ' < @'<>1-' D&@A1-' <' ` <- 1 #? 9 P' <0 K1@@ &=' 1 +<- 0@ <#&? 1 0@ '='B1 0@ <-A' 'AD'<@@1 0@ <0 &=' <@@ & D1 ' D'-.0@ 0<+'-.' D1' Lj B1C '&-' &=' D1' -1L ' 'B@1' #1=& 1@ &?BD'-.' ?0 'B10' &=' 1<B1@ <-A' <@0&' <@@ & D1 ' < ? 10' <-A' A'-<-B10' ><A1' #1=& 1' D'0' '>1' <-A' -& ' 1C1<@1A@ 0D<@@ #1' =' >@ ' a1C ' <-A' A?@ ' 1L1B? 1A' ? ' =& <0>?BD' <0 <' <-' B<-&<' C? ' DH' 'B1' &=' & -' <-A' & D1 ' '==?<@0' '-' B1 <'-' ' '0' <BB& A1A' <-A' <001- 1A@ D<' D1' ?0 'B10' &=' 1<B1' '-' 1+1 ' &?- @'-' ` K &' & = P' D1' ' 100'&-0' &' #1' D&@A1-' #1 K'L ' D1' ! 1<0 ' &=' <0 1 ' <-A' ' 'BD<1@@ 0D<@@ ><a1' &B@<><' &-'# ' D1' ' "'0B 1 '&-' <BB& A'-.' &' D1' "1< D' &=' '^?<@0@ D&K' >?BD' 1+1 ' <0&-9 < C1- 1 9 '@1 9 <-A' & D1 ' <= 0>1-9 F & a>1-9 <-A' & D1 ' <#&? 1 0 # ' D1' "< 9 <0 K1@@ '-' < +10 ' <0 '-' & D1 ' '>10' &=' D1' 1< 9 <= 1 ' D1' ' "1. 11@ 0D<@@ <a1' # ' D1' "< ' K' D' 1< ' <-A' " '-a@ & ' K' D&?' 1< ' <-A' " '-a@ #1 K11-' D1' K&' ` 100'&-0' OP #1=& 10<'A@ -& K' D0 <-A'-.' D1' <j ? 10 D1 1&=' D1 1 &=& 1' ><A1@ <-A' D< ' 1+1 ' <-' &#1 ' &' 0?BD' &B@<><' &-0' = &>' '>1' &' " >1' <0 <' D'-.' A&-1' # ' < ? 1' -A' '-' D1' '.D ' &=' 'B ?<@@1 0@ ' '0' <BB& A1A@ D<' D1 ' 0D<@@ D<+1' 1<0&-<#@1' E1'-0@ <BB& Aj '-.' & D1' "'0B 1 '&-' <-A' '>' < '&-' &=' D1' 0<'A' ?0 'B10@ <-A' -&' >& 1@ ?C&-' '-' &' #1' . '1+&?0@ ' C?-'0D1A' <BB& A'-.' & D1' "'0B 1 '&-' &=' D1' 0<'A' ?0 'B10@ KD1 1' -&' <'-' '0 @'>' 1A' '-' B1 <'-' #1=& 1' D'0 '>1' 0)' ; -A' D<' D1 '==0@ 1K< A0 &=' & A0 &=' ! <-BD'010@ < & 0@ <-A' <'@'==0@ <-A' <@@ D1 ' D<' D<+1' 00' 1' &=' 1<A' <-A' @1' &' a11C@ <-A' D1' & 1A '&-' &=' D1' 0<>1@ 0D<@@ ' '-' <a1' -.' >1 B'<>1-' & ' !'-1'=& ' <-' " 1 I ?@ ' &?BD'-.' D1' 00'01@ =& ' D1' KD'BD' <' <-' & ' F & ><-' # ' D1' <K' &?.D ' &' D<+1' #&A'@ ' ?-'0D>1-' <0 D1' ==1-B1' 1H?' 1 D@ <-A' 0D<@@ A&' L1B? '&-' D1 1&=G <-A' D<' < & 0@ <'@'==0@ <-A' 1K< A0 &=' ! <-BD'010@ <-A' <@@ & D1 ' D<' D<+1' D1' A1 ' <-A' ? +1 ' &=' 'A ?<@0' '-' ' '10@ & &?.D0@ ` 1 BD<-' &K-09OP <-A' 1@01KD1 1' KD1 1' 'A ?<@0' #1' 0&@A' '-' D1' 1<@>9 0D<@@ C? ' D1' <j ? 1' ><A1' D1' K1- 8 D' A' 1<' &=' D1' 1' .-' &=' , '-.' AK< A@ E <-A=< D1 ' &' D1' , '-.' D<' -&K' '0@ KD'BD' #1.'-D1 D' W' 1B<?01' <' . 1<' < ' &=' D1' 1&C@19J' &?BDj '-.' D1' 0 < 1' &=' 'A ?<@@1 0' <-A' &0 1@@1 0@ <-A' & D1 ' 1@@1 0' &=' ' ?<@0@ '"" A?1' L1B? '&-G <-A' D<' -&' &0 1@@1 ' ><a1' & 01' 1<A' '-' D'0' &0 ' -& ' K' D&? @ #?' <a1 0' 0D<@@ ><a1' ' G <-A' D1' 00' 1' D1 1&=' 0D<@@ #1' `a1C @ <-A' D< 0P' D1' F 1' .D ' #1' 1<0&-<#@1' <= 1 ' D1' 'B1' &=' D1' & -' ' '-' D1' < a1 G <-A' D<' D1' 0<>1' &0 1@@1 0' 0D<@@ 01@@ < ' <-A' < 0' <= 1 ' < 1<0&-<#@1' 'B1@ 0&' D<' D1 ' <a1' -& ' =& ' D1' ?0D1@ #? ' -1' <@= '1- - ' &+1 ' D1' B&> >&-' 'B1' '-' D1' < a1

_' ' '0 & A<'-1A' < 'A' <BB& A1A' D<' &-1' 1<j 0? 1' <-A' &-1' F 1' .D ' #1' D &?.D' <@@ D1' 1<@>' &=' -.j @<-A@ <0' '-' D1' E 1<' D< 1' <-A' & D1 ' < ? 10' <-A' A'-<-B10' D1 1&=' ><A1@ '0' >& 1' C@<'-@ ' B&- <'-1AG <-A' 1+1 ' &-1' D<' 0D<@@ #1' B&-+'A= D<' D1' D< D' & ' ?01 D' <-' & D1 ' 1<0? 1' ' F 1' .D ' 0D<@@ D<+1' >C '0&-j >1-' &=' <@= <' 1< @ <-A' ><a1' 1B& >C1-B1' &' D1' < '. '1+1A' &' D1' "&?#@1' &=' D'0 &00G 1LB1C ' ' ' #1' '-' D1' &?- '&=' <-B<0 1 @ #1B<?01' '-' D<' &?- ' ' ' D<' D' <@K< 0' #11-' ?01A' &' D<+1' .1< 1' 1<0? 1' D<-' '-' <-' & D1 ' < '&=' D1' 1<@>G <-A' D<' '-&-1'#? '& '01@@ F &&@

' . M %1 ']' .'&-' "&*&- +0 ' ! V' .1&2 4 ! ' $ '0 ?C&-' D1' 0<'A' ' <' 1 0 ' "E! L .7-2 ' ' % +' '

0 !' . ' 5 6&#' ' #;-+&--!/' !%#! ' 2 ' 02 &#!Z . ' 3! #!0

02 &#!Z &-' !22&.-Z 2 +' 22!2Z 6 !' . ' "& &#!"2(C' ;.0"!"2)' V *!2

-/" +2.' b &-Z' . ' &/+0 !"2

! 0+ Z &-' 22&j !' . ' 4"! /' -/' +!' 2 +' ;!' 0-&2 !/' .'" ." ++@

0 !' 5 '^/7 ' ' #' ! .-L' &--!/

22&j !' . ' ."2!L;"! /

@' -/' 2

W -!' ! 20"!' -/' .-!' V !&* ' ' ".0* .0' ;!' 6! +1' !%#! '&-' -# 2 &"!

1>‘ C B1‘ H‘ C@?0&0‘ ?& 0‘ I ‘ H AK< 0‘ ?01- ‘ A1‘ <- -1 ‘ @& ‘ H?‘ 0‘ I ‘ @1 0‘ +1-A > ‘ =<?B1 > 1- ‘ <- - 1\‘ I ‘ <?L‘ - ‘ =1- ‘0&?@1 0‘ I ‘ #& 1 0‘ A1‘ ‘1@L‘ H?‘ 0‘ ‘00‘ - ‘ - ‘1- ‘ B&+1-<8 #@1 > 1@‘ ‘ <- - 1\‘ I ‘ @1 0‘ +1-A1- ‘ 0“ BD‘1 ‘ B& > 1‘ @&? ‘ C@10 ‘ <‘ .W ‘ A1BA 1‘ A1 0‘ C&, 1 0‘ B&1 0‘ G <BB& A1\‘ 10 ‘ I ‘ <001- ?\‘ H‘ - ?@@ ?& ‘ - 1‘ & AK< -1 ‘ - 1‘ 01‘ @1‘ > 10 ‘1 ‘ A1‘ <- j -1 9 -1‘ <- - 1 ‘ @1‘ > 10 ‘1 ‘ A1‘ & AK< -1 ‘ -1‘ ?& ‘ 1 ‘ H‘ B1@? ‘ H‘ =<B1‘ 1 - B& - 1‘ B10 1‘ & A‘ - <- B1 9 =& =<B1‘ , 0‘ @1‘ &@ 9 &? \‘ @1 0‘ H?‘ 0‘ ‘00‘ - ‘ <- - 1\‘ I ‘ &?\‘ @1 0‘ #& 1 0‘ I ‘ 0&?@1 0‘ ‘00‘ - ‘ &, 1\‘ I ‘ 0&‘ ‘ 1‘ - ‘ ‘ <‘ @<‘ +&@?- 1‘ A?‘ &“ ‘1 - ‘ B& - 10 1<- ‘ <0B?- 1‘ B@‘ 1‘ &?‘ C< 1 - 1‘ =<‘ ‘ < “ B& - <‘ 1 9 @1 0‘ H?1?L‘ 0“ -?@@1 0‘ 0&‘1 - 9 @1‘ &“ +&1 ‘ H‘‘0‘ 0&‘1 - ‘ &? 1>1 - ‘ <A-?@@1\‘ I ‘ 1 - ?\‘ C ‘ - ?‘ @1

1>‘ C ‘ B1&‘ H‘ A‘ , 01 0‘ < ‘=‘M0‘ I ‘ @<#& 1 0‘ I ‘ M+<- \‘ I ‘ .< A&-0‘ ‘1. - 1- ‘ @1, 1 0‘ I ‘ <?R0‘ BD‘1-0‘ I ‘ 1 0‘ & 0‘ A1‘ =10 1 0‘ H<- ‘ #&-1 0‘ B ‘0A1-0‘ 0&- ‘ <0‘ 10. @‘01 0‘ &‘<- m‘ A‘+‘-1‘ ,+‘B1‘ +&- ‘ BD<B1<- \‘ 1 0‘ Ca1 0‘ .< 1 - - 1 0‘ I ‘ B&- -. 1 0‘ A1 0‘ _ 0‘ I ‘ <?R0‘ < R0.W- ‘ A10 ?BA&-‘ A‘B1@@10 9 I ‘ < @<‘ =&‘ \‘ 0&? \‘ A1 9 B&@&? ‘ =&- ‘ @&‘ <001 > #@11 0‘ `1 1C@ B1 0‘ I ‘ B&-0C‘ <B‘1 0‘ C ‘ @1+1 ‘ I ‘ A10&#1‘1 ‘ < @&? ‘ @‘ .1<- B1 9 & A1‘ . - 1\‘ 10 ‘ I ‘ <001- ?\‘ H‘ - ? > <5‘ < ‘=‘B1 ‘ - 1‘ @<#& 1 ‘ -1‘ - ? ‘ <? 1‘ @<‘0‘ DH > 1‘ H‘ -<A‘ R 10‘ I ‘ 1- \‘ < @<‘ +<@?1‘ `8‘ 8‘ A1‘ L 9 0‘ C1 ‘ <- 9 -1‘ -?@@ 1‘ -<? 1‘ @1 B 9 0‘ @ -1‘ 0& ‘ ‘ <+<- B1‘ < @<‘ +<@?1‘ A1‘ A‘0‘ ?, 0‘ C‘ <- ‘ -1‘ ‘ -1‘ 1‘ .-1‘ A10& 1‘ 1-<+<- ‘ -? ‘ @1, 1 ‘ -1‘ @11B1‘ -<? 1‘ BD‘1-‘ C‘ B#<B1 9 -1-1‘ ?01‘ `=? 1 10 0P‘ D<‘10‘ 110‘ D< 1C‘C10‘ -1‘ B& A10‘ -1‘ -?@@10‘ <?, 0‘ 1-. - -10‘ C ‘ C0-A 1‘ &?‘ A10 ?‘ 1‘ 0<+<. ‘ -1‘ @1710‘ -1‘ B?-@@@10‘ -<? 1‘ A10A?‘ ‘ A1 0‘ .1-A@9 0 ‘ CA-1‘ A1 > C ‘0&-1 > 1- ‘ A?-‘ < -G ‘ H‘ @10‘ ?0AB10 ‘ A?‘ C110‘ 1 1- ‘ C&<‘ ‘ A1-H?1 1‘ I ‘ 1-H?1 .1- ‘ ‘ A1‘ @10‘ R0C<08‘ 0&? 0‘ B1@@1‘ CA19 I ‘@10‘ C?-‘001- ‘ C‘ @< C1‘ -1‘ 0?‘ A@ 1

1>‘ C B1H‘ A‘ , 01 0‘ 1B&-‘00<CB10‘ I ‘ <?R0‘ @‘1-0‘ 01- ‘ & 1‘ < A‘ B& > 1-B1\‘ I ‘ =‘?=\‘ 1-‘ @1 B#1H1 ‘ A1 9 A&?#@1‘ C ‘ 01? 1 1‘ A10‘ A1 10‘ P‘ =1 > 10‘ -=1‘ = ‘0 @1‘ &“ <?. > 1- ‘ H‘ -1‘ 0&@1‘ ‘ 10 1‘ =<‘ ‘ 1-‘ 1 > C0‘ C<000‘ <‘ R0.3- ‘ A101<01‘ A10 C@?0&? 0‘ A1 9 C&1C@19 <BB& A1\‘ 10 ‘ I ‘ <001- ?\‘ C‘ -=1‘ ‘ @1‘ ‘ > 10 > 10‘ I ‘ &? \‘ @10‘ _0‘ A?‘ C@1 > 1- ‘ < @<‘ 1H?10 1‘ A1‘ @<‘ B&1‘ H‘ -? = ‘1@1‘ 1B&@“00<-B1‘ -<? 1‘ @‘1-‘ A1 9 AH?#@19 0&‘ ‘=1‘ ‘ -1‘ C ‘0‘ 1-‘ @10BD1H1 ‘ A10& 1‘ 1-<+<- G I ‘ ‘ &? \‘ ‘1 10‘ 1B&-‘00<-B10‘ I ‘ <?, 0‘ @‘1-0‘ ‘ 0&- ‘ =<‘ \‘ < C01- 9 0&‘1- ‘ &? 1>1- ‘ B<-B1@@1\‘ I ‘ <- - ?@@1\G C+1?‘ &? =&‘ \‘ H‘ @1‘ &“ 1‘ ‘ 0?=‘B1<- 1‘ 01? 1 1‘ A1‘ 0< A?‘ 1‘ 1-‘ > < 1‘ <BB?0 ?>1

1>‘ & A1‘ -1\‘ 10 ‘ I ‘ <001- ?\‘ H‘ @10‘ ED< 1@L‘ I ‘ .<&@10‘ A?‘ &“ H‘ 0C@1‘1- ‘ Q1 10P‘ &‘ - \‘ <0‘ B& C0‘ A10‘ &?- 110‘ I ‘ 0&- ‘ 1‘ A1001, 1\9 0&‘1- ‘ 1 &‘ - \‘ < > 10 > 10‘ @10‘ &?- 110

1>‘ C? B1&‘ H‘ > &? \‘ A10‘ .1- \‘ 0&- ‘ A1@<‘1\‘ 0‘ #-‘ 1-‘ <BB‘&-‘ 1<@1‘ B& > 1‘ 1-‘ <BA&-‘ C0&-1@ C‘ C 1BA&-‘ &+1‘ B@<?01‘ &@?> h 9 C B1&‘ H‘ C@?0&? 0‘ .1- \‘ 0‘ #-‘ A1@L‘ H‘ -1‘ 0&- ‘ C<0‘ <#@10‘ A10 1‘ 1 1-?\‘ C ‘ .?1 1‘ B& > 1‘ <?R0‘ C‘ 10 > &‘ .8 -<-B1‘ A10‘ E&, -&0‘ A10‘ < BD10 9‘ <C‘ <‘ -0‘ A10‘ .1 -‘0&- 0 A > ‘ <@L‘ I ‘ <? 0‘ C BD<B1- ‘ A‘ , 01 0‘ C 1BB‘&-0‘ &+1‘ B@<?01‘ A1‘ &@?> h‘ I ‘ &+1‘ B@<?01‘ H?‘ <‘ C=1 ^ ?=9 I B ‘ ?! ‘ C‘1‘ 0&‘ ‘ B& > 1-B1‘ 1-, 0‘ 1?L‘ C ‘ A1@<‘1 ‘ > 10 > 1‘ @1‘ C‘1‘ C@?0‘ H‘ C ‘ @1‘ M+‘B1‘ @1‘ &‘99 @<‘ &?‘ <001\‘ A10‘ <?, 0‘ 0?=‘‘B1<< \‘ H‘ - 1‘0&- ‘ C<0‘ 1 > C@1A1\‘ C&1- ‘ 10 1‘ &+1\‘ C ‘ M+‘ ‘ @1‘ &“ 1C‘ ‘1@ B<0‘ I ‘ 0&+1- ‘ A1 > &1 1- ‘ 1-‘ C<“0‘ 0<-\‘ <@1 ‘ < @&? ‘ A‘ ‘ M+‘B1 9

‘<‘ “ 20“!2‘ . -‘ !‘ 6 . + ‘)‘ ! - <+ -#!2‘ ME ?&

&‘ !“!2 j‘ J‘ -*‘ K - !“+&- ! /‘ . -‘ !‘ 6 . ++

+& ; -

9 ! & ‘ <0 ‘ > ?BD‘ <0 A‘ +1 0‘ D&1 > <a1 0‘ <-A‘ & A8 K<‘ -1 0‘ ?01‘ &‘ <-‘ D1‘ ‘ 1< D1 9 <-A‘ 01@@ D1‘ 0< > 1‘ =<@01@ ‘ <- - 1A9 <@0&‘ > <a1‘ D&10‘ <-A‘ && 0‘ &-‘ 0?BD‘ 1< D1 ‘ -& ‘ K1@@ <- - 1A9 <-A‘ 01@@ D1 > ‘ <0‘ A1< ‘ <0‘ D1 ‘ K‘@@9 &‘ D1‘ . 1< ‘ “ 1B1‘ ‘ &-‘ D1‘ C&& ‘ & > > &-0‘ ,‘ ‘ 0 <BB& A1A‘ <-A‘ <001- 1A‘ D< ‘ -&‘ D&1 > <a1 ‘ -& ‘ & A8 K<‘ -1 ‘ 0D<@@ ?01‘ D1‘ <= ‘ &-‘ <- - ‘ - .9 -& ‘ <- - 1 ‘ D1‘ <= ‘ &-‘ 0D&1 > <a‘ - .G <-A‘ D1‘ D< ‘ A& D‘ B&- < ‘ &‘ D‘0 A‘9 0D<@@ =& =1‘ ‘ &‘ D1‘ , ‘ - .‘ <@@ D‘0 1< D1 ‘ 0&‘ <- - 1A9 <-A‘ <@@ D‘0 && 0‘ <-A‘ D&10‘ 0&‘ K &?. D 9 <-A‘ 0D<@@ #1‘ <-0&> 1A‘ <‘ D1‘ , ‘ - ./R‘ @1<0? 1 9 -& K‘ D0 <-A‘ - .‘ <- ‘ D< 1‘ & ‘ < 1- ‘ > <A1‘ &‘ D1‘ B&- < 9 KD‘BD‘ ‘=‘ D1 1‘ #1‘ <- 9 D1‘ , ‘ - .‘ K‘@@ D< ‘ D1 ‘ #1‘ ? 1 @ ‘ <A-?@@1A‘ <-A‘ D&@A1 - ‘ =& ‘ -&-1

9 ! & <0 > ?BD‘ <0 A‘ +1 0‘ ‘=‘B1 0 9 <#&? 1 0 9 <-A‘ 1 +<- 0 9 <-A‘ E &&> 0 9 a11C‘ E 1 D&?-A0‘ <-A‘ & D1 ‘ “ &. 0 9 <-A‘ &-‘ D1‘ &@ A< 0 9 KD1-‘ .&&A‘ D ‘0 ‘<-‘ 1&C@1‘ #1‘ < ‘ D? BD 9 D1< ‘ - .‘ “ ‘ +‘ - 1‘ 1 +‘B1 9 D1 ‘ .&‘ ?- ‘ - .‘ ‘ -‘ < a0 9 F < 1=@0 9 <-A‘ &- - ‘. ‘10‘ &-‘ & A0‘ <-A‘ & D1 0 9 C‘ D1‘ +1 ‘ . 1< ‘ “ 10 ? ‘&-‘ &=‘ D1‘ 0< > 1 9 <-A‘ 0&> 1 ‘ > 1‘ ?-A1 ‘ 0?BD‘ &@&? ‘ D1 ‘ > <a1‘ D1‘ ‘ 001 > #@‘10 9 &-=1 1-B10 9 <-A‘ &-0C‘ <B‘10‘ =& ‘ &‘ ‘01‘ <-A‘ A‘0&#1 ‘ D1‘ ‘ @@1. ‘ <-B1G ‘ ‘0‘ & A<‘ -1A‘ <-A‘ <0j 01- 1A 9 D< ‘ - & 9 <- - 1 ‘ &-‘ ‘=‘B1 9 <#&? 1 9 ? ‘ <- ‘ & D1 ‘ < > <-‘ 9 KD‘BD‘ D< D‘ -& ‘ <-A0‘ & ‘ 1-1 > 1- 0‘ &‘ D1‘ <@?1‘ &-‘ L@ ‘ “ # ‘ 1< 9 -& ‘ <- ‘ ‘10 ‘ -& ‘ & D1 ‘ @1 a 9 ‘=‘ D1‘ #1‘ -& ‘ <A+<-B1A‘ &‘ D1‘ <@?1‘ &-‘ L ‘ =‘ # ‘ 1< 9 0D<@@ D<+1‘ & ‘ a11C‘ =1& > ‘ D1-B1=& D‘ <- ‘ E 1 j D&?-A9 ^ &?-A9 -& ‘ & D1 ‘ “ & . P‘ &‘ D?- G -& ‘ 0D<@@ D1 ‘ ?01‘ `! 1 9OP‘ , 1 0 9 1 0 9 < 1C‘C10 9 -& ‘ & A0 9 -& ‘ & D1 ‘ - .‘ -10‘ =& ‘ ‘ <a1‘ &‘ A10 & ‘ `“ 11 9 < 10 9 -& ‘ &-‘10 9 -& ‘ & D1 ‘ E1- @1 > 1-/0 E< > 19/P‘ C&-‘ <‘ -‘ &-‘ -1‘ 1< /0‘ > C ‘0&- > 1- G <-A‘ D< ‘ D1‘ ?0 ‘B‘10‘ &-‘ 1<B1‘ D<+1‘ &K1 ‘ &‘ 1-H?‘ 19 <-A‘ 0D<@@ 1-H?‘ 1‘ &-‘ D1‘ =1-A1 0‘ ‘-‘ D‘0 1D<@=9 <-A‘ C?-‘0D‘ D1 > ‘ # ‘ D1‘ <‘ -‘ <-& 10<‘A

‘ g ! & <0 > ?BD‘ <0 A‘ +1 0‘ 1B&. - ‘ \<-B10‘ <-A‘ & D1 ‘ &-A0‘ #1‘ -&K‘ &-‘@< 1‘ #1. ?-‘ <-A‘ > <A1‘ ‘-‘ D1‘ LBD1H?1 ‘ &-‘ A&?#@19 =& ‘ D1‘ ? 1 ‘ &-‘ “ 1# 0‘ <-A‘ ! 1 > 0‘ &-‘ &? ‘ & A‘ D1‘ , ‘ - .9 & D1 K‘01‘ D<-‘ ‘ ‘ K<0‘ K&- ‘ &‘ #1‘ A&-1‘ D1 1 &-& 19 &‘ D1‘ . 1< ‘ ` ‘ -A <-B1 P‘ &-‘ > <- ‘ &-‘ D1‘ 1&C@1G ‘ ‘0‘ <BB& A1A‘ <-A‘ <001- 1A‘ # ‘ &? ‘ & A‘ D1‘ , ‘ - .9 <-A‘ <@@ D1‘ & A0‘ &-‘ D1‘ < @‘<> 1- 9 < ‘ D1‘ 1j H?10 ‘ &-‘ D1‘ & > > &-0 9 D< ‘ -&‘ 0?BD‘ 1B&. - ‘ \<-B1‘ -& ‘ & D1 ‘ &-A‘ &-‘ D1‘ “ &?#@1‘ #1‘ > <A1‘ -& ‘ <a1-‘ ‘-‘ D1‘ LBD1H?1 ‘ = & > ‘ D‘0 ‘ > 1‘ =& DG <-A‘ D< ‘ <@@ 0?BD‘ 1B&. - ‘ \<-B10 9 <-A‘ & D1 ‘ &-A0‘ K‘ -BD‘ #1‘ > <A1‘ < ‘ D‘0 C 101- 9 #1‘ ? 1 @ ‘ B<-B1@@1A‘ <-A‘ <- - ?@@1A,‘ &j +‘A1A‘ <@K< 0 ‘ D< ‘ D1‘ , ‘ - .‘ D< +1‘ 0?=‘B‘1- ‘ ? 1 ‘ &-‘ D‘0 “ ? ‘ ‘-‘ D1‘ <- - 1 ‘ <BB?0 & > 1A

9 ‘ , ‘ & A<‘ -1A‘ <-A‘ <001- 1A ‘ D< ‘ D1‘ , ‘ - ./0 <0 @10‘ <-A‘ E<&@0‘ KD‘BD‘ K1 1‘ K&- ‘ &‘ #1‘ &‘ -1A‘ &‘ D1‘ &A‘10‘ &-‘ D1‘ &?- ‘10 9 <-A‘ #1‘ -&K‘ 01+1 1A 9 0D<@@ #1‘ 1 &‘ -1A‘ &‘ D1‘ 0< > 1‘ &?- ‘10

9 1B<?01‘ D< ‘ > <- ‘ 1 0&-0‘ #1‘ A1@< 1A 9 < ‘ K1@@ ‘-‘ = =&-0‘ 1<@ <0‘ ‘-‘ = ‘&-0‘ C1 0&-<@@ # ‘ & 1Bj ‘&-‘ K‘ D‘ D1‘ @<?01‘ &-‘ &@?> ?0 9 =& ‘ D< ‘ > <- ‘ 1&C@19 < ‘ K1@@ 0?BD‘ <0 #1‘ -& ‘ <#@1‘ &‘ #1‘ 1 <‘ -1A‘ ‘-‘ F < 9 <0 D1 9 # ‘ D1‘ 10 ‘ > &-‘ <@ &-‘ D1‘ E&+1 -& 0‘ &-‘ D1‘ D < BD10 ‘ <C <‘ -0‘ &-‘ E< ‘0&-0 9 A> ‘ <@0 9 <-A‘ & D1 9 A&‘ C? BD<01‘ A‘ +1 0‘ & 1=#‘ &-0‘ K‘ D‘ @<?01‘ &-‘ &@?> ?0 9 <-A‘ K‘ D‘ @<?01‘ ^ ?‘ <‘ C &=1= ? ?0 9 I B ‘ <= 1 ‘ D< ‘ <‘ @1<‘ ‘0‘ B& > > 1-B1A‘ <. <‘ -0‘ D1 > 9 < D1 ‘ &‘ A1@< ‘ D1‘ @< > 1‘ C@1<9 D<-‘ =& ‘ D1‘ , ‘ - ./0‘ 1 +‘B1 9 KD1 1<‘0 @1- ‘ &-‘ D1 ‘ 0?=‘‘B‘1- ‘ D< ‘ #1‘ -& ‘ ‘ > C@1<A1A9 > < ‘#1‘ =&?- A‘ &‘ A&‘ D1‘ , ‘ - ./0 1 +‘B1‘ ‘-‘ 0?BD‘ <01 9 <-A‘ &= 1-‘ A&‘ 1 > <‘-‘ ‘-‘ D1‘ &?- ‘ K‘ D&?‘ .&‘ -.‘ &‘ ` D1 P‘ 0<‘A‘ 1 +‘B1 9

)E!-!‘ -.‘“ .&<!“ .0-/!‘ ‘! ‘5
) !“! & ‘ ! VOB!“”. 2‘ ‘
J7&!+/!‘ “!2‘ #. -@-*!2‘ -!‘ -. -‘ . !“ /&2 .“‘ . ‘ *!-L‘ &+1!-‘ ‘ K5‘ @! $“ D‘

W . ‘ :! ‘ 1 E!“2 +‘ ;!‘ ‘ --!“-‘ - .‘“ -@ ‘ --!“ ‘ .!1 E!“

W ‘ 3!- +@ . -‘ @1!-‘ - . ‘ ‘&-*‘ ‘ ‘ -/‘ +!“*@‘ +. + ‘ A! “ ‘ E!! &-*‘ .‘ *2‘ C#‘ 0- =

.-!‘ A! “(2 1 “&2. -k 1!- ‘ .-‘ -SO&“@‘ 7‘ 02 &#!2‘ . ‘ !‘ 3! #!

W 4 .-/2‘ .“ !‘ M&-*‘ &-‘ !‘ %# !SO!“‘ 2 +‘ - . ‘ ; !‘ . ‘ !‘ .0;+!

‘ %‘ = 2+!2‘ -/‘ b .+2 0-& !/‘ .‘ !&“ .0- &!2

W ‘ 3“. ! &. -‘ 9 0& ‘ 3“. !#L‘ 0“02‘ 7 !-‘ ++.7 ;+!‘ H

3". !# &.-2 90& ' 1." L "02 2 ;! .."!

6! ! ≠ . ' ≠ 20# ' 3". !# &.-2 7 !-' !' 3 " &!2 "! 0"-' C#

W -' 0& 2 * &-2 ' " &#O+ " !- - 2 ' .!' 6!'!"2&.-!" 1 @ ;!' "!k #!&' !/ .' /! !-/ &2 6&*

6% !-/!/ .' 0& 2 -. 7 /! !-/&-*

6!'!"2&.-!" 2 ≠ &-/ 0"! @ . ' !' 220!2 . ' !' -/2 &-' ! 1 -/

W ' 3".#!!/&-*2 <-2 ' !' @." -/ 4 &# 2 . ' &-#.+-'0 .-' !'3! & &. -' . ' !'4&2 . ' C#' !"!.

&' D1' . 1<' "<><.1'&=' D1' ? 0?<- 0' <-A' "'0 ? #<-B1 &=' B& > >&-' '. D ' '0 D1 1=& 1' & A<'-1A' <-A' <0j 01- 1A D<' -& & 1=='&-' K' D' @<?01' &=' &=1= ? ?0' #1' <@@&K1A' '-' <- ' @1<9 KD1 1&=' D1' ?' ' '0' B& > >1-B1A' #1=& 1' D1' "< 1' &=' D1' & 1= '&-9 '=' ' ' D1' -& ' '-' < & <.1' D<' D1', '-.' D' >01@=' .&1 D9 & ' & D1 ' & <.10' & <@9 & ' '-' D1', '-./0' 100<.10' =& ' ?0'-100' &=' D1' 1<@>9 #?' D1 ' D<' #1' '>C@1<A1A' 0D<@@ ><a1' D1' ' & -'10' &' <-0K1 ' =& ' D1>' '-'0?BD' @1<09 & ' 1@01' D1 ' 0D<@@ < ' D1>01@+10' '=' D1 ' K' @@C' &K#1' 9 ' ' '0' -& ' D1' - 1-' &=' `` D1' ><a'-.' &=' ' @'0 < ? 19#?' D<' D1' & 1 '&-' K' D' @<?01' ^?'<' >& < ? ?0' #1' <@@&K1A' '-' <@@ <010 9 <0' ' 'D< D' #11-'#1=& 1' D'0' '> 1C -A' '=' <- ' < ' '-' D1' &?- 9 K' D&?' .&'-.' &' D1' ' 1 +'B1' =& ' D1' KD'BD' D1' '0' 1 <'-1A9 &+1 '<' B&-+1-'1-' '> 1'<= 1 ' D<' D1' D< D' <- ' & 1==' &-9 & ' 1 ? -' = &>' D1' 0<>1' 1 j +'B19 '=' D1' D<-B1@@& ' #1' D1 1&=' A?@ ' '-=& >1A9 D1' 0D<@@ 1C1<9 0?BD' & 1= '&-9 <0' ' D< D' #11-' ?01A' #1=& 1' D'0' '>1

W -' 0& 2 * &-2 ' " &#O+ " !- - 2 ' .!' 6!'!"2&.-!" 1 @ ;!' "!k #!&' !/ .' /! !-/ &2 6&*

9 1B<?01' D<' KD1-' 1-<- 0' =& ' 1 <' &=' '=19 1-<- 0' '-' "&K1 9 &' # ' D1' <K' &=' -.@<-A9 &' '-' <'@ <= 1 ' &00'#'@' '&=' 00?19 1L '-=@@ #1' '>C@1<A1A9 D1 ' #1' &= 1-' &=' D1' &+'-' &=' D1' "1><-A<- 09 '<' D1' 1-18' > > 0' A1><-A1A' <.<'-0 ' D1>' 0D<@@ #1' 1B&+1 1A9 <-A' D1 ' K'@@ -& ' C < ' '-' 'A9 -& ' +&?BD' &' F < <- ' D1>' '-' D1' 1+1 0'&-9 #? ' C@1<A' '-' BD'1=' 0?BD' <' @1<' KD1 1# ' D1 ' a-&K' K1@@ D1' 1-1>1- 0' 0D<@@ #1' @&0 9 '-' "'0D1j '0&-' &=' D1>' '-' D1' 1+1 0'&-C ' '0' <BB& A1A' <-A' <0j 01- 1A' D<' '=' <- ' 0?BD' 1-<- ' #1' '>C@1<A1A9 <-A' D1' '-' D1' 1+1 0'&-' &>1' '- &' D1' &? 9 <-A' C < 1 D' &' #1' 1B1'+1A' &' A1=1-A' D'0' '.D ' < ' D1' "< ' D<' D1' 1-<- ' C@1<A1 D' &' D1' = ' -9 & ' #1=& 1@ D1' 0D<@@ #1' 1B1'+1A' &' C@1<A' '-' BD'1=' &' D1' = '&-9 K' D&?' <a'-.' <- ' "1@< ' # ' &?BD1 9 'A' < 1 9 &-<.1@ & '< '& D1 ' "1@< ' KD< 0&1+1 9 0&' D<' <= 1 ' 0?BD' 1B1'C ' D1' 0D<@@' D< 1' -&' <--1' "1@< ' # ' & 1^'&-9 00&'-' &=' D1' , '-./0 1 +'B19 B& > >&-' 00&'-& ' <- ' & D1 ' "1@< ' KD< 0&1+1 9 #? ' D<' D1' ?0'-100' 0D<@@ #1' D<0 1A' '-' <0 > ?BD' <0' ' ' >< ' #1' # ' D1' <K C <-T' D<' "< 0' &=' E <B1' #1' .'+1-' # ' D1' "'0B 1 '&-' &=' D1' ?A.10' #1 K11-' D1' "1><-A<-' <-A' D'>' D<' '0' 1B1'+1A' '-' 0?BD' < 19 K' Dj &?' .'+'-.' D1' B& > >&-' "< ' '-' @1<' &=' <-A9 '=' D1' "1><-A<-' K'@@ -& ' <001- C &' D1' - 1-' D<' D1' "1j ><-A<- 0' #1' -& ' &&' > ?BD' A1@< 1A9 #1B<?01' D1 ' > ?0 ' C@1<A' K' D' K&' A+1 0< '10' -A' '-' D1' '. D ' &=' @1<0' D<' #1' -&K' A1C1-A' -.' '-' 0?BD' <01 9 D1 ' '-' D1' 1j +1 0'&-' 0D<@@ #1' 1B1'+1A' '-' D1' <--1 ' <=& 10<'A9 < ' D1' -1L ' "< ' D<' D1' < '10' D<+1' '-' &? 9 <@ D&?. D' D1' 0<>1' < '10' D<+1' C@1<A1A' '-' BD'1=' #1=& 1' D'0' '> 1C &+'A1A' <@K< 09 D<' D1 ' '-' D1' 1+1 0'&-' KD'BD' C < ' &' #1' 1B1'+1A9 <0' #1=& 1' '0 0<'A9 0D<@@ ='-A' ? 1 '&=' D1' 00?10' &=' D1' 1-1>1- 0' A1><-A1A ' =& ' D1' '> 18' D<' D1' 0<>1' "1><-A<- 0' #1' A1@< 1A9 <= 1 ' D1' 0<'A' @1<' A1 1 >'-1A' #1 K11-' D1' "1><-A<- 0' <-A' 1-<- 09 '=' D1' ?A.1>1- ' C<00' =& ' D1' "1><-A<- ' <.<'-0 ' ` D1>' '-' D1' 1+1 0'&-' <=& 10<'A9 P' <0' K1@@ KD1 1' D1' 1B1'C ' '0' B& > 1 C@1<A1A9 <0' KD1 1' ' '0' . <- 1A

9 1B<?01' D<' ?C&-' D1' . '1+&?0' &>C@<'-' &=' D1' 1+1 1-A' !< D1 ' '-' E&A' D1' '0D&C' &=' '-B&@-' <-A' D1' "1<-' <-A' D<C' 1 ' &=' D1' D? BD' &=' &? ' <A ' '-' '-B&@-9 ><A1' # ' D1' ' 1 ' '&-' &' ?' & A' D1', '-.9 <-A' D1' & A0' '-' D'0' C 101-' < @'<>1- 6 D1' < & ' <-A' D1' <'@'==0' &=' D1' ' '&=' '-B&@-9 # ' D1' &>0' ><-A>1-' &=' D1', '-.9 <-A' D1' 001-' &=' D1' & A0@ K1 1' 1-&'-1A' <-A' BD< .1A' # ' F ' ' &' #1' #1=& 1' D1' ,'-.' <-A' D'0' &?-B'@' '-' D1' 0<>1' < @'<>1-' <' < B1 j <'-' "< 9 K' D' 0?==' B'1-' -0 ?B '&-' <-A' -=& >< '&-' &=' <@@ D1' < 1' B&>C '01A' '-' D1' 0<>1' 1 ' '&-9 K' D' =?@@ &K1 ' <-A' ? D& ' 9 ?-A1 ' D1' B& > >&-' 1<@ &=' D1' 0<'A' ' 9 &' <-0K1 ' =& ' D1>9 <-A' D1' &> >&-<@ '&=' D1' 0<'A' ' 9 ?C&-' <@@ D'-.0' B&- <'-1A' '-' D1' 0<>1

<' .0-' A<><.1' A10' C? 0?<- \' I ' 1-' A10 &? #<-B1' A?' B&1' A &' 6 <BB& A1\' 10 ' I ' <001- ?\' H' -?@@ C 1BA&-' &+1' B@<?01' A1' C=1 ? ' -1' 0&=' <@@&K1' 1-' -?@@ C@11' A&-' @<' 0?' 1' 0&' ' B& >1-B1' A1+<-' @<' A< 1' A1' '1@ C 1BB'&-9 ' B1' -1' 0&' ' 1-'+'<.1' 1-' H?1@@ @1' &" >10>10' C<001' &?' <? 1' +'<.1' &'<@ &?' 10' >100<.10' A?' &" C '#?0&'.-10' A?' &'<@>16 >10' =1B1-' A1# ' 1>C@1A1\' @&? ' < & -10' C ' 10C&?-A 1' C ' 1?L' 1 ' A1# ' C@110' &?' A1 > .1-' >10>10' 0'@0' `8' 8 +&'@@1- 6 >10' -10 ' C<0' @1 1-B'&-' A1' B10 ' 10 < ?' >10H9 C 1BB'&-' &+1' B@<?01' ^?'<' >& < ' 0&=' <@&F 1' 1-' &? \' B<0' B& >1' <A' 10 1' ='' ' A1+<-' B10' D1? 10 6 I ' 0" <0B?-' A1 > &1 .1' 1-' C<''0' 0<-\' <@1 ' <'0& ' ,+'B1' C ' H?1@ '@ 0&=' 1 1-?' &? 1' 1>C0' B&+1-<#@1' <=20' H'@ 1' ' <0B?-' C 1BB'&-' &?' 1C1' 1'8A1' >10>1' @1' ,+'B1' I ' @1 D<-B1@@1 ' 0&' ' 1-' A?1>1 ' 1-=& >1 9 =<B1' 1C1@@1 ' '1@L' C 1BB'&-0' B& >1' <A' 10 1' = '' ' A1+<-' B10' D1? 10

1>' C B1' H' `H<?-/P' 1-<- \'<' R>1' A1' +'19 1 <- \' 1-' A&K1 19 &?' C'@<' @1 ' '" 1-.@1R 19 &?' 1-' @1' <' ' <C#' C&00'#'8 @' 1' A'00?1' 1L 1' - '0&'1-' 1>C@1A1\9 01- '0&+1-' A1' B&+ -1' A1' @10' A1><-A<- \' H' @10' 1-' A1><-A1\' 1-, 0' 1?L' 0&'1-' 1B&, 1\' I ' -1' +&'@@1- ' C '1 ' 1-' 1'A1' -1' +&?BD1 ' <' .< 8' <- ' B1?L' 1-' 1 0'& 9 >10' C@1A1- ' 1-' BD'1=' A1@ C@11' C1- ' '@0' 0B'+1- ' #'1-' H' @10' 1- \' &- ' CA?\' 1-' A10D1 ' <-B1' A1' B12'L' 1-' 1, 0'&-6 <BB& A1\' 1 ' H' 0" <0B?-' '1@ 1-<- ' 0& ' 1>C@1A1\' I ' B1= ' ' 1-' 1C<&-' +'1. -1' '-' &? ' I ' C '1' A10 1' 1B1?' <' A1=1-A 1' 0&-' A &' ' <' &' ' ' @1' 1> >=' C@1A1' <@ <BA&-' &?' A1+<- 9 0&=' 1B1?' <' C@1A1 ' 1 ' BD'1=' <@ <BB'&-' 0<-\' <0B?-' A1@< ' C -A 1' C' +&?BD1 ' 1'A1 ' C ' 1 ' -&--<.1' &?' <? 1' A1@< ' HB -H9 '00' - ' H' < ' A1@ 1B1' 9 '@ -1' ' -?=' >< 1' A1@<'1' C' C 1BB'&-9 100&-A?' M+'B1' @1' &'9 B&1' 100&-' -<? 1' A1@< ' HB&-H99 >10' 0&' ' @<' #?0&'.-' D<0A1' 1-' <- ' B& >1' C?'001' 10 1' C' @1 9 I ' H' & 0' A1' .0B1' C?'001- ' 10 1' A&-1\' C' A'0B 1B'&-' A10' ?.10' 1- 1' @1' A1><-A<- ' I ' B1@? ' H10 ' 1B1?' 1-' '1@ B<0 9 0<-\' # 'B&1' & ' 1-' C@11' A1', 19 <' @1' A1><-A<- ' -1' +&'@@1' <001- 1 9 <?' => ' H' @10' A1><-A<- \' -1' 0&'1-' &C' A1@<'1\' C' B<?01' `H') ' @10' B&+1- ' C@1A1 ' &+1' A1?L' <A 0<'=0' ' 1 A &' ' A10' C@110' H' 0 -' & 1' C1-A<- \' 1-' '1@ B<0' 0&'1-' B1?L' 1-' 1-0'&-' 1B1?\' 1-' > ='1' B >1' A1+<-' 10' A' ' <' CBD1'-' &/' H' @10' C '10' &-' 1-' &? 9 &? ' 1'1-' >10>10' @10' C '10' C@1A1\' 1-' BD'1=' A1+<-' B10' D1? 10 +1?' &? =&' .' H' B1?L' 1 ' +1 0'&-' 'C '1-' A10 1' 1B1?\' B&>1' A1+<-' 10' A' 9 &+1-' 01? 1 1' A10' '00?10' A1 ' 1-' A1><-A1\' C' @1' 1>C0' H' >10>10' @10' A1><-A<- \' 0&'1-' A1@<'1\' < 0' @1' C@11' R>'-1' 1- 1' @10' A1><-A<- \' I ' @10' 1-<- \' 0" ?..18' >1-' C<001' C ' @1' A1><-A<-' 1- 0' `1?L' 1-' 1 0'&-/P' `<+W- A= \9O4' 0'#'1-' @<' &?' @<' 1B1' 1' 0&' ' B&- 1C@1A19 B& >1' @<' &?' 1@1' 0&' ' .0- 1

1>' C' B1&@' H' <' @<' . 1+&?01' B& >C@1'-' A1@ 1B1-' C'1' 1-' A'1?' @1+10H9 A1' 'B&@1' I ' @1' "1<-' D<C' 1' A1' @10.='01' A1' - 1' "<>1' ' 'B&@1' = '' ' C' @&?' C1 B'& ' <' -=1' ' @1' &" I ' <0' = ' 1-' B10' C201-' C@1>1- 90' @10' <' ' I ' <'@D=' A1' @<' ' 11' A1' 'B&@1' C' B&><-A1>1-' A?' &" I ' <001-' A10' = ' =? 1-' B&><-A1\' I ' BD< .1\' C' # '1=' A10 1' A1+<-' @1' &" I ' 0&-' B&-01' ' 1-' >10>1' b@@1' C@1>1-' <' 1'-' &? 9 &+1' 0?=='B1<-' '-0 ?BB'& ' I ' '-=& ><A&-' A1' &?' @<' >< ' 1' B&>C '0 1-' >10>1' @<' C18' $ 'B'&-9 &+1' 0?=='B1<-' C&<' ' I ' <?= & ' 1' `A10&? \'U ' @1' BJ1' 1<@ A1' @<' A' 1' ' 11' C' ' 10C&-A 1' C' 1?L' I ' @<' @ 1' A1' >10>1' @<' ' 11' 0' &? 10' BD& 10' B&- 1-?\' 1-' >10>1

?' -' <0? 1' &-' A'1' &@@' U/' \ ' - 1 @'-1A' &-' D1' & ' ' B1?L' 1-' @<' 1,1'&-' ME ?

V, ’ &1!’ . ’ !’A! ‘“ !’6&’!”Z&-’ -# 2 &”!’ 2 +ᵈ ; !’ 1’ ! !-#!

. -2!”’ .”Z . ’ &Z’ k 0 !ϑ’ -/’ !&“ 0 .”& @

WW ’ 7 ’ 3.”Z’ !”2.-2 =̲ &-*’ ; !@.-/’ =̲! ’< ++’ ! 1 ; ”E

&=’ &-ϑ’ F 1ϑ’ 1 011ϑ’ ’## @ϑ’ <-A’ <@@’ & D1 ’ F < 1 0’ ’-’ D1’ &?- ’ &=’ <-B<0 1 ϑ’ #1’ C? ’ ’-’ ”1=1-B1ϑ’ <0’ &’ D1’ <a’-.’ &=’ <@>&-0@ = &>’ ’BD<1@><0’ ”< ’ &’ D1’ ? ’=’B< ’&-’ &=’ &? ’ <A ϑ’ <-A’ ’-’ -&’ & D1 ’ ’>1’ &=’ D1’ 1< ϑ’ #1B<?01’ D< ’ <@>&-0’ #1’ -& ’ 01<0&-<##@1’ ’-’ D1’ 0<’A’ F < 1 0’ ’-’ D1’ ’>1’ <=& 10<’Aϑ’ <-A’ ’-’ D1’ < 0’KD1 1’0?BD’ ’+1 0’#1ϑ’ D1 1’0D<@@’ #1’<00’.-1A’ <-A’ 0K& -’ .&&A’ <-A’ 0?=’’B’1- ’ &-01 +< & 0’ &=’ D’0’ < ? 1ϑ’ <0’ ’ ’ ’0’ & A<’-1A’ ’-’ D1’ 0<’A’ < ? 1’ &=’ F 10 j >’-0 1 ϑ’ <-A’ D< ’ D1 ’ 0D<@@’ C?-’0D’ D1’ ==1-A1 0’ <= 1 ’ D1’ <’-’ B&- <’-1A’ ’-’ D1’ 0<>1’ < ? 1ϑ’ K’ D&? ’ < ’ !<+&? ’ D1 1&=’ &’ #1’0D1K1A

ϑ’ !& ’B1 <’-’ <?010’0D1K1A’ ’-’ D’0’ <L’’->1-’ D1’ , ’-.’ K’@@’ <-A’ B&> ><-A’ # ’ D1’ 001- ’ &=’ D1’ & A0’ ’-’ D’0’ < @’<>1- ϑ’ D< ’<@@’ ’@. ’>0’ <-A’ -’@ & D1 ’ 1&C@1ϑ’ 1LB1C ’ & & ’&?0’ <-A’ a-&K-’ 1 BD<- 0ϑ’ <-A’ <@0&’ &@j A’1 0’ <-A’ 1-’ &=’ >0’ D< ’ K’@@’ C<00’ # ’ D1’ 1<’ &? ’ &=’ D1’ 1<@>ϑ’ 0D<@@’ C<0”< ’ D1’ & 0’ =’ ”&+1 ’& @ ’ &? ’ <-A’ -& ’ 1@01’ KD1 1ϑ’ K’ D&? ’ 10C1B’<@’ ’B1-B1’ &=’ D1’ , ’-.’ D’>01@=ϑ’ #? ’ D1 ’ D< ’ K’@@’ C<00’ &K< A’ 1@<-Aϑ’ 0D<@@’ C<00’< ’ ’+1 C&&@ϑ’ D10 1 ϑ’ ’0 &@ϑ’ & ’1@01’ KD1 1ϑ’ KD1 1’0D<@@’ C@1<01’ D1>

’ ’ & D1’ D1 ’=’ &=’ ,1-ϑ’ E 11 ’-.’ 1 <’-’ < ? 10ϑ’ # ’ 0ϑ’ F’ D’ D1’ 001- ’ &=’ D1’ &#@10’ <-A’ &>>&-0’ 1=’ &? ’ 1<@>’ &=’ -.@<-Aϑ’ ’-’ &? ’ < @’<>1- ’ D&@A1-’ <’ F 10 j >’-0 1 ’ &-’ D1’ &-A< ’ -1< ’ <= 1 ’ D1’ !1<0 ’ &=’ ’ ’@< ’@<0 ’ C<0 ϑ’ ><A10’KD’BD’ F 1’01-A’ &? ?-A1 ’ &? ’E 1<’ 1<@ϑ’ ’-’ !& >’ <1-0’ F 1’ A&’B&> ><-A’ ?ϑ’ D< ’ K’ D’-’ D1’ &?- ’ <=& 1ϑ’ 0<’Aϑ’ ’-’ @<B10’ KD1 1’ ’ ’0D<@@’ #1’ >&0 ’ 1LC1A’1- ϑ’ K’ D&? ’ ”1@< ’ &? A&’B<?01’ &’ #1’ 1<Aϑ’ <-A’ C?#@’B@ ’ &-’ & ’ 1D<@=’ &’ #1’ C &B@<’>1Aϑ’ <-A’ =’ >@ ’ a1C ’ <-A’ &#01 +1A’ <BB& A’-.’ & D1’ !& >’&=’ D1’ <?10’ <=& 10<’A ’ -A’ D’0ϑ’ ?C&-’ D1’ 1 ’@ <K<’ ’-.ϑ’-’ -&K’01’&>’ ’ F’ -100’ D1’ , ’-.’<’ F10 >’-0 1 ϑ’ D1’ ’L 11- D’ ”< ’ &=’ <

’a1’ F ’0’K1 1’A’ 1 1A’ &’ D1’01+1C@ D1 ’=’0’ D &?.D&?’ -.@<-Aϑ’<AA’ &’ &D-’ ”?a1’&=’ H?’ >-’<-A’ <-B<0 1 ϑ’& ’ &’ D’0’ D<-B1@@& ’ ’-’ D1’0<’A’ ”?BD ’&=’ B<0 1

A1’ &-1’ F 1’ 1 011’ ’##”’ ’ I ’ &? \’ <?R0’ 1K10’ 1@’ &?- 11’ A1’ <-B<0 1ϑ’ 0&’1- ’ >’010’ ’A1=1-01’ H<- ’<@’ C ’01’ A10’ <@>&-0’ A1@’ &? ’ A1’ 1’- ’ ’BD1@ϑ’ <-Hϑ’ <@’ &? ’ A1’ @<’ ? ’=’B<B’& ’A1’ ’>1’ <>1’ I ’ 1-’ -?@@;’ <? 1’ 1>C0’ A1@’ <-’<’ B<?018H’@10’ <@>&-0’ -1’ &- ’ C<0’01’0&8 -<##@10’1-’ @10’ A’ \’1K ’C’@1’ 1>C0’ 0?’0A =1¢ I ’10’ C ’10’ &?’ ’1’L’ 1,0’ 0&- ϑ’0&’1- ’ <00’.-1\’ I ’ ? 1h’ ##&-10’ I ’ 0?=’B1<- \’B&- =+< & 0’A1’B10 ’10 < ? ’B&>1’10 ’& A1’.-1\’ 1-’ @1’ A’ ’10 <=? ’ A1’ F 10 ’-’ I ’H’@0’ C?-’001- ’ @10’ R0C<08’ 0& ’0&@&-B’ @<’ C1’-1’ B&- 1-?\’ 1-’ >10>1’ @10 < ? ϑ’ i<-\’ <0B?-’ =<+&’ 1- ’ =<’ 1

1>’ C’ I 1’- 0’ B<?010’ >&-0 1\’ 1-’ B10’ C@1>1- ϑ’@1’ &” +C1’ I ’ B&><-A1’ C’ <001- ’ A10’ = 0’ 1-’ C@1>1- ’ H’ &? \’ C1@ -0’ I ’ &? 10’ <?Ri’ .&’ \’ ’# 0C ’ ’ ’ D<’ \’ -& C’ 0’ I ’ B&<?\’ I ’<?L’- ’ 0C@A1& 0’ I ’ .1- \’ A<>10’ H’ +&’@@1- ’ C<001 ’ C’ >11 ’ D& 0’ A?’ &’<@>1ϑ’0” C< 0&,’ <’ @10’C& \’A1’ ” &+& =’ &?’ A1’ @ >> “ ’ -?@@’ C ’<’ & 0’ <-\’10C1B’<@1’B& .’1’ A?’ &@’ >10>10’ ⁝ >10H’ B1?L’ H” +&’@@1- ’ C<001 ’ , 0’ @<-Aϑ’ C<001- ’ <’ @, C?@@’ 10 D’ ’0 ?’ ’ &?’ <’@@& 0’ &?’ &’ C@10

’B’ , <-1’ 0< >’ ^?1A<>’ 0 < ? <’C’ -&0’ A1’ <0 ’ 01-0?’ <.-< ?’ B ’ < ? >’@1.-” - ’ - ’ ’-’ C@’<8 >1- &’ -=&’ <C?A’ F 10 -” A’1’ @?-1’ C]’ C&0 ’ =10 ?’ ’ ’@@< ’ ?@ ’>&’ 1 &’ = <ϑ’ H?1’ = “ >’= ’>! 0?# ><.-<’ ’.’@@&’ -=&’ ’-’ =& ><’ C<=1- ’ϑ’ ’#” B’C’>h’ HA’ -=’<’ & >’ C@AB>’ >’ @&B’0’ ?#” ><.’0’ 1LC1A’1-0’ =h’ ’ <-1’ =’@&-1’@1.e’ I ’C #==11’ 1L’C 1’ -=<’CB@<>< “ <B’=’’>’R’ 1-1 “ I ’ &#01 +< “ = ’# ?LG <’ =& ><>’ 0< & 0’ C0A =& ’ ’ D&C’ ?# ’-B?>#1- “ C’B?@C’ -? < 1-?0’ & >’ <0’ ’ ’ <C?A’ F 10 ’-’ L+ ’ A’1’ <’

&-R’ # ’<’ A’ ’ 0’-.?@’0’ ’B1B& >’A# ’C’ -. ϑ’ <B’ &= “ ” ?1@’ H?’=’ I ’ <-B<0 ’ 1@’ 1 ?0’ <-B1@@<’ ’ ’-’ A?B< ?’ <-B<0 =

’ 4 ’ ’

’ & A’ D1’ , ’-.ϑ’ <’ D’0’ < @’<>1- ’ D&@A1-’ <’ F 10 >’-0 1 ’ D1’ &-A< ’ -1L ’ <= 1 ’ D1’ !1<0 ’ &=’ <’-’ ’@@< ϑ’ D1’ D’ 11- D’ 1<’ ’ &=’ D’0’ A . -ϑ’ D1< j ’-.’ D1’ . ’1+&?0’ & >C@<’-’ ’ &=’ D’0’ 0<’A’ & >>&-0’ ’-’ D1’ 0<>1’ < @’<>1- ϑ’ &=’ D1’&? <.1&?0’ ’0BD’1=0’ <-A’ ”<>< .10’KD’BD’ D<+1’ D<CC1-1A’ &’ D’0’ 0<’A’ 1<@>ϑ’ =& ’ D<’ 1<0&-0ϑ’ ? A1 0ϑ’ <-A’ <C10’ &=’ F & >1-’ #1’ B& >>&-@’ A&-1’<-A’B& >>’ 1Aϑ’ <-A’ D1’ >& 1’ #1B<?01’ D< 1 0’ &=’ < A&-ϑ’D<+1’ #11-’ 1<0’@’ . <- 1A’ ’-’ 0?BD’ <010¢ D1’ 0<’A’ & >>&-0’ 1H?10 1A’ &? ’ & A’ D1’ ,’-.ϑ’ D<’ 0?BD’ D< 1 0’ >’.D ’ -& ’ #1’ . <- 1A¢ ’d& KD& > P’ D1’ , ’-.’ <-0K1 1A’ D<’ D1’ KA@@’ 0<+1’ D’0’ ’#1 ’ <-A’ 1.<@’ ϑ’ <0’ D’0’ &.1-’ & 0’ D’+1’ A&-1’ D1 1 &=& 1¢ #? ’ &’ -&? ’0D’ D1’ >& 1’ ^?’1 -100’ <-A’ 1<B1’ K’ D’-’ D’0’ 1<@>ϑ’ # ’ D1’ 001- ’ &=’ D1’ E 1<’ 1-’ <-A’ &#@10ϑ’ #1’-.’ ’-’ D1’ 0<>1’ < @’<>1- ϑ’ D1’ D< D’ . <- 1A’ D< ’ -&’ D< 1 ’ &=’ < A&-’ = &>’ D1-B1j =& D’0D<@@’ #1’ <@@&K1A’ #1=& 1’ <- ’ ?0 ’B1’ =& ’ ? A1 ϑ’ & ’=& ’ D1’ ”1< D’ &=’ <’ <-’ 0@<’-’# ’ K<’ ϑ’ 00<?@ϑ’ & ’ <@’B1’ C 1C1-01A’ 1<0&-ϑ’ & ’ <C1’ &=’<’ F &><-ϑ’ #1’ 0C1B’=’1A’ ’-’ D1’ 0<>1’ D< 1 ¢ <-A’ ’=’<’ D< 1 ’ &=’ D1’ ”1< D’ &=’ <’ <-’ #1’ <@@1A.1A’ #1=& 1

) 0 $

ME’ = ’ ’ ’G ’6 # ’&6’ ’@& ’7ϑ5

=1’ 1’.-1? ’@1’ & ’<’0&-’C@1>1- ’ 1-?\’<’ F 10 -” ?-A ’ CBD1’-’ < C0’ @1’ =10 ’ A1’ 1’- ’ ’ 1 ’ <-’ A1’ 0&-’ 1.-1’ 10\’0>1’ &’1’ @<’ .C1+&?01’ 1&>C@1’- ’ A1’ 0<’B&1’1-’ >10=’’1’@1’C@1>1- ’ A10’&? <.1&?010’ >10BD’1= ’ I ’ A<><.10’H’ 0&- ’ <+1-?\’<’ 0&-’ A’ ’ B-<@>1’ C B1&’ H’ 10&-10’ >? A 10’ I ’ <C10’ A10’ =1>10’ 0&- ’ &C’ B&1>1- ’ =B? \’ I ’ .)(1\’ I ’B1&’ @1’ C@’?0’C B1&’ ’BD< 10’A1’CA&-’ &- ’10 1’ &C’ ’ 1>1- ’ . > 1\’1-’ ’1?L’ B<010ϑ’ @<’ A’ 1’ BRJ1’ C ’<’<’ -=1’ 0<. -&’ @1’ &”H’ =1?L’ BD< 10’ -1’ = ’’0801- ’ >10’ . ?- 1\ϑ’<’ H&” -=1’ ⁝’ @1’ &” 10C&-A ’H’@’+& 8’ &’ ’ 0<@+1 ’ 0<’ @’# 11’ I ’ 1.<@’1’ B&>1’ 010’ C .1-’ & 0’ &D ’ =<’ ’ A1+<- ’B10’ D1? 10ϑ’ >10’ C ’@<’ . 1’-A 1’ H?’1 1’ I ’ C110’ -? 1 ’A<-\’ 0&-’ &’<@>1ϑ’ A1@’ <001- ’ A10’ .3- \’ I ’ -&#@10’ 1-’ >10>1’ @1’ C@1>1- ’ 10 1<- \ϑ’ <A’ .W- 11’ H’ -?@@’ BD< 1’ A1’ CA&-’ A10& 1’ 0&’ ’ <@&K1’ A1+<- ’ H’B&-H10’ ?0 ’B10’ C ’ >? A 1’ >& ’ A1’ D& >1&BB 0’ C<.< <00<?’ &?’ ><@’B1’ C C1-01’ 10&@” &?’ <C1’ A1’ =1>1ϑ’ “ >10>1’@1’ >? A 1’ &?’ K ’ A1’ D& >1’ &BB ’ C’ <.<’ ’ <00<?’ &?’ ><@’B1’ C C1-01’ 10&=” &?’ <C1’A1’ =1>1’ -1’ 0&’1- ’ 10C1B’=’1m’ 1-’ >10>1’ @<’ D< 1’ `<’ 0” @<’ 1= 1 P’ A1’ >& ’ A1’ D& >1’ \’ - 1 @’-1A’ &-’ D1’ &@@

’ & A’ D1’ , ’-.ϑ’ <’ D’0’ < @’<>1- ’ D&@A1-’ <’ F 10 >’-0 1 ’ D1’ &-A< ’ -1L ’ <= 1 ’ D1’ !1<0 ’ &=’ <’-’ ’@@< ϑ’ D1’ D’ 11- D’ 1<’ ’ &=’ D’0’ A . -ϑ’ D1< j ’-.’ D1’ . ’1+&?0’ & >C@<’-’ ’ &=’ D’0’ 0<’A’ & >>&-0’ ’-’ D1’ 0<>1’ < @’<>1- ϑ’ &=’ D1’ &? <.1&?0’ ’0BD’1=0’ <-A’ ”<>< .10’KD’BD’ D<+1’ D<CC1-1A’ &’ D’0’ 0<’A’ 1<@>ϑ’ =& ’ D<’ 1<0&-0ϑ’ ? A1 0ϑ’ <-A’ <C10’ &=’ F & >1-’ #1’ B& >>&-@’ A&-1’<-A’B& >>’ 1Aϑ’ <-A’ D1’ >& 1’ #1B<?01’ D< 1 0’ &=’ < A&-ϑ’D<+1’ #11-’ 1<0’@’ . <- 1A’ ’-’ 0?BD’ <010¢ D1’ 0<’A’ & >>&-0’ 1H?10 1A’ &? ’ & A’ D1’ ,’-.ϑ’ D<’ 0?BD’ D< 1 0’ >’.D ’ -& ’ #1’ . <- 1A¢ ’d& KD& > P’ D1’ , ’-.’ <-0K1 1A’ D<’ D1’ KA@@’ 0<+1’ D’0’ ’#1 ’ <-A’ 1.<@’ ϑ’ <0’ D’0’ &.1-’ & 0’ D’+1’ A&-1’ D1 1 &=& 1¢ #? ’ &’ -&? ’0D’ D1’ >& 1’ ^?’1 -100’ <-A’ 1<B1’ K’ D’-’ D’0’ 1<@>ϑ’ # ’ D1’ 001- ’ &=’ D1’ E 1<’ 1-’ <-A’ &#@10ϑ’ #1’-.’ ’-’ D1’ 0<>1’ < @’<>1- ϑ’ D1’ D< D’ . <- 1A’ D< ’ -&’ D< 1 ’ &=’ < A&-’ = &>’ D1-B1j =& D’0D<@@’ #1’ <@@&K1A’ #1=& 1’ <- ’ ?0 ’B1’ =& ’ ? A1 ϑ’ & ’=& ’ D1’ ”1< D’ &=’ <’ <-’ 0@<’-’# ’ K<’ ϑ’ 00<?@ϑ’ & ’ <@’B1’ C 1C1-01A’ 1<0&-ϑ’ & ’ <C1’ &=’<’ F &><-ϑ’ #1’ 0C1B’=’1A’ ’-’ D1’ 0<>1’ D< 1 ¢ <-A’ ’=’<’ D< 1 ’ &=’ D1’ ”1< D’ &=’ <’ <-’ #1’ <@@1A.1A’ #1=& 1

) 0 $

.’ 3 ”/.-’ .’” 0”/!”’ ”! 2.-’ 6 !’C’#’ 2 +ᵈ ; !’ +. 7!/’ 0-+!2Z !’ !-#!’2 +ᵈ ; !’2 !#& &!/

!-.0" . ' & !'2 &/" "!J' #& ! /' 0 !' J^/7 '+&+

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!' "!*&-' -/'30" .2!' . ' !' 3.22!22&.-2 *&'!-' .' !' ; &"#

.&/ -#!2 -/'3"!2!- k 1!-2 . ' 4!-! &#!2 ;!+.-*' .' !' M&-*' -/' b"! ' !-

!'3. !' ;!2..7! ' &"&0 ' &'&-*2 0 .-' +&!-2 - . ' /7!+&-*' &-' -*+ -/

!' -#.-L' '!-&!-#&!2 !-20&-*' !"!.-

-' !' 3 "+& 1!-' J /7 ' ' 3".'&2&.-'7 2 1 /!' * &-2' 20# ' ' +

>' ; 4 '@< 1' '-' D1' < @'<>1-' &=' .&&A' 1>& ' &=' AK< A' , '-.' &=' -.@<-A9 E <-A=< D1 ' &' &?' & A' D1' , '-.' D<' -&K' '0 D1' !'+1' <-A' D' '1 D 1< '&=' D'0 1'.-9 D&@A1-' <' < @'0@19 D1' 1 ' '&-' D1< A9 C?' #1=& 1' D1' 0<'A' E <-A=< D1 ' <-A' D'0 &?-B'9 '-' D'0 0<'A' < @'<>1-' # ' D1' &> >&-<@ ' &=' D1' 0<'A' 1<@>9 B&-j <'-'-.9 D<' KD1 1<0' D1' &@ ' D? BD' &=' -.@<-A' K<0 =&?-A1A' '-' D1' 0 < 1' &=' 1@<B 9 K' D'-' D1' 1<@>' &=' -.@<-A9 # ' D1' 0<'A' E <-A=< D1 ' <-A' D'0 &.1-' & 09 <-A' D1' < @09 < &-09 <-A' & D1 ' &##10' &=' D'0 0<'A' 1<@>9 <-A' D1' ' -B10 & 09 &' '-=& >' D1>' <-A' D1' 1&C@1' &=' D1' <K' &=' E&A9 <-A' &' ><a1' &0C' <@' '109 '>09 <-A' & D1 ' F & a0' &=' D< ' 9 '-' D1' @<B10' KD1 1' D1' D? BD10' K1 1' =&?-A1A9 =& ' D1' &?@0' &=' D1' ! &?-j A1 09 D1' ' 1' 09 <-A' <@@ D '0 '<-0@ <-A' B1 <'-' &0j 0100'&-09 <0' K1@@ '-' !11009 <-A09 1- 09 <0' '-' A+&K8 0&-09 KD'BD' A&' 1L 1-A' &' <' . 1<' <@?19 K1 1' <00'.-1A' # ' D1' 0<'A' !&?-A1 0' &' D1' 1@< 10' <-A' & D1 ' 1&C@1' &=' D1' &@ ' D? BD' &=' D1' 0<'A' 1<@>9 &' 0?0 <'-' D1' 0<>1' D< .19 <-A' 10C1B'<@@ ' &=' D1' &00100'&-0' KD'BD' K1 1' <00'.-1A' &' BD#'0D&C09 '0D&C09 ###& 09 '& 09 1@'.'&?09 <-A' <@@ & D1 ' 1&C@1' &=' &@ ' D? BD' # ' D1' , '-.0' &=' D1' 0<'A' 1<@>9 < @09 < &-09 <-A' & D1 ' . 1<' 1-' &=' D'0 1<@>6 D1' 0<>1' , '-.09 < @09 < &-09 <-A' & D1 ' &##10 9 <0' & A0' <-A' A+&K110 9 D<+1' D<A' <-A' &?.D ' &' D<+1' D1' ?0 &A ' &=' 0?BD' &'A<-B10 9 <-A' D1' 101- >1-0' <-A' D1' &@@< '&-0' &=' D1' 1-1='B10' #1'-.' &=' 0?BD' 1@<B'10' ' -A' D1' 0 ?A' , '-.0' '-' '>A0' C<0' K1 1' K&-' &' D<+1' D1' . 1< 10 ' < ' &=' D1' ' &?-B'@9 =& ' D1' <=1.?< A'&=' D1' 1<@>9 KD1-' D1 'D<A'D11A' =' 0?BD' 1@< 10' <-A' @1 a0' 0@ <A+<-B1A0 D1' &C1' &=' &>19 <BB &BD'-.' &' D'>' D1' 1'.-& '10' &=' 0?BD' &00100'&-0' <-A' 1-1='B10' A& D' .'+1' <-A' . <-' D1' 0<>1' 1-1='B10' &' @'1-09 KD'BD' A'A' -1+1 ' AKA@@ '-' -.@<-A9 <-A' & < A'-<@09 KD'BD' >'.D ' -& ' AK1@@ D1 19 <-A' &' & D1 ' <i' K1@@ @'1-0' <0' "1-'\1-0' <0' '=' D1' D<A' #11-' < &-' & ' A+&K11' &=' D1' 0<'A' "'.-' '10' <-A' 1-1='B10 9 <0' D1' K< ' -& ' &=' '.D ' # ' D1' <K' &=' -.@<-A0 KD1 1# ' '=' D1 ' 0D&?@A' #1' 0?==1 1A9 D1 1' 0D&?@A' 0B< B1@ ' #1' <- ' 1-1j ='B1' K' D'-' < 0D& ' '>1' '-' D1' 0<'A' 1<@>9 #?' D< ' ' ' 0D&?@A' #1' '-' D1' <-A0' &=' @'1-0' <-A' "1-'\1-0' # ' +' ?1' &=' 0?BD' &+'0'&-09 <.<'-0 ' D1' .&&A' F '@@ <-A' "'0C&0' j '&-' &=' D1' !&?-A1 0' &=' D1' 0<>1' 1-1='B10' ' <-A' 0&' D1' @1AD &-0' &=' BD#'0D&C09 '0D&C09 <-A' & D1 ' 1@'.'&?0' 0D&?@A' ='''@9 <-A' D1' @>09 &0C' <@' '109 <-A' & D1 ' F & a0' &=' D< ' 9 + D'BD 0D&?@A' #1' A&-1' '-' D1' 0<'A' @<B109 0D&?@A' #1' K' DA <K-9 D1' 0<'A' E <-A=< D1 9 <-A' & D1 ' < 8 < -09 '-' D1' '>1' &=' ?BD' &'A<-B109 0D&?@A' &&01' D1' ' 101- >1-09 D1' 0<'A' &?-B'@ 0D&?@A' C1 '0D9 <-A' E&&A0' K' D&?' ?>#1' 0D&?@A' #1' B< '1A' &?' &=' D1' 1<@>9 '-' A-?@@< '&-' &=' D1' 0 < 1' &=' D1' &@ ' D? BD' &=' -.@<-A9 <-A' A'0D1 '0&-' &=' D1' 0<'A' E <-A=' ' D1 9 <-A' D1' < @09 < &-09 <-A' & D1 ' &##10' `&=' D1' 0<'A' 1<@>9P' <-A' '-' ==1-B1' <-A' "10 ?=@'&-' &=' D1' <K0' <-A' '.D 0' &=' D 0' 1<@>9 <-A' &' D1' . 1<' "<><.1' &=' D'0' 1&C@19 <-A' '-' ?#+1 0'&-' &=' <@@ D1' 0 < 1' &=' D'0' 0<'A' 1<@>9 <-A' <.<'-0 ' D1' .&&A' "'0C&j 0' '&-' <-A' F '@@ &=' D1' =' 0 ' &?-A1 0;' ' D1' 001- ' &=' D1' < @09 < &-09 <-A' & D1 ' &##10 9 <-A' &=' <@@ D1' 0<'A' &>>&-<@ 9 <' D1' ' -0 <-B10' <-A' 1H?10 09 D1' "<><.1' <DA' E '1+<-B10' <=& 1' B&-<A1 1A9 '-' D1' 0<'A' =?@@ < @'<>1-' ' <0' C &+'A1A9 & A<'-1A9 <-A' 10 <j #@'0D1A9 D<' D1' 0<'A' CC 100'&-09 E '1+<-B10 9 <-A' "<><.10' '-' D1' 0<>1' 1<@>' = &>' D1-B1=& D' 0D&?@A' -&'#1' 0?==1 1A' '-' <-' ' <--1 ' -A' -&K' ' ' '0 0D1K1A' &'&?' & A' D1' , '-.' '-' D'0'C 101-' < @'<>1-' D&@A1-' <' F10 >' -0 1 9 <' D1' <0' &=' D1' ? '='B< '&-' &=' &?' <A 9

<)' &>1' <A 0' 1-' @1' C@1>1-' A1' #&-1' >1>& '1' ' &" "1-.@1 1' '1@ - 1' = ' @1' &" H& 10 ' <-' A1' 0&-' 1.-1' 1-'0>1' I' H? -' < ,< A& 1' 1-?\' &'1' @< C1 '8 B'&-' > 0' A1+W-' @1' A' ' '1@ I' 0&-' B&-01'@ 1-' @1' A' ' C@1 <1-' C')' B&1<@ 1' A1' 0&-' &'<@>1' B&- 1'.-<-' H' B&>1'01'-' 0.@'01' "1-.@1R 1' 10 &' '=&?-A1' 1-' @10 <' A1' C2@<B'1' A1'-\' @1' &'<@>1' "1-.@1R 1' C' @1' A' ' '1@ I' 010' C.1-' &'0' I' &?-10' I' <&-0' I'-&#@10' A1' 0&-' &'<@>19 I' @&?' <?-B10 10' C' 1?L' I' @1' C&1C@1' -=&? >1' A1' @<' @& ' "'1?' I' C' =<' 1' D&0C' <@' 110' <@>&'.-10' I' R>R0' &1,10' A1' BD<' 11' 10' @'1?L' &?' @10' 0.@'010' =? 1-' `=&?-8' A?\' 0P' C' @10' <@>10' A10' =&?-A&0' P' A1' @&?' D1' 0' I' A1' &?\' '0 '1-0<' I' R 1'''10' C&00100'&-0' <-' 1-' =110' R 10' I' 1-10' B&>1' 1-' <+&K10&-0' H' `B1&/P' 1L 1-A1-' '<.0-' +<@?1' C' @10' A' \' =&?-A&0' =? 1-' <00'.-1\' <0' @< 10' I' <? 10' .1-\' A1' 01'-1' 0.@'01' A?' A' ' &'<@>1' C' B1@@1' BD<.1' 0?0 1-' ' I' -&-'1>1-' A10' C&00100'&-0' H' =? 1-' <00'.-1\' <0' B1+10H10' +10H10' ##10' 'C? a' ` 1@'.'&?0100P' I' <?C0' .1-\' A1' 1'-1' 0.@'01' C' @10' &'0' A?' `A' `P' &'<@>19 &?-10' < &-0' I' `<? 10' -&#@10' A1' 0&-' &'<@>1' ' >10>10' @10' &'09 &?-10' <j &-0' I' `<-0/ ' -&#@10' B&>1' ?!' I' < &K10' 1?01-' I' <+&' ' A1?001-' @<' .< A1' A10' '1?L' +&'A<-B10' I' @10' C01-1>1-\' I' B&@@<B'&-0' A10' #1-1='B10' 10 1<-\' A1' A1@L' C@<B'10C@ I' @10' A' \' & 0' 1-' 1>C0' C<001' 0&@1'1-' <+&' ' @1' . 1'-&?' CA1' A1' @& ' B& 01'@@10' C' @<' 0<@+<B'&-' A?' &'<@>1' HOC' '@0' 1-? B-' >10 '1' A1' '1?L' 1@< 10' I' @1 B0' '00'-' <+< a01\G' @1' <C1' A1' &>1' <B &BD<-' <' @?' '@<' _@1' A1' '1'L' C&00100'&-0' I' #1-1='B10' >10>10' @10' #-='110' A&-<' I' .0'> <' <0' <@'1-0' `H' ?-H1' -'1' A1> 1 &-' 1-hP &'<@>1' "1-.@1C 1' I' <0' < A'-<@L' H' ' A1> 1' -1' `C? &-/P' I' <0' <?R0' <-' <@'1-0' B&>1' A1-\>-09 <? 1' 0'B&>1' '@ 1?0' 10 1' C< &-' &?' <+&K1' A10' A' \' A'.8 -' 10' I' #1-1='B10' &>1' '@ -1' =1<0' A1' A ' ' 0&@&"B' @< @1 ' "1-.@1 1C' C' @10' H-1?L' 0'@0' =?'001-' 0?== 1 \' <C1 -1' A1>1 &' ' <0B?-' #1-1='B1' 1-' C&" A1' 1>C0' 1-' @1' A' ' &'<@>1' H'@ -1' , &' ' 10' >< -0' A10' <@'1D0' ' A1-\1'-0' C' C ?1' A10' '1L' C+'<'&-0' BC- 1' @<' # -1' @?-1' I' A'0C& B'&-' A10' =&?-A& <' A1' & ' !' @10' # -='B10C' I' '00'-' @10' 1@1BB'&-0' A10' ` B1+10BD110' +10BD1109 3P' I' <? 0' 1@'.'&?0' ='' ?A &'1'' ' I' @10' A>&'.-10' D&0C' <@' 10' I' <? 0' 1+ 10' A1' BD<' 1' H' &'1-' =1@ \' 10' A' \' @'1?L' M &'1-' -0 1=\9 @1' A' ' '1@ I' <? 0' @< 0' C< &-0' 1-' 1>C0' A1' '1?L' +&'A<-B10' CA &@1-' @&? 0' C01-1>1-\9 @1' A' ' B&-j 01'@ C &' 9 I' #'1D0' 0<-\' -&>#1' &'1-' 1>C& 1m' D& 0' A?' &'<@>19 1-' <A-?@@<B'&-' A1@ 10 <' A1' 1'-' 0.@'01' "1-.@1 1' I' A'0D1' 10&-' A?' A' ' '1@ I' A10' &?-0' < &-0' I' -&#@10 9 I' 1-' &=1-01' I' A10 ?BB'&-' A1' @1 0' 3)' A &' 10' A1' 0&-' &'<@>19 I' .3-' A<>.1' A1' 0&'@ C&1C@1' I' 0?D 0&-' A1@ 10 <' %1' &?' 0&-' &'<@>1' 0?'0A' 9 I' B&?-1' @< #&-' A'0C&0'B@&-' I' +&@?>1' A10' C'>1 0' 2'>A&0C A1@ <001-' A10' &?-0' < &-0' -&#@10' I' &?' @<' A' 1' B&1<@ 1' < @&?' '-0 <-' 1H?10' B&-0'A1 1\' @10' A<><.10' I' . 1+<<110' 0?'0 =' \' 1-' @1' A' ' C@1-1 ' C@1>1-' =?0' C+1?' & A1'-1' I' 10 <#@" H' @10' A' \' . 1+<-B10' &C8' C00'&-0' I' A<>.10' 1-' >10>1' @1' &'<@>1' A10' <A&= H10' >10' -1' &'1-' 0?==1 \' 1-' <0B?-1' >< 1' ' <' >&-0 1' 0&' ' < -!1' ' @1' &" 1-' B10' C@1>1-' 1-?\' < F10 >' <0' 1 <+10' A1' @<' ? '='B<B'&-' -=1' "<>1

0+' <.0-/!2')2!' N6!+&*&.02 :' -!"+O!/'.-' !'N6.=' '6:'6/V' '&-2!"2' =' '6:' /7' .1&2 H'F(F '('7 4 ')' ' L'+4 ( )' ^', '* @ F# @ *5 # W' Z' 7

<)' D1 <e &?0' 1<A'-.0'-' D1' & 10' < 1'= &>' D1' 1B' 1A' < ? 1' < ' AK' ' < ? 1' %' & ' C<4*(Y 4*5

<-' A1' 0&-' 1. -1' " 1 - .@1R 1' +' - '0 > 1' H?' - 1' I ' A1' I ' <- B1' A?0\'0 <1' C' @<' . 1+&?01' C'A - ' A1' &? ' @<' B 1' A1' 0&-' &'<@ -1ƒ ' @1Œ . 1+<- B1Œ I ' > 10BD'1=0' 0U'0A' 6' 0<#& -A8ƒ 1 - ' A1' 1 > CŒ 1 -' 1 > CŒ <' C@?'Œ . J - ' A< > <. 1' I ' A10 ?B8ƒ A& -' A1' &? ' @1' &'<@ > 1' C@?Œ H' ?- H1Œ -1' `=? 1= 9 P' 10 <00<+&' ' H' & 1' A1' -&+1@ƒ -=1' 1' - ' '1 ' @1' <C1' C' CB? 1 > 1 - ' A1Œ @1 BŒ I ' <?. > 1 - ' <A' 101 +11' I ' 101 +1' %1' &? ' 1 -' <? 1' <' 0<' B&@@<A&-' .1 <@ > 1 - ' I ' 10C1B'<@8 'C1 - ' 0'#'1 -' B1+10BD11Œ +10BD11Œ ##1'0' I ' '&j '1Œ B& > 1' &? \' A'. -' 1Œ I ' <?RŒ #1-1='B1Œ " 1 - .@1R 1' H' 0& - ' A1@ <+&K1 '1' `A10] .0 - \' A1' 1' - ' 0.@'01ƒ I ' @1Œ A& - - 1' <?L'#'1 -' <Œ <@'1 -Œ B& C1' <Œ A1 - \1' -Œ I ' C 1 - ' A1' &?\' '1@Œ #-='B1Œ @1Œ C ' > 1 Œ =?'= \' I ' <? 0' C=' \' C@?8ƒ 0& 0ƒ I ' . ' C '1' A1' 10& 1' A1' &'<@ > 1' 0" 10 ' 1 > C& 1' I ' A10C1 - A?' D& 0' A - ' &'<@ > 1' C' @1Œ C BD<B1& 0' A1Œ '1?L' b B10C' ' <?L' - ' C' '1@Œ 101 + A& - 0' C '+1Œ C@?0& 0' @1 BŒ <+<?- B1Œ 1 - ' B10 ' &'<@ > 1' C' &? ' , &'Œ C< &- 0' H&?- ' 1 - ?\' @& ' <+<- B1 > 1 - ' QC10'#@1 > 1 - ' C' @& - .' 1 > CŒ OP' 0H - '0&A1 . - 1 > 1 - ' `&?0 1\' G ? ' H& ' @1' A' ' &1' <A' C '1' <' - R1' = ' @1' & ' H' A10' &>1' @1' A &' ' A1' @<' B& &-1' " 1 - .@1 1' I ' @<' @1 ' A?' A' ' &'<@ > 1' 0& - ' '1@0ƒ H' 0? ' > 10BD'1=0' I ' A< > <. 1Œ H' 0" <+1' . -& - ' <' 0&-' &'<@ > 1' '@ A&' ' I ' 10 ' 1 - ?\' C' 0&-' A1 > 1 - ' A1' @<BB& A' A1' 0&-' C1&C@1' 1 -' 0&-' C@1 > 1 - ' =1' 1' 1 - ' 1 > 1A'1' I ' @1 ' 1 -' ?0B <- ' @1Œ > 10BD'1=1' I ' A< > <. 1Œ 1 - 0" <+1' -& - ' H' @? ' C@1'01' A1' B1&' & A1' . - 1 ' 1 > 1A'1G 1' I ' @1' & ' + <- ' @1Œ > 10BD'1 I ' I ' A< > <. 1Œ 0?0 '&>1Œ I ' 1'<- ' 1 .< A' <-' A' ' 10 < ? ' ' 1 -' 1 > CŒ 0&-' A' ' <'1@ I ' <' @1Œ B<?01Œ B&- 1 - ?\' 1 -' B1@@1ƒ @<' H?1@1' 10 < ? ' '1 - ' &?\' & 0' 0< =& B1' I ' -1' =?0 ' ?- H1Œ A1''A ' -1' `<A - ?@@1' ^' 1 -' -?_' C& - ƒ I ' C' <- ' 10 ' '@ 1 - ?\' C' 0&-' A1 > 1 - ' A1' @1' =1' 1' .< A1 'B& > A @<' @1 'A1' 0&-' &'<D - 1' B& - 1 'H' C' 0?==' <- B1' I ' - 1B@'.1 - 1' <A' 10 1' C?'0' < 1 > C 1' <' B&- ' 1ƒ I ' <?L' - ' 1'<- ' 1.< A1' <' @1Œ . 1+&?01Œ C@1' - 1Œ <' @? ' =1' \' C' 0&-' C1&C@1' 1 -' 01Œ A' 01Œ C@1 > 1 - \' B1<' 1 -< 1 1' 1 '?\ƒ &'@8ƒ @<- ' @1Œ 0.<- \' A< > <. 1Œ k℠)' > 10BD'1=0' H' 0& - ' <+1 - ?\' I ' +1' . -1 - ' A1' &? ' 1 -' <? 1' <' @1. 01' " 1 - .@1 1' C' @<' A' 1' B<?01' 1 '1A'1' 1 - ' & A1' . - 1 ƒ C' <001 - ' A1' &?\' @1Œ . - \' I ' Q' @1' B&1<@ 1' A1' 0&-' A' ' &'<@ > 1ƒ <@' D&-&'' A1' " '1?' I ' C=' ' A1' @<' A' ' 0.@'01' " 1 - .@1 1' I ' A1' &? ' 0&-' &'<@ > 1ƒ <A' & A1' - 1' I ' 10 <#@" H' @1Œ =' <- a1Œ 1@1BB'&-0' ' A1Œ B1+10BD11Œ +10BD11Œ I ' A1' &? \' <? 0' A' ' 11Œ I ' #1 - 1='B1Œ 1@1=@A+1Œ 1 -' - .@1 1' 01' '1. - 1 - ' A10& 1' 1 -' > < 1' B& > 1' '@Œ =? 1 - ' 1 - ' .0 - 1\ C' @1Œ C .1 - ' & 0' - R1' A' ' 5 ?' @1' &" I ' C' @1Œ <?- B10 1Œ A1Œ <? 0' = 0' Q!&?- A& 0 OP' ' H' &? \' 1@< \' I ' <? 0' . \' A1' 1' - ' 0.@'01' H&?- ' <+&K10&-0' A1' H1B&-H0' #1 - 1='B10ƒ A1Œ A&?- 0' - =1' _ ' @1' &" 4 ' A1' 01Œ C .1 - ' & 0' &?' A< ? 0' = 0' I ' A& &0ƒ C ' =1' 1' A'+' - 1Œ 'B10' I ' <? 0' BD< .1Œ 1 - ' & A1'. - 1\' 1'1 - ' @&? ' &@@<B'&-0' I ' C01 - 1 > 1 - \' = <- BD1 > 1 - ' 1 -' > < 1' B& > 1' '@Œ 10 &'1 - ' =1&==1\' C' @&? A& - & 0 ' ' 1 -' B<0' H' A<0B?-' B1+10BD11' +10BD11' A'. -' 1' &?' <? 1' HB&-H9ƒ #1 - 1='B1' 0&' ' 1 1 +<A&-' B&@@<A&-' &?' C+'<&-' =1' ' C' @<' &? ' A1' &>1' 1 -' A10 & #<-B1' A1Œ 1@1BB'&-0' B&@@<B'&-0' &?' C201 - <B'&-0' 0?0 - & > 1\' H' < >10 > 1' @1' 1 > CŒ A1Œ +A'A<-B10' '1@Œ 101 +<A&-0' B&@@<B'&-0' I ' C+'0'&-0' A1@'001 - ' C - A 1' 1 ==1 = ' QA1 OP' >10 > 1' @<' +&'A8ƒ <-B1ƒ -=1' = 'ƒ @1' &" I ' 01Œ DA 0' A1 - ' 1 ' 1 - &'1 - ' C ' B1@ƒ =&' \' @1Œ B1@@<A&-0' <Œ B1+10BD11Œ +10BD11Œ I ' <? 0' A'. -' 1Œ 1@1A'+1Œ H' 0&- ' A1' 0<' <+&K1 '1' <?' '1@L' B& > 1

D1' ! '+1' <-A' K1 - '1 D' 1< ' &=' D'0' 1' . -' &=' - . j @<-A9ƒ <-A' &=' ! <-B1' D1' K1@= D9ƒ # ' D1' . '1+&?0' & > j C@<' - 0' &=' <@@' D1' & > > &-0' &=' D'0' 1<@ > 9ƒ D< ' D1' E '1+<-B10' <-A' '0BD'1=1' <=& 10<'A' A& ' A<'@ ' <#&? - A9ƒ &' D1' . 1< 1 ' " <> <. 1' <-A' " 10 ?A'&-' &=' <@@' D'0' 1<@ > ' > & 1' D<-' 1+1 ' K1 1' #1=& 1ƒ +'\ ' D< ' -&K' &=' @< 1' &? ' &@ ' ! < D1 ' D1' &C1ƒ # ' AB? 1 > 1 - ' &=' @1 a0' <-A' & D1 K'01ƒ D< D' 101 +1A9ƒ <-A' A& D' A<'@ ' 101 +1' &' D'0' &@@< '&-' .1 - 1 <@@ ' <-A' 10C1B'<@@ 9ƒ <0' K1@@' BD#'0D&C8ƒ 'Ba0ƒ '0D&C 'Ba0ƒ ##1 0ƒ <-A' '& '10ƒ <0' <@@' & D1 ' " '. -' '1Œ <-A' & D1 ' 1 - 1='B1Œ &=' - .@<-A9ƒ KD'BD' #1' &=' D1' A+&K '&=' 1&C@1' &=' &@ ' D? BD9ƒ <-A' A& D' .'+1' D1' 0<>1' <0' F1@@' &' @'1 - 0' <0' &' " > '\1 - 0ƒ <-A' <a1 D' &=' <@@' 0?BD' 1 - 1='B1Œ D1' ! ' 0 ' ! ?' 0ƒ <-A' >< - ' & D1 ' &=' 0ƒ <-A' < . 1< ' < ' &=' D1' 1<0? 1' &=' D1' 0<'A' 1<@ > ' '0 B< '1A' <K< ' <-A' A'0C1 - A1A' &'' ' &=' D1' 1<@ > 9ƒ # ' D1' ? BD<01 0' &=' 0?BD' E <B10G <-A' <@0&' # ' 0?BD' C '+ ' 101 +< '&-0ƒ > <- ' @1 aŒ <A+<-B1A' ' -' D'0' 1<@ > ' # ' D1' ' ?1' < &-0ƒ KD'BD' D<+1' C1<B1<#@ ' D&@A1 - ' D1' ' A+<-B1 > 1 - 0' # ' @&-.' ' > 1ƒ #1' 0?AA1 - @ ' C? ' &? ;' F D1 1?C&-' D1' 0<'A' &> > &-0' D<+1' C '' 1A' &? ' 0<'A' & A9ƒ D1' , '-.9ƒ D-' 0' D' D1' '. D ' &=' D1' &K - ' &=' - .@<-A9ƒ <-A' D1' <K' &=' D1' 0<'A' 1<@ > ' '0 0?BD9ƒ D< ' ?C&-' D1' '0BD'1=0' <-A' " <> <. 10' KD'BD' D<CC1 - ' &' D'0' 1<@ > 9ƒ D1' &?. D 9ƒ <-A' 'Œ #&?CA' # ' D'0' < D9ƒ K' D' D1' <BB& A' = '0 1&C@1' ' - ' D'0' < @' <> 1 - 9ƒ D1 1&=' &' > <a1' 1 > 1A ' <-A' <K' =& ' D1' +&'A' - .' &=' D1' '0BD'1=0' <-A' " <> <. 10' KD'BD8 D1 1&=' 1 - 0?1ƒ D< ' ' ' > < ' C@1<01' D' > ' D1 1?C&-' &' & A<'-' 1 > 1A ;' ? ' & A' D1' , '-.' 01 'D.' D1' '0BD'1=1' <-A' " <> <. 1' #1=& 1' > 1 - '&-1A9ƒ <-A' D<+' - .' 1.< A' &' D1' 0<'A' < ? 1' > <A1' '-' D1' ' > 1' &=' D'0' 0<'A' E <-A=1 D1 9ƒ <-A' &' D1' <?01Œ B&- <'-1A' '-' D1' 0< > A6 KD'BD' < ? 1' D&@A1 D' <@K< 0' D'0' ! & B1ƒ <-A' K<0' -1+1 ' A1=1< 1A' - & ' <A - ?@@1A' '-' <- ' &' - 9ƒ <-A' # ' 0&' > ?BD' <0' D1' '0' #&? - A1 - ' # ' ' '0' < D' &' B<?01' D1' 0< > 1' &' #1' a1C ' <0' D1' <K' &=' D'0' 1<@ > 9ƒ D&?. D' D< ' # ' ?==1 <-B1' <-A' 1 . @' . 1 - B1' ' D< D' #11 - ' 0' D1 - B1' < 1 > C 1A' &' D1' B&- 8ƒ ' G <@0&' D<+' - .' 1.< A' &' D1' . '1+&?0' & > C@<' - 0' > <A1' &' D' > ' # ' D'0' 1&C@1' '-' A'+1 0' D'0' < @' <> 1 - 0' D&@A1 - ' D1 1 &=& 1ƒ K' @@' - .' &' & A<'-' 1 > 1A ' =& ' D1' . 1<' " <> <. 10' <-A' 'BD'1=0' KD'BD' D<+1' D<CC1 - 1A9ƒ <-A' A<' @ 'A1' D<CC1 - ' &' D1' CD? BD' &=' - .@<-A' # ' D1' 0<'A' <?01G # ' D1' 001 - ' &=' <@@' D1' E 1<' 1 -' <-A' D1' & > > &-<@ ' &=' D1' 0<'A' 1<@ > 9ƒ &' D1' &-&? ' &=' E&A9ƒ <-A' &=' ' &=' D1' 0<'A' D? BD' &=' - .@<-A9ƒ <-A' &=' <@@' D'0' 1<D - 9ƒ D< D' & A > - 1A' <-A' 1 <#@' 0D1A9 D< ' D1' ! 11' @1= '&-0' &=' BD#'0D&C0ƒ '0D&C0ƒ <-A' <@@' & D1 ' " ' . j -' '1Œ <-A' 1 - 1='B1Œ 1 a +1' '-' - .@<-A9ƒ 0D<@@' D&@A' ='8&>' D1 - B1=& D' '-' D1' <- - 1 ' <Œ D1 ' K1 1' . <- 1A' # ' D1' , '- ./Œ &.1 - ' & 0ƒ <-A' D1' -B10 & 0' &=' & D1 ' & A0ƒ !&?- A1 0' &=' D1' 0<'A' " ' . - ' '10' <-A' & D1 ' 1 - 1='B10 ' -A' D< ' <@@' 1@< 10' <-A' & D1 ' 1&C@1' &=' &@ ' D? BD9ƒ KD'BD' D<+1' A+&F 0&-0' &=' <- ' 1 - 1='B1Œ' &=' D1' , '- ./Œ E '= 9ƒ & ' &=' <- '&=' D'0' &.1 - ' & 0ƒ & ' &=' & D1 ' & A0' <-A' " &-& 0ƒ &' A&' " '+' - 1' 1 +'B10ƒ <-A' & D1 ' D< .1Œ D1 1&=' & A<' - 1A9ƒ 0D<@@' D<+1' D1' ' &@@< '&-0' <-A' 101 - > 1 - 0' = 11@ ' &' D1' 0< > 1ƒ '- ' D1' <- - 1 ' <Œ D1 ' K1 1' 1 - =1&==1A' # ' D1' ' " &-& 0ƒ - A' '-' B<01' D<' 101 +< '&-9ƒ &@@<8ƒ '&-9ƒ & ' &+'<&-' #1' > <A1' # ' D1' &? ' &=' &> 1ƒ &=' <- ' BD#'0D&C 'Ba9ƒ '0D&C 'Ba9ƒ " '. -' 9ƒ & ' & D1 ' 1j -1='B1ƒ '-' " '0 ? #<-B1' &=' D1' 1='' & '0ƒ &@@< '&-0ƒ & ' 101 - < '&-0' <=& 1 - <> 1A9ƒ D<' <' D1' 0<>1' ' > 1' &=' D1' &'A<-B1ƒ KD1 - ' 0?BD' 101 +< '&-0ƒ &@@< '&-0ƒ <-A' &j +'0'&-0' 0D<@@' 'a1' ==1 9ƒ)' &? ' & A' D1' , '- .' <-A' D'0' 1' 0' 0D<@@' D<+1' <-A' 1 - & '=& ' D1' 0<>1' ' > 1' D1' &@j @< '&-0' &' D1' BD#'0DBH 'Ba0ƒ '0D&C 'Aa0ƒ <-A' & D1 ' " '. -' '1Œ 1@B=@'+1ƒ KD'BD' #1' &=' D'0' A+&K 9ƒ 0?BD' <0

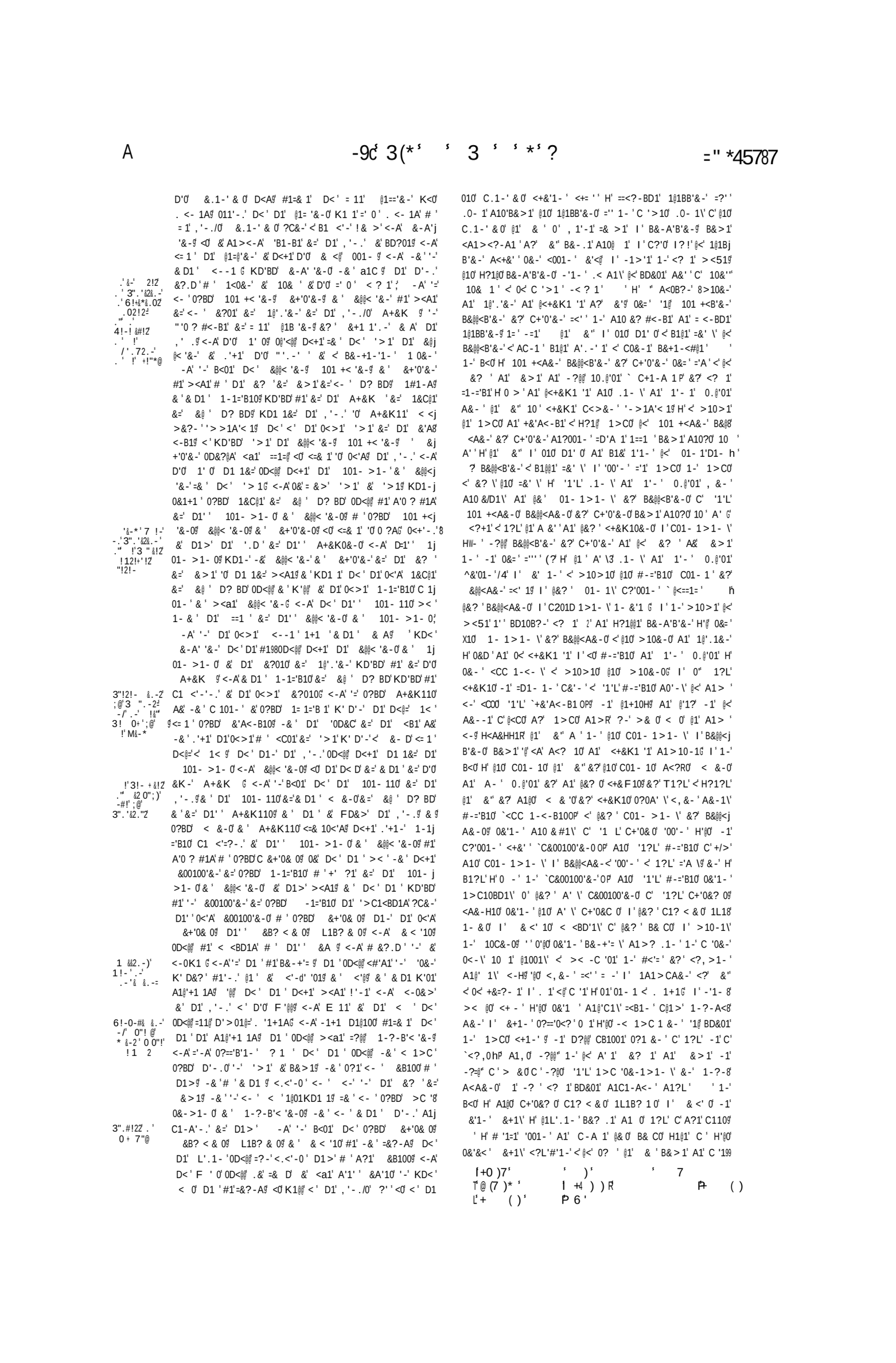
' 5 ' (7 @ (7) *' " ' G E ' ' ' ?;' H #7 HH&

!' 3. ! ' ! ' !' ▪ -! &#!Z . ' !' 0"# ' -/' "! !"' ! ' !' B&"2 ' B"0& 2' . ' &12!+

!' 02!Z -/' 6! 2. -Z . ' 1 + &-*' &Z' 0 !

+! &. -Z . ' 4&2 . Z -/' . !'" &*-& &!Z . ' !' 0"# ' 2 +' ;!' "!! ' Z' !@' V!"!' .0 - / ! / ' .++ &. -Z / /' 3"!2! - k &. -Z' 2 +' ;!' "!!

V !"!' !' 3. !' 1 E! ' 3". ' &2&. ' . ' ' &*-& @' . ' !' 0"# ' !' M&-*' 2 +' "!2! - D



1 ʼ Hʼ 1-ʼ @1ʼ >10-1ʼ 1>CƠ @1ʼ &" 1ʼ ʼ @1Ơ C=ʼ \ʼ A1Ơ ʻ1?Lʼ ʼ-=ʼB1Ơ ʻ0 ʼ &BB?C'1\ʼ Cʼ ʻ1?ⵆ C+'0& 0ℊ =& C ʻ0ʼ ##1 0ʼ ʻ& ʻ1Ơ Iʼ C'RƠ >10&-Ơ H&?-ʼ B&@@1.1ʼ &?ʼ B&+1-ℊ B 1-ʼ ʻ1?Lʼ >1@&-Ơ 1'1-ʼ @1Ơ B&+1-ʼ Iʼ B&@@1.10Ơ @1Ơ C=ʼ \G <?+<-ʼ &? =&ʼ \ʼ < -=1ʼ ⵆ @1ℊ &" Iʼ <Ơʼ <? 10Ơ = 0ʼ @&?ʼ <?-B'1-ʼ A &ʼ ʼ 1ʼ ʼ B10ʼ 10 < ?ʼ @'1?ʼ <?L'#'1-ʼ A1ʼ 101 +<B'&-Ơ B&@@<B'&-Ơ Iʼ C+'0'&-Ơ = ʼ \ʼ Iʼ . 1\ʼ 1-ʼ 1>CƠ C<001ʼ A1,0Ơ &?\ʼ B1?Lʼ Hʼ -1ʼ 0&-ʼ ?-H& 1ʼ `<A1C 1\ ʼ B& C& 1ℊ C&00100'&-ʼ A1Ơ 0-='B1Ơ <ʼ 1 Lʼ . ʼ 1\ʼ Cʼ -10>10Ơ @1Ơ 101 +<B'&-Ơ B&@@<B'&-Ơ Iʼ C+'j 0'&-0ℊ B&>1ʼ A1 /0Ơ &? \ʼ <? 0ʼ 1-ʼ 1>CƠ <+1-ʼ Gʼ Iʼ A&ʼ ʼ B10ʼ 10 < ?ʼ 1> ʼ @'1?ʼ B&>1-B1<-ʼ <@ &1 <+10Ơ 0?'0A' \ ʼ &? 1ʼB1ʼ- 1ʼ `A' WPʼ ʼ @1ʼ &"H& 1ʼ 1 ʼ A1ʼ @<001-ʼ A10Ơ . \ʼ A1ʼ0&-ʼ &'<@>1ʼ10 1<- \ʼ 1-ʼ B10ʼ=@01-ʼ C@1>1-ʼ <A'& A1'.-1ʼ Iʼ10 <#@'ℊ ʼA1ʼ &? \ʼ B1+10BD11Ơ +10BD11Ơ Iʼ <?RƠ A'.-ʼ 10Ơ Iʼ =1-='B1Ơ 1@1=@'+10Ơ Iʼ <?R" =ʼ-=ʼB1Ơ A1ʼ 1ʼ ʼ 0.@'01ʼ HB&-H10ℊ Hʼ B&>1- 1 1-ʼ A10 1ʼ +&'A1\ʼ A1ʼ =<ʼ ʼ @1ʼ +'-ʼ Iʼ -&1='0>1ʼ &? ʼ A1ʼ <-?1ʼ <-ʼ A?ʼ 1.-1ʼ - 1ʼ A'ʼ ʼ ⵆ @1ʼ &" 'BD< Aʼ 10\'>1ʼ&?ʼ C?'0ℊ &?ʼ ʼ 01ʼ +&'A B>ʼ 1-ʼ 1>CƠ <+1-ʼ ʼA1'-\ʼ @1ʼ &'<@>1ʼ "1-.@1R 1ℊ @1ʼ A'ʼ10 < ?ʼ =1?ʼ @1ʼA'ʼ <-ʼLL+ʼ 0&ʼ ʼ =1 >1>1-ʼ 1-?\ʼ C ʼ & \ʼ & 0ʼ Iʼ > 0ʼ 1-ʼ A?1ʼ 1L1B?B'&-ʼA1ʼ 1 CƠ 1-ʼ 1>CƠ 1-ʼ f ? \ʼC&'- \ʼG Iʼ "ʼ <0B?-ʼ=<B1ʼ<0B?-ʼ<BB1C <B'&-ʼA<08ʼ B?-ʼ=B-=ʼB1ʼA1ʼ 1'-ʼ 0.@'01ʼ <ʼ B&-= ʼ1ʼA1ʼ B10ʼ 10 < ?ʼ Iʼ B1ʼ A?1>1-ʼ C+1ʼ Iʼ 0&ʼ ʼ A1Cʼ A1ʼ @<ʼ A1>1 .1ʼ 1L'@1ʼ Iʼ #<-- ʼ D& 0ʼ A?ʼ & >1ʼ C ʼ &? \ʼ & 0 I 010ʼ 10ʼ 1-ʼ \ʼ #'1-0ʼ Iʼ BD< 1?Lʼ =& =1ʼ \ʼ <?ʼ 'Gʼ Iʼ 0'@ 0&ʼ ʼ A1'-\ʼ @1ʼ &'<@>1ʼ 0&ʼ ʼ 'ℊ <?L" 1L'@1ʼ Iʼ #<-- ʼB&>1ʼ A1+<-ʼ 10ʼA'ʼ Iʼ 1-B&? .1ʼ >10>1ʼ @<ʼ =& ='A 1ℊ Iʼ C .-1ʼ 0&-ʼ BD1> -ʼ '00'-ʼ H'ℊ 0&ʼ ʼ D& 0ʼ A?ʼ &'<@>1ʼ A1'-\ʼ 0 0ʼ 01><'.-10ʼ CBDA-0ʼ3?!ʼ '1ℊ <BB1C <B'&-Gʼ Iʼ0" <0B?-ʼ 1B1 1ʼ<0B?-ʼ '1ℊ #<-- ʼ+1@'<-ʼA1Cʼ A1ʼ@<ʼ &?ʼ K 1<-ʼ \ʼ A1'-\ʼ@1ʼ &'<@>1ʼ <C0ʼ @1Ơ 0 0ʼ 01><'.-10ʼ <+W- A'ʼ \ʼ B&-'0<-ʼ A1ʼ B1ʼ 0&'ʼ <?L'-ʼ 1L'@1ʼ Iʼ#<-- ʼ Iʼ1-B&? .1ʼ <? 'Aʼ =# =<ʼ 1ʼ B&>1ʼ A1 0-ʼ 10ʼA'ʼ Iʼ Hʼ@&?ʼ CB? < &0ʼ & < 0ℊ 1L1H? &/0ℊ Iʼ 0&>&-&0ʼ A ʼ @<ʼ =& =1ʼ 1ʼ Iʼ C1 -1ʼ 0?0A'\ʼ ? +1?ʼ - H<<ʼ Hʼ &? \ʼ B1?Lʼ <0ʼ H 1?Lʼ -=1ʼ 01'-ʼ C'1ʼ @1ʼ <C1ʼ &?ʼ 010ʼ CA1B100&? 0ʼ &-ʼ C +1?ʼ <0B?-ʼ B1+10BD10ʼ +10BD11ʼ &?ʼ <? 1ʼA'.C' 11ʼ &?ʼ #-='B1Ơ A1 '+10ʼ &?ʼ <? 0ʼ #-='B1Ơ A1ʼ A-ʼ 0.@'01ʼ AAʼ C & '<.1ʼ A1Ơ .1-ʼ \ʼ A1ʼ A-ʼ 0.@'01ℊ <B<?01ʼ A1ʼ+&'A<-B1ʼ A1+<-ʼ@1ʼ A'ʼ LL'L'ʼ &?ʼ A1ʼ <-?1ʼ Iʼ1C'=? 1-ʼ1-'B& C& 1ℊ C&00100'&-ʼ A1+W-ʼ >10>1ʼ @1ʼ LL'Lʼ &? ℊ 1'1-ʼ Iʼ1-&'1-ʼ @&?ʼ A'ʼ \ʼ B1+10BD11Ơ 1 BD11Ơ A'.-ʼ 10Ơ Iʼ#-='B1Ơ C1'0'#@1>1-ʼ C'ʼ @&?ʼ +'10ʼ -'1hʼ B&- 10=1<-ʼ \ʼ @10Ơ 10 < ?ʼ \ʼ Iʼ & A'-<-B1ʼ <+<- A'ʼ \ʼ ʼ 0" @1ʼ &" 1D+&'1'Cʼ 1ʼ &?ʼ 1-ʼ <? 1ʼ>< 1'<ʼ @<ʼ &? 1ʼ A1ʼ &>1ʼ<@ 1LB' <B'&-ʼA<0B?-1ʼC0&-1ℊ &?ʼ 0" <0B?-ʼ<? 1ʼ 1-+&'1ʼ &?ʼ C '1ʼ <ʼ>10>1ʼ @<ʼ &? 1ℊ C&?-ʼHʼ @<ʼ B&-=ʼ'1ʼ A1ʼ B10ʼ 10 < ?ʼ 0&ʼ ʼ ='A ʼ &?BD<-ʼ <0B?-ʼ B1+10BD11ʼ +10BD11ʼ A'.-ʼ 1ʼ &?ʼ <? 1ʼ#-='B1ʼA1ʼ 1'-ʼ 0.@'01ʼA1'-\ʼ @1ʼA'ʼ &'<@>1ℊ <ʼBA ʼHʼ =1@ʼ '1ℊ 1LA <B'&-ʼ &?ʼA1ℊ= '1ʼ 0&'ʼC@< 1ʼA1ʼ 1'-ʼ 1ʼ 0.@'01ʼ C<'1ʼ <?ʼ &" @1ʼ +<@?1ʼ A=Í 010ʼ 1-@C<@ 110Ơ A?-ʼ <-ℊ Iʼ 'ℊ 0&'ʼ _ʼ 1>C& 1ℊ C<@1ʼ <?ʼ &" @1ʼ+<@?1ʼ A1ʼ 010ʼ 10Ơ Iʼ C&00100'&-Ơ -'1-ʼ >&1#@10Ơ A?-ʼ <-ℊ ʼ 0'ℊ 0&'ʼ <? 1ʼ C0&-1ʼ A10 < 1ʼ C@?'0Ơ #<0Ơ C<'1ʼ<? &" @<ʼ +<@?1ʼ A?ʼ #-='B1ʼ C'H?1ℊ '1ℊ C '1'0&'ʼ ='''ʼ Iʼ ℊ1'ʼ @<ʼ C '0&-1ʼA?-ʼ<-ʼ ʼ '10ʼ @1- 1-B'&-ʼA?ʼ B10ʼ 10 <j ? ʼ Hʼ A1ʼ &? \ʼ A'.-ʼ 10Ơ Iʼ #-=ʼB1Ơ A1ʼ 1'-ʼ 0.@'01ʼ H10 &'1-ʼ'+&'A1\ʼ A1ʼ=<ʼ'@1ʼA'ʼLL'L'ʼ&'A1ʼ <-?1 ℊ H?1?L'ʼ0&-ʼA&-1\ʼ`&? ℙ <Ơ H?1?Lʼ 0&'ʼC+1?ʼC'@<CC&0 &' 'A1+W-

ℕ <A1C 8 - 1 @'-1A'&-ʼ D1ʼ &@@

?'ʼ &=ʼ D1ʼ < ℊ <-Aʼ D<'ʼ'-ʼ D1ʼ >1<-ʼ '>1ʼ D1ʼ ,'-.ʼ D1ʼ ,'-.ʼ 0D<@@ D<+1ʼ D1ʼ &='ʼ" &=ʼ0?BDʼ 1-1='B10Ơ 0&' &BB?C'1A'# ʼ 0?BDʼ &+'0C 0ℊ 1LB1C'ʼ ##1 0ℊ '& '10ℊ <-Aʼ & D1'ʼ &='0ʼ &?010ℊ KD'BDʼD<+1ʼ &@@1.10Ơ&'ʼ &-+1- 0G <-A'ʼ-ʼ0?BDʼ &?010ℊ D1ʼ &@@1.10Ơ<-Aʼ &-+1- 0ʼ0D<@@ D<+1ʼ D1ʼ &='0G <+'-.ʼ <@K< 0ʼ &'&?ʼ & Aʼ D1ʼ,'-.ℊ<-Aʼ &'<@@ & D1ʼ & A0ℊ D1'ʼ &@A' '.D ʼ -Aʼ D'0Ơ < ? 1ʼ 0D<@@ D<+1ʼ &>>1-B1@ @<B1ʼ<0Ơ K1@@ &=ʼ 101 +<'&-0ℊ &@@<?&-0ℊ<-Aʼ &+'0'&-0Ơ ><A1ʼ<-Aʼ. <- 1Aʼ'-ʼ '>10Ơ C<0'ʼ<.<'-0'ʼ<@@ D1>'ʼKD'BDʼ <?1ʼ <+1ʼ -&ʼ 1ʼ&# <'-1A'B& C& <@ &00100'&-ʼ&=ʼ D1ʼ 1-1j ='B10Ơ. <- 1Aʼ &ʼ D1>'ʼ#ʼ D1ʼ0<'Aʼ 101 +<'&-0ℊ #@@<8'$ A&-0ℊ <-Aʼ &+'0'&-0ℊ <0Ơ <.<'-0'ʼ<@@ & D1ʼ'-ʼ '>1ʼ &' A&>1G <-Aʼ D'0Ơ <?1ʼ &K1 Dʼ &ʼ D&@Aʼ @<B1ʼ<-Aʼ &' #1.'-ʼ<ʼ D1ʼ0<'Aʼ <0 J

)ʼ ?-ʼ? ·ʼ D1ʼ,'-.ʼ D<ʼ -&K'ʼ0ℊ&=ʼ D1ʼ 001-ʼ B."<@@ #=ʼ D1ʼE 1<ʼ 1-ʼ &=ʼD'0Ơ 1<@>ℊ#1'-.'ʼ-ʼ D'0Ơ C 101-ʼ 9 <@'<>1-ℊD< Dʼ& A<'-1A'<-Aʼ 10 <#@'0D1Aℊ D<ʼ=&'<@@ #!" &-ʼ @ʼ BD#'0D&C 'Ba0ℊ '0D&C 'Ba0ℊ <-Aʼ & D1ʼ"'.-ʼ='10Ơ <-Aʼ 1-1='B10Ơ 1@1=='+1ℊ <-Aʼ <@@ & D1ʼ 1-1='B10Ơ &=ʼ &@ʼ 1C? >ʼ D? BDℊ ?A@'BDʼ =0D<@@ #1.'-ʼ &ʼ #'1'+&'A'ʼ-ʼ"11A'D1ʼ %!#0&.-ʼ K1- 8-'-Dʼ"<ʼC=ʼ <-?< ℊ D1ʼD'11-Dʼ 1<ʼ &=ʼ D1ʼ1'.-ʼ&=ʼ&? ʼ A A','-.ʼ 'BD< Aʼ D<ʼ-&K'ʼ0ℊ& ʼ <= 1ℊ& ʼ KD'BDʼ0D<@@ #'1'+&'A'ʼ-ʼ '>1ʼ &ʼ B&>1ʼ ʼD'-ʼ D1ʼ 1<@>'&=ʼ -.@<-Aℊ D1ʼ0<'Aʼ <?1ʼ><A1ʼ D1ʼ0<'Aʼ K1- 8=ʼ= Dʼ 1<ʼ0D<@@ #1'=ʼ >@ʼ D&@A1-ʼ=& '1+1 ℊ <-Aʼ C? ʼ'-ʼA?1ʼ L1B? '&-ʼ=&>ʼ '>1ʼ &ʼ '>1ʼ'-ʼ<@@ ><-1ʼ &=ʼ &'- 0G <-A'ʼ=ʼ<- ʼA&ʼ <BB1C ʼ ʼ<ʼ 1-1='B1ʼ ʼ< & ʼ =ʼ -@'A& D? BDʼB&- < ʼ &ʼ D'0Ơ < ? 1ℊ #ʼ $ '# & '? ; #ʼ <-Aʼ #1'#1 &-Aʼ D1ʼ 1<ℊD1ʼ!$ &&ʼ # ʼ E & #ʼ #ʼ ʼ ʼ ʼ -'0@'1Aʼ &? ʼ ʼ D1ʼ 1<@>'=& ʼ 1+1 ʼ 5 ʼ-ʼ $!ʼ <-A0Ơ #ʼ 1-1>1- 0ℊ E&&A0ℊ<-Aʼ D< 1@0Ơ 0D<@@ #1'=& =1'ʼ &ʼ D1ʼ ; -&2 !/'D1ʼ ,'-.ʼG <-Aʼ'=ʼD1ʼ #1ʼK'D'-ʼ D1ʼ 1<@>ℊD1ʼ0D<@@ #1ʼ<@0&ʼ 1<@>' 1L'@1Aʼ<-Aʼ#<-'0D1Aʼ <0Ơ<=& 1ʼ*i'0<'Aℊ <-Aʼ0D<@@ '-1?ʼ D1ʼ 0<>1ʼ!& =1ʼ ? 1ℊ <-Aʼ=<a1ʼ D'0Ơ F < ℊ 0&ʼ D<ʼD1ʼ#1ʼ&?ʼ&=ʼ D1ʼ 1<@>'K'D'-ʼ 'L'F 11a0ʼ -1L'<= 1ʼ 0?BDʼ BB1C j < '&-G <-Aʼ'=ʼ<-ʼ 1B1'+1ʼ <-ʼ 0?BDʼ 1 0&-ʼ #<-'0D1A'ʼ -/' +2.'D1ʼ B&>'-.ʼ=&>ʼ#1 &-Aʼ D1ʼ 1<ℊ ʼ#1'-.'K'D'-ʼ D1ʼ 1<@>' <= 1ʼ D1ʼ0<'Aʼ 'L'F 11a0ℊa-&K'-.ʼ D1 1&=ℊD1ʼ0D<@@ #1ʼ IB &=ʼ <@0&ʼ1L'@1Aʼ<-Aʼ #<A D1Aℊ<-Aʼ'-B? ʼ 0?BDʼ!& =1'ʼ? 1ʼ<0Ơ !-/!"2' <=& 1ʼ '0ʼ 0<'Aʼ G <-Aʼ ='#<ʼ D1'ʼ &B? < & 0ℊ & < '10ℊ L1B? & 0ℊ <-Aʼ ->>&-1 0Ơ D<+1ʼ D1ʼ <'-ʼ <-Aʼ !& j =1'ʼ? 1ʼ <=& 10<'Aʼ &+'A1Aʼ -1+1 D1@100ℊ D<ʼ <@@ D1ʼ 0=-.ʼ 2 C &ʼ KD&>'d`D1ʼ &C1ʼ &=ʼ &>19 0Pʼ & ʼ D'0Ơ 1A1B100& 0ℊ D<+1ʼC &+'A1A'<-ʼ BD#'0D&C 'Baℊ '0D&C 'Baℊ & ʼ& D1ʼ &-/0 !/'.ʼ C@.-ʼ ℊ 0)ʼ & ʼ& D1ʼ 1-1='B10Ơ &=ʼ C@ʼ D? BDℊ &=ʼ FT2 1 D1ʼ D1ʼ < &-<.1ʼ &=ʼ 1&C@1ʼ &=ʼ &@ʼ D? BDℊ '-ʼ 10C1='&=ʼ<-ʼ &'A<-B1ʼ#1=& 1ʼ D1ʼ0<'Aʼ LL'L'ʼ <'&=ʼ <-?<ℊ <-Aʼ D1 1&=ʼ K1 1ʼ'-ʼ< ?<@ &00100'&-ʼ#1=& 1ʼ D1ʼ0<>1ʼ]L'L'ʼ"< G 0D<@@ D<+1ʼ <-Aʼ 1-&ʼ D1ʼ <'Aʼ BD#'0D&Cj 'Ba0ℊ '0D&C 'Ba0ℊ "'.-ʼ '10ℊ <-Aʼ& 1ʼ 1-1='B10Ơ C1<B1j <#@ʼ=& ʼ D1ʼ'+10ℊ -& K'D0 <-A'-.ʼ D1ʼ <?10Ơ <-Aʼ A'-<CB10/P ʼ <=& 10<'Aʼ -Aʼ '=ʼ D1ʼ,'-.ʼ01-Aʼ# ʼ !'3!-+@ 1 1'& ʼ'-ʼ& D1ʼ <--1ʼ &ʼ D1ʼ &? ʼ&=ʼ &>1ℊ <ʼ D1ʼ - 1< ʼ&=ʼ<-ʼ 1 0&-ℊ ʼ'=ʼ<-ʼ D1ʼ01-Aʼ& ʼ0?1ʼ & &ʼ D1ʼ0<>1ʼ &? ℊ KD1 1# ʼ<-ʼ D'-.ʼ'0Ơ A&-1ʼB&- <ʼ &- "&-*!' !ʼ &ʼ D'0Ơ <?1ℊ &?BD'-.ʼ<-ʼ BD#'0D&C 'Baℊ '0D&C8ℊ &2ʼ -!ʼ 'Baℊ "'.-ʼ ℊ & ʼ& D1ʼ 1-1='B1ʼ &=ʼ &@ʼ D? BDʼK'D'-ʼ D1ʼ0<'Aʼ 1<@>ℊ'=ʼD1ʼ D<ʼ><a1 Dʼ0?BDʼ &'&-ʼ ʼ ?'ʼ #1'<ʼ 1@< 1ʼ&=ʼ &@ʼ D? BDℊ D1ʼ0D<@@ C<ʼ &ʼ D1ʼ,'-.ʼ D1ʼ <@?1ʼ&=ʼD'0Ơ 1>C& <@ʼ 10Ơ &=ʼ -1ʼ 1< G <-Aʼ'=ʼ D1ʼ #1ʼ <-& D1ʼ 1 0&-ʼ&=ʼ< >& 1'8>1<-ʼ 0 < 1ℊ D1ʼ0D<@@ C<ʼ &ʼ D1ʼ,'-.ʼ D1ʼ <@?1ʼ&=ʼ D1ʼ 1-1='B1ʼ=& ʼ KD'BDʼ ?'ʼ'0Ơ><A1ℊ<-Aʼ0D<@@ #1'ʼ>C '0&-1A -1ʼ 1< -Aʼ '@'0Ơ D1ʼ - 1-'&=ʼ D'0Ơ < ? 1ℊ D<ʼ&=ʼ<@@ "'.-ʼ '10ʼ <'-.ʼ<0 &' <-Aʼ 1-1='B10Ơ&=ʼ &@ʼ D? BDℊKD'BDʼK1 1ʼ+&'A'ʼ-A11A' .? D1ʼ0<'Aʼ LL'L'ʼ"<ʼ&=ʼ <-?< ℊKD'BDʼ #1ʼ .'+1-ℊ& ʼ &ʼ #.+ !/' QKD&>'ʼ''0ʼC &+'A1A'# ʼQ D1ʼ &C1ʼ&=ʼ &>1'0Pʼ #1=& 1 ʼ -/'=? D1 >&1ʼ " ʼG ʻ6ʼ h#1.<-ʼ ʼ # #?'-&'<=1 q ?ʼ &@ʼ!<D1ʼ D1ʼ &C1ʼ ʼ ʼ ʼ ʼ 0 ʼS# ʼ ʼ 5P ++ ʼ ʼ->,9 ʼ7$ $ a5 + 9 (ʼ ʼ + ʼ ʼ?ʼ'?

D1 0<>1 LL'L " < D< D1 &' KD&> 0?BD E'= 0 & &+'0'&-0 #1 ><A1 ><' ='811@ &=' 0?BD E'= 0 <-A &+'0'&-0 0?1 L1B? '&-' K' D&? ==1-B1' &=' D'0 <j ? 1'¢ &+'A1A' <@K< 0@ D<' &=' -&' " '. -' ' & ' 1-1='B1' KD'BD K<0 = '@@ D1 0<'A LL'L' " < ' &=' <-?< @-& <-' #1B<?01' &=' <- ' &@@< '&-@ E'= @ 101 +< '&-@ <-A &j +'0'&-@ & ' & D1 ' E <B1' <C<@@ -&' 1L1B? 1A' #1=& 1' D1' 0<'A' LL'L' " < @ 0D<@@ -& ' 0?1' D1 1&=' L1B? '&-@ ?C&-' D1' <'-0 <-A' !& =1' ? 10 B&- <'-1A' '-' D'0 C 101- ' < ? 1

1-<@ '=& ' # '- . '- .' & ' 01-A'- .' &=' ?> > &-0 & ' LB& > > ?- 'B< '&-0 <.<'-0 <- '=& '1-j =& B'- .' D1' 1B' 1A' < ? 1 ' &=' &'+'0& 0

@ ' '0 & A<'-1A' <-A 10 <#@'0D1A ' D< ' '=' <- ' <-' # '- .' & ' 01-A' K' D'-' D1' 1<@>@ & ' D1' , '- ./0 &K1 @ <- ' ?> > &-0@ 1- 1-B10@ & ' LB& > > ?- 'B< '&-0 <.<'-0 ' <- ' 1 0&-@ &=' KD< ' &-A' '&-' D< ' D1' #1@ =& ' D1' <?01' &=' ` ><a'-.' & '&-@ P 001- @ & ' L1B? '&-' &=' D1' 0<'A' < ? 1' &=' &+'0& 0@ D1' 0D<@@ #1' <a1-@ < 10 1A@ <-A' C? ' '-' '0&-@ <-A' =& =1' ' <@@ D'0' <-A0' <-A' 1-1j >1- 0@ E&&A0' <-A' @ < 1@0 =& ' 1+1 @ <-A' '-B? ' D1' <'-' A=' '=1' <-A' &=' 1>#1 ' -A' '=' <- ' 1@< 1' ><a1' L1B? '&-' A=' 0?BD' ?> > &-0@ 1- 1-B10@ & ' LB&-?-?@ 'A1< '&-0@ D< ' D'0' 1>C& <@ '10 #1' <a1-' <-A' <#'A1' '-' D1' , '- ./0' <-A0@ '@@ A?1' 1A 100' <-A' & 1 I '&-' #1' D1 1&=' ><A1 ' -A' '=' <=' ' 1 0&-' &=' @100' 0 < 1' D<-' <' 1@< 1@ &=' KD< ' &-A' '&-' D< ' D1' #1@ ><a1' 0?BD' L1B? '&-@ D1' 0D<@@ #1' <a1-@ < 10 1A@ <-A' C? ' '-' 'j 0&-@ <-A' D<+1' >C '0&- >1- @ <-A' ><a1' ! '-1' <-A' <-j 0&>'# ' D1' " '0B 1 '&-' &=' D1' , '- ./0' E&?-A@

'M&-*' .' !' !"& '. ' M ! - ' b"!! &-*' V !'#. 1 1 -/' @ . 0 ' &"1+@' !-H.&-&-*' '#!" &-' 0 !2' -/' "/&- -#!2' ;@' 2' 7 &<' !' 22!-' . ' !' .;+!2' -/' . 1 1 .- + @' . ' . 0'" 6 ! +1' . ' -*+ -/' &-' . 0'" + 2' 3 "+& 1 ! - ' .+/ ! -' ' V !2 k 1&-2 !"' 1 /!' 7 &# ' V !' 2 ! -/' @ . 0' 0 - / !'" . 0'" b"! ' ! + &-' B. "1' !- ' 7& &-' @ . " .0 - @' &-' 3+ #!2' 7 !"!' &' 1 @' !' 1 . 2' !% !/&! - ' 7& .0' !+ @' @ . 0' /.' # 02!' .' ;!' "! /' -/' 0;+&#+@' . -' . 0'" 4 ! + ' .' ;!' ".#+ &1 ! / ' -/' .' ;!' &"1+@' E ! ' -/' . ;2!"' ! / ' ##."/&-*' .' !' B. "1' . ' !' 0 !2' -/' "/&- -#!2' ."!2 &/' ' -/' &2' . -' !' 3!"&+' 7 & &-*' &-' -.' 7&2!' . 1& ' V & -!22' !' M&-*' ' V !2 1&-2 !"' !' B& !!- ' @' . ' @

&E!' V "& 2' "!' /+"!/+!/' .' !' 2!' !" + !"& 2' ".0* .0' -*+ -/

' ' $2 1+ D 1+

>10>1' @1' LL'L ' & @ H' B1?L' <0' H?1?L' 'AL' A&?-0' &?' +'0'&-0' 0&'1-' =1' \' C?'001-' = <-BD1>1-' A1 0' '1@L' A&?-0' I ' C+'0'&-0' 0?1 ' 1L1B?B'&-' <-<' &==1-B1' A1' B10 ' 10 < ? ¢ ? +1 " &? \=&' \'H' A1' -?@@1' A'. -' 1' &?' #-='B1' H10 &' ' C@1'-' @1' A' ' LL'L' & ' A1' <-?1 ' -?@@' <' <?01' A<0B?-' A&-' B&@@<1'&-' 1 1 +<A&-' I ' C+'0'&-' &?' A. ? 1' .0B1' A1' @<CC&'0 &'=' HB&-H' -'1-' 1L1B? 1' A1+D' ' @1' A' ' LL'L' & ' -1' 0?1' 1-' 1L1B?B'&-' 0? ' @10' C1 -10' B&- 1-?\' 1-' B10 ' C01-' 10 < ?

1>' & AA.-1' 10 ' 10 <#@" H' 0" <0B?-' C& ' &?' 1>@ +&'1' A1'-\' @1' &'<@>1' &?' @1' C&<' ' - 1' A' ' 2' @1' & ' <0B?-' 0&>&-BH0' 01- 1-B10' &?' 10B&>1-.1>1-\' 1-, 0' <0B?-' C0&-1' A1' H?1@ B&-A'A&-' H'@ 0&' ' <' Ba?01' A1' @<' >&B'&-

8888 =10<-B1' <001-' &?' 1L1B?A&-' A?' A' ' 1i < ? A10' C+'0& 0@ 0&' ' '@ C '0' I ' < 10 ?\' I ' > 0' 1-' C '0&-1' I ' =& =<B1' &? \' 010' 10' I ' 1- \' #'1-' I ' BD< 1?L' C ' &?\' & 0' I ' &? 1' 1-B&? .1' @<' C1 -1' A1' +'1' I ' A1' >1' @# 1 ' <' <0B?-' 1@<' =<B1' 1L1B?B'&-' A10' '1?L' 0#>&-B10' 01- 1-B10' &?' 10B&>1-.1>1-\' H' 010' 1>C<@ 10' 0&'1-' C '010' I ' A1> .1-' 10' << -0' -=1' A' ' 2' @1' & ' <-H' A?1' 1A 1001' I ' B& 1BA&-' 1-' 0&' ' =<' ' 0" <0B?-' C0&-' A1' >1 -A 1' 10 < 1' H' @<' A1' H?1@ B&-A'A&-' H'@ 0&' ' =<B1' '1@ 1L1B?A&'" &' ' C '0' I ' < 10 ?\' I ' > 0' 1-' C '0&-' I ' 1' ' 1>C '0&-1>1-' I ' =<B1' = -' I ' <?-B1&=" 0&@&-B' @<' A'0B 1A& ' A?' B&-01'@' -=1' A' ' _' @1' &

/ 'B' , <- ¢ 0<@ > ' 1AC' > ' '#"= > 'R' - ?-.1-=1 ' HA' H?1A<>' < ? <' I ' A'<<B#10' C' -&0' A1' <001-0?' <.-< ?>' I ' &' < ?>' 1.-" - " - . ' '-' @'<>1-&' -=&' <C?A' F 10 >' ?@ '>&' 1-&' = <' H?1' '#" >' '>h' 0?# > < &' 0'.'@@&' -=&' '-' =& C'<' C< 1-" >=<' &>' ??' '-' @&A0' ?#" ><.'0' 1LC1A'1-0' = ' ' 0'-1' A' &-1' @1C' I ' C?#8' ='B1' 1L' C 1' -=<' CB@<>< " <B' =' '-' ' 1-1 " I ' &#01 ' +< "=<B' ?L <'=& ><>' < ? 1 ' I' A'-<B -?/P' A & ' ' D&B' 0?# '-B?>#1-" C'B?@&' -?@@< 1-?0' &>' <0@ ' '<C?A' F 10 '-' L+' A'1' <' &-0' #='<' A' '.?- '0'-.?@'0' 'B1B&>' '# ' C' -.

Ñ -' " 20"!' .-' !(6. +' Q -!"+&-!/' .-' !' 6. ++

ME' = ' ' 'G '6 #'H6' '5' 5 - ' &" <@ '0B&-' A1' ,1-@ 0<@? \' &>1' C' @10' @1 10' I ' B?0 ?>10' A1' - 1' &'<@>1@ H?1?L' -&?i' 0?>='0' 1-?\' <' .< A1 'C' 1>1-' =1' ' <' -=1' B& &-1>1-@ &?\' -&\' @'1.10' A1' \' >10>1' @1' &'<?>1' 0'#-' C&+ 10' B&>1' 'BD10' A1?001-' = <-BD1>1-' 0?1 ' A1=1-A1 ' 108' B1 +1 ' I ' <+&' ' ?0 'B1' I ' A &' ' I ' <B&>C@'001>1-' I ' 1L1B?B'&-' A'B1@@10' 1-' H?1@B&-H10' -&\' &? 10' I ' <' ' @&? 0' 0<-\' 10 1' A10 &? #1\' &?' &CC001\' C' ><'- 1j -<-B1' ><-<B1' &?' <? 1' >< 1' HB&-H ¢ I ' & 1' 10 ' 1'-0 ' H1-' C@? &0' -&\' C@1>1C \' 1-?\' A1+<-' B10' D1? 10@ I ' >11>1-' 10' C@1>1-\' A< 1'-' 1-?\' <' '- 1# ' I ' F 10 '-@ . 1+&?0' C@1'-' I ' .3-' B@<>&?' -&?0' <A' 10 1' = '' 1' 0' 1' C' = 0' 10 < ?1@L' I ' 1>C& 1@0' B&>1' C' @10' &C@00'&-0 I ' ><'- 1-<-B10' =<' \' 1-' A<>< .1' A1' -&?0' I ' A1' -=1' C&1C@1' 1-' A', 010' C '10' A1' >10>1' @1' &'<?>1' C' A'+0010' ><'- 1-&?>' >1-&? 0' #< 1 &? 0' C1? &? 0' I ' 1># <B1&? 0' A1' H?1 1@10' I ' 1-H?10 10' 1-' C<''0@ A10

' 56&# +' 1 +&-2' ' D"@1' &-' -#!2' ". 1' &-L' 1.'2

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H?1?L' C@?0& 0' 0&?-' '1' C@?'0' 1>#<?A1\' I'D< A \' 1-' @&?' ><'- ''<<B1' I' ><@+10 110' 0?0A' \/C'B1A' H'@0' 801-' A1' 1 1-?1' A10' = 0' I'<? 10' A1' - 1' A' ' &'<?>1'<0' =110' &#10' iB <? 10' ',110' <CC1@'1\' @' 110' A1' B >C<'.-'1G' " <+&-0' C A1-1\' I' 10 &' 1>1-' A1=1-A?\' A1' @<A+ 0' A1' - 1' .0-' B&-01'@0' H' -? ' 1@<' -<? 1' D&>1' A1' 1'-' 0.@'01' -1'#<BD'@1' D1' 10H?'1' -<? 1' A1' >1 -A 1' 10 <' -1' A&--1' -?F' ><51' A1' '1e' @'C 1' <CC1@@1' , 11' A1' B&>C<'.-'1G I'H' '>@ " ?1' 1- ' < &-' &?' <-1 1' -1'A&--1'@'1@'C11'A1'B&>C<'.-'1' < D'+<@1 ' -1' 0H?'1 9' <@' -1' 0&' ' 1 1-?\' &+10H '@? ' <' >1' A(' +'1' C'C110' I' .?1 1'C' 1-A1'@ 1' 0<-\' = <?A1' &?' ><@1' 1-. -1'9 &?' H' 0&' ' >10-0A' I' =&>'@'1 ' A1> <-' 1-' 0&-' D&0 1= 9 -1' <-?@ +<@@1 ' <CC1@'1\' & -<-' < BD1 ' -<? 1' A1' >1'-A 1' 10 <' H' 10H?'1 9 0'@ -1' 0&' ' 1-01>1-' >'@'1 ' A1> <-' 1-' 0&-' D&0 1 ' 'H' &? \' 10C' ' ?1@0' I' 1>C& 1@0' I' &? \' <? 10' A1' H?1@1' B&CA'B'&-' &?' 10 <' H'@0' 0&'1'' 9' &?0 1-' &? &? 1>1-' &?\' A1@L' >1 - 1= &? 0' >18' -&? 0' #< 1 &'0' C1? &'0' I' 1>#<B1&A'A1' H?1 1@10' I' 1-8' H?10 109' @&?' =110' &#10' I' &?\' ><510' @', 11\' `I' A1' @&?' ,+'B1' 1AC '.>1' 1 1-?9' 0<-\' <0B?-' A1@' 1B1'+ 1' <' @&?' 1 1-?' 1-' H?1@B&-H ' ><51' 1-' 1>C0' <+1-' G 1'H' -?@ 10C' ' ?1@' -1' 1>C& 1@9' -1' -?@ <? 1' H<A' &?' <,<' .1 \' A1' 0<' 1 1-?1' -1' 0&1=' 1' -?@0' H' 0&'1-' A1,0' '? ' 10 1' ><'- 1-&?' >1-&?' #< 1 &' CH? &?' &?' 1>#<B1&?' A10' H?1 1@10' I' 1-H?10 10' 1-' C<''0' 1-' -?@ ><51@ >10' @10' &?0 1' A1' 0&-' M+'B1' I' 1 1-?1' B&>1' A1+<-' 10' A' ' <' C@?0' &0' H'@ C&1' 1' ' 10 1' <C1'1?' ' I' H' ' <0B?-' &?0 1' <0B?-' A1@ ><'- 1-&?' >1-&?' #< 1 &' C1?L&' &?' 1>#<B1&?' A1' 0<' B&>C<'.-'1' C' B1@@1' B<?01@' H' <A&-H0' -?@ <? 1' @? ' 1 1'.-1' -1' 1B +1' A1' 0<' 1 1-?1' -1' A1' 0<' B&>C<'.-'1' 1-' -?@ >< 1G 1' '- =' A1' -&\' @'1.10' .W-' -1' C1 ' ' A1' H?1@1' B&-A'A&-' &?' 10<' H'@ 0&' 9 0&' ' '@ A1' 1 1-?1' A<0B?-' _ 9&?' <? 1' C0&-1' HB&-H H' -1' 0&' ' > 1' A1' 1 1-?1' -1-8' 1'.-1' H?1 1@1' <? 1' H' 0<' CC 1' -1' @<' ><'-A1.-1' C' @? ' -1' C' <? 1' 1-' C '+1' -1'@ <CC1 ' ' I' H' &?\' B1?L' H' 01-' I' C& 1-' '1@ @', 11' <CC1@@1' @'+11' A1' B#>8' C<''.-'19' <' B&- <' 1' A1' B10 1'- 1' & A1-<-B19' @10' @1001-' 0' &?' &? 1>1-' AA-\' A 0' &? 0' <C0' @<' CB@<><B'&-' A1' >10>1' B10 1' & A1-<-B1' 0<-\' @10' C@?0' ?01' &?' C& 1' 1-' <C0G I'H' B10 1' -R1' & A1-<-B1' 0&' ' 1-?1' I' =1 >18' >1-' .< A1' 'A?1>1-' 1L1B? 1' 1-' &?\' C&D' \9' 0'#-' C' B1?L' H&-' &?' <,&-' .1- \' A1' @&? ' 1 1-?1' B&>1' C' &?\' <?R 'C0&-10' 1-' B1' H' <' 1?L' <CA1-' &?BD<-' >10>1' B10 1' & A1-<-B19' 00' C1'-1' A1>C '0&-1>1-' = -' I' <?-8' B1 -9' &?' A10 1' C?C'\' 1-' <? 1' ><51' 0&@&-B' B1 'H' 0&' ' <+'0' <' -&?0' I' <' - 1' B&- 1'@;' C@ H?&" +&?0' ><-AC-0' I' BD< .1&-0' H' ><'- 1-<-' +1?1\' B10 109' A' =1BB\' C?#0' ,1' I' CB@<>1' B10 1' - 1' & A1-<-B1' 1-' '110' ? .D0' '@@10' >BD<- \' I' <? 0' @'1?L' C? 'a10' A1'-\'+ 1' #<'@@'1' 0'#-' A1'-\'=W-BD'01' B&>1' A1D& 0@ I' @1'=1B1\' 10 1' 1-?\' I' A?1>1-' 1L1B? \' 1-' &?\' C&'- 10' " &-' 0&?\' -=1' ./-' 1<@ <' F 10 >' @1'L' ' &? ' A1' <''

C''C>' 1.1>' I' B&-0'@'?

&-0' # '<' A' '.?-A' A-.?@'0' 'B1B&>' '#X' C' -.D'

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! @' D< ' D1' <C@1' #1' 1 >&+1A' = &>' <@'B1' '- &' -.@<-A@ 0& D< ' ' ' #1' '-' -.@<-A' D1' &-A< ' -1L ' <= 1 ' D1' !1<0 ' &=' D1' C'CD<- ' < ' D1'=? D10 ;' -A' D< ' ' ' #1' D&@A1-' '-' D1' @<B10' B&- <'-1A' '-' D1' Q < ? 10' &=' D1' <C@1@ > <A1' '-' D1' 1+1-'<-A' K1- '1 D' 1< ' &=' A'1' , '- ./0' E <-A=< D1 ' D< ' -&K' '0@ <-A' '-' -&-1' & D1 ' @<B1G <-A' D< ' D1'0<'A' < ? 1' #1' C' > @ ' <-A' 0? 1@ ' D&@A1- (' <-A' A?1@ ' 1L1B? 1A' '-' <@@ &'- 0@ K' D' D1' AA' '&-0' ?-A1 8K ' 1-@ -& K' D0 <-A'-.' <- ' 1A<'< '&-' & ' < ? 1' > <A1' 0'-B1' &' D1' &- < G D< ' '0' &' 0< X D< ' 1+1 ' 1 0&-' @'1-@ &=' KD< ' " 1. 11' & ' &-A' '&-' D< ' D1' #1@ D< ' # ' -.1 D' <- ' 1 BD<-A'\1' ' & -.@<-A@ 0D<@@ =' -A' 0?=='B'1- ' ? 1 '10' #1=& 1' D1' ?0 &>1 0@ '-' D1' & ' KD1 1' D1' BD<-A'\1' 0D<@@ #1' # &?.D @ &' #? ' & D1 ' 1 BD<-A'\1@ &' D1' <@?1' &=' <@=' ' 0<'A' 1 BD<-A'010' 0&' # &?.D @ < ' D1' @1<0 @ <0' F &&@0@ 1< D1 @ F #&@=1@0@ 1<A@ '-@ ? 1 @ D1101@ @& D0@ & ' & D1 ' &> >&A'=' 10' &=' D1' <-A

@ @ D< ' =& ' 1+1 ' LBD<-.1' D< ' 0D<@@ #1' ><A1' # ' 1 1#<- 0' &' D1' &? '&=' &>1@ & ' 1@01KD1 1@ ='@<' D1' 0 ?A' 1 BD<- 0' D1' =' >@ ' %0? 1@ ' #&?-A' '-' D1' D<-B1 @ &' #? ' K' D'-' D 11' &- D0' <= 1 ' D1' 0<'A' LBD<-.1' ><A1' 1 BD<-A'010' &=' D1' <C@1@ <0' F &&@0@ 1< D1 @ F &#'=1@0@ @1<A@ & ' '-@ ? 1 ' & ' D1101@ @& D0@ & ' & D1 ' &> >&A' '10' &=' D1' <-A@ &' D1' <@?1' &=' D1' ? >' 0& 1LBD<-.1A@ ?C&-' <'-' &=' !& =1'j ? 1' &=' D1' 0<>1

@ D< ' '-' 1+1 ' & ' <-A' @<B1' KD1 1' D1' <C@1' 0D<@@ #1@ D1' < & 0@ &-0 <#@10@ &a1 0@ <-A' <@@ & D1 ' '= 11 0' <-A' '-'0 1 0' &=' D1' <C@1' 0D<@@ #1' 0K& -' =' 0 ' &' D1' , '- .@ <-A' <= 1 ' &' D1' <C@1

' A' a11C' D1' /)' ' ' &=' F &&@ D1' #1 1 ' D< ' -& " 1-'L1-' &=' -.@<-A' 0D<@@ #? ' - ' F &&@0' #? '&=' D1' ` K-1 0' V ' &=' D1' D11C' <-A' &=' ` D1' ' D10@/P' 1LB1C ' '-' D1' <C@1;' -A' D< ' -&' " 1-'\1-' 1. < 1' F &&@0' -& ' D1 ' 1 BD<-A'010' &=' D1' <C@1' C '+'@ ' -& ' <C1 @ @ ?C&-' <'-' &' =& =1 ' ' D1' <@?1' &=' D1' D'-.' 1. < 1A' ;' -A' D< ' D1' ?0 'B10' &=' 1<B1' '-' D1' &?- ' D<+1' &K1 ' &' 1-H?' 1@ <-A' 0D<@@ 1-H?' 1' = &>' ' >1' &' ' >1' &=' 0?BD' -.='0D' `E < ? 00P' <-A' &=' D1' F 1'. D 0' &=' D1' <C@1@ <-A' C?-'0D' D1>' # ' D1' <'-' <=& 10<'A' -A' D< ' -&' -.@'0D><-' #? ' <- ' F &&@' &=' <- ' 1 0&-@ #? ' =& ' D' >01@=' & ' =& ' D'0' &K-' 01@ <0' &' 01@@ < ' D1' <C@1' <-A' `=& ' &' ><a1' @&=D /P

/' < ? 1' /'$ && ' %'D - ' 0 D'.D (' C&00100&? 0' " '' 4' /' C'0 > 10' " 'G '6 W 1. < & 0' ' $ ' ' 1'$ '. $ +

ME' = ' ' 'G '6 #' ' '

6' "!+!' #&.-' C' !-#"!22!' /0' #.!' &' /0' 6.& +1!' !-*+!$"!' C) /!2' $"!2' /!' b +!2' +'4&"+ /' S0/' !2 !' !-' /&<2!' Y !' (l' *[- !1!-' "&!"&22!' ' !1 2' 22!' 2@' /' & & !' ¿' +!' 6 .@' ' 2. ' +!1 ! ' !-0j V !2 1' +!-/!1 @-' /!' !&-' " @-' - /!' 2.&+' "!*-!' S ."L' %&21!' ."/ &-!' C' !2 ;+& /!+ 22!-' /!' 2.-' /&' +!1!-' +!2' /&!2!2' /!2.0j' !2#"& j

-' C '>10' H' @10 <C@1' <'' ' 1>?1\' A1' <@1 0' 1-' -.@1R 1' '00'-' H'@ 0&=' 1-' -.@1R 1' @?-A ' C BD1'-' @1' =10=' A1' @< '='<-'1' <' C@?'0' < A6' 1 ' *' 0&=' 1<?\' 8 10' @'1?L' B&- 1-?\' 1-' @10 < ? ' A1' @10 <C@1' = ?' @<D' LL+' ' @<'1@ - 1' A' ' _ ' @1' & ' I ' 1-' -? ' <? 1' @'1?G 1 ' H' @1' ' 10 < ? ' 0&=' < > \' I ' .< A1\' I ' A?1 > 1-' 1L11? ' 1<' &? \' C&'- \' &+1' @10' <AA'B'&-0' A10&?\' 10B 'C \@ '1-' B&- 10 1<-' '<0B?-1' A1B@< <B'&-' &?' 10 < ? ' =<' ' A1C?'0' <B&- <= 1 ' 10 <0 <+&=@ H' BD10B?<1' C0&-1' < I -1' A1' H?1@@1' A1. 1' &?' B&-A'A&-' H'@ 0&=' H<>10-1' <0B?-1' BD<-A'01' 1-' -.@1R 1' &+1' 0?=='B1<>1' 01? 1 1@ A1+<-' @10 ?0 ? 0' A' C& '&?' @<' A' 1' 1 BD<-A'01' ' '<>10-1@ A<BD< 1 ' <? 1' BD<-A'01' <' @<' +<@?1' A1' @<' >&=1' A?' A11' BD<-A'01' 00'-' <>10-1' <?' >1 -0@ B&>1' @1 -0' ' H> 0' C1<?L' @<-? \' C@?>#' 10 1 >' #= 1' = ' ><.1' A <C0' &?' <? 1' B&>&A' 110' A1' @<' 1

1>' H' C ' BD10B?-' 10BD<?-.1' H' M <' =<' ' C' BD<- \' <' @<' &? ' A1' &>1' &?' <'@@&? 0@ H@ 0' A' \' BD<- \' &'1-' =1 >1>1-' I ' 0? 1>1-' @'1\' 1-' @<' D<-B1@@< '1' A<BD< 1 ' A1'-\' &'0' >& 0' < ' @<' A' 1' 10BD<?-.1' = '' 1' >< BD<-A'0&0' A1'@10-H'@1' B&>1' @1 -0' H?' 0' C1<?L' @<-? \' I ' C@?>#' &?' 10 1 -' #? 1' = ' ><.1' A <C0' &?' <? 10' B&>&A'=' 10' A1' @<' '1' <' @<' +<@?1' A1' $' 0&>1' '00'-' 10j BD<?-.1' 0' =& =''' 1' A B1@@1

1>' H&-' BD10B?-' @'1?' I ' C& '&?' @10 <C@1', <' 0' <' ' --10 <#@10' # &.& D' I ' &? \' <? 0' =' 0' ' D I ' 0 10' A1' @10 <C@1' 0&'1-' ? 1\' C ' 1>1-' <?' & ' 'C?'0' <' @10 <C@1 1>' C/' >1? \' .< A1 ' @1' D<? ' C '0' A10' @1 -0@ H' -?@@ A '-\1a' 1-' a'.@ 1' -<BDH 1' @1 -10' = ' 0H@ A1' 10' C&08' 100&0' A10' #1 #= \' I ' A10' A'0>10' 0'-&?-' 1-' @10 <C@1G 1 ' H' -?@@ A '-\1'-' < 1' @1 -0' -<? 10' BD<-A' 10' A1' @10 <C@1' U-' C =K1' -1-' 0H'1 @ 0/' C1 -1' A1' =1 = ? 1' @<' +<@?1' A1' @<' BD&01'8 1. < 1G I ' H' @10' ?0 'B10' A1' @<' C110' 1-' C<'@0' 1'1-' C&<= 8 A1-H?1 1' I ' 1-H?1 .1-' A1' 1>C0' 1-' 1>C0' A1' '1#B 1. 1=0' @'.=1 0' I ' A1' @10' C&'010' A1' @10 <C@1' I ' @10' C?-'001-' C' @<' C1 -1' <+<- A' 1' ' H' -? 'D&>1' .@1 0' -<BD< 1' <0B?-1' @1 -1' A1' -? "=& 0H@ C/' @?" >10>10' C '0&-' &1C0' A1>10-1' B&>1' A1' +1-A 1' <' @10 <C@1' I ' C' & 1' & 1' A <C

/ >1 @'?BA' &<' D1' &@@

C@110 I ’ H?1 A108 I ’ &? 10 <?R0 BD&010 0&? A<- \’ A1’-\’ @10 B& C0 A10 &?- 110 0’#-’ C’ R 1’ B&>1’ C’ 1<K1’ B&>1’ A10?’0 1 ’ <+#AD ’ F 1a’ A1’ >11 ’ ’1\’ R’-’-1\’ A’0B?0 I ’ 1>1A’1\’ C’@10 @& 10 A1’ @<’ R 1’ I ’-1> 1’ A1+<- ’ 1’ C’@<A>’ <@ -1’ 0&-’ @’1? 1-<- ’ 1-’ -?@@1’ >< 1 ’ ’1- 8 >1 -0 A1’ >& ’ A1’ D&>1’ I ’ A1’ ><D1 >’ =<’ \’ 10 . &0010 -’1=0 10 1<- \’ I ’ D&, <- 1’ 1-’ > ’@1’ D<? ’ =’@ A10 . &0010 ’+1 0 <- 0& @1>1-’ C<+<@ @10’ `C&?- \’ A1’ >10>10 @10 ’+ 10 C@?’0 C0BD1’-0 <@ >11 9 I ’ 1-’ -?@ <? 1’ @’1? A1’ >10>10 @10 ’+1 0 1’ ’ @<A>’ <@ B&-’00< B1 I ’ <?L’- ’ A< 10 ’ A10 -’1=1’ 1-’ @10 . > \’ =@ F \’ C ’ .3- \’ +’<.10 A? &’’ B A1’ C’<@>1 <?+<- ’ <?’ &’’ &? \’ >< 10 =& 8 =1’ 10 I ’ C=’ \’ 1- ’ C+1-<- \’ ’ 1’ ’ 1-01>1- ’ ? ’0A’B B’&-’0? ’ @10 A#10 =@1 \’ A? <- \’ @10 A’ 10 +’<.10 <- 0&?@18 >1- ’ <?+<- ’ &? A=1’ <0 = 0’ ’ 110 I ’ ? .D0 @&? ’ @’# 110 I ’ = <-BD’010

1>’ B&>1’ & A1’.-1’ 0&’ ’ C’ A’1010 10 < ? \’ H?-1’ >10? 1’ A1’ #@11’ +’-’ I ’ M+&’01’ 0&’ ’ C> ’@1’ &’<@>19 I ’ H’ &1C ’ #?001’L’ <01\’ =1B1- ’ ?-’ H?< R’ A1’ #@119 -’1- >1’-0 <’ B<?01’ H’ -+A@1’ C1 -1’ 10 ’ 0? ’ B1’ & A1’-1’ 1-’ @10 A’ \’ 10 < A 0 C@?0&? 0 .1- \’ A1’ A’1010 ’ 1\’ ? .D0 ’@@10 I ’ < BD110 -1’ +&’@@1- ’ -Ba1’ -<BD< 1’ 1-’ @10 A’ \’ ’ 110 ? .D0 ’@@10 I ’ < BD110 -<’ &0 0’-&?-’ -&1=’ #?001@\’ C ’ @1’ H < 1 I ’ 0’@0 -1’ @10 C? &- ’ <BD< 1’ 1-’ A1 >< 51’ ’@0 @< 10 1- ’ B&>1’ =& =’? 9 <’ R0.D’ ’ A<><.1’ B &CC0 &-’ A1’ &? ’ a ’ B#1’ C& @1 ’ B B 18 >1- ’ 1-B&- 1’ @10 < ? \’ 0?’0A’ \ & A>.-1m 10 ’ I ’ <08 01- ?\’ H’ @10’ A’ \’ 10 < ? \’ 0&’1- ’ =1 >1>1- ’ .< A1m B 1-?m i’=1-’ @< ’ 11’ A1’ &?-A 10 B&>1’ 0==@@&? 0 C> ’ @1’ &’<@>19 I ’ <#’1-’ C’ 1<K1’ B&>1’ C’ R 19 -’1-B&- 108 1<- ’ <0B?-1’ ?0<.1’ <+<C ’ B10 D1? 10 <’ B& <’ 1@ 1 ’H’ -?@@ A10& 1’ 1 1+<- ’ <BD< 1’ 1-’ @<’ A 1’ ’ 11’ A1’ &?-A 10 -<’@@A 0 -?@@1’ >< 1’ #@11’ &?’ # 110 0’-&?-’ &1C ’ #?0 1@L’ C ’ @1’ H?< R’ 0&@&-B’ @1’ C ’A10 A’ \’ 10 < ? \’@ 0? ’ C1’-1’ A1’ =& I ’ 1’ &? ’ @1’ #@11’ &?’ # 10 ’00> ’ <BD< 1@ <?+<- ’ @<’ A 1’ =& =1’A1’ <?’ &’9 =& 0C ’0’ = <-BD’010 &’<@10 <0 H?1?L’ @1’ &’’ <’ B10 1’ =&’ \’ <A’ .0- 1’ B@@1’ =& 1’ A1’ 0<’ . <B1@ 5 H’ <#’<’’ @1 ’ <’ ’ @ ’0B&?- m’ A1’ &-A 10 B&>1’ @10 <’ 0 B <’@@’=0 A<?R0 ’ 110 ? .D0 ’@@10 I ’ < BD110 0’@0 -1’=1 B ’1- ’C ’-1’ BA?1’ 1L1B?B’&-9 1-B&? .1- ’ <?@’1@1’ C1’-1’ 0’#-’ <?’ 0?’ 1’ A?’ &’’ B& ’1 A1’ CA1’ B A<? 1’ HB&-H ’ H’+& <’ 0?’ ’ C ’ @1’ &’

1>’ B&>1’ B&- 1-?\’ 1-’ @10 < ? ’ A1’ 1@’ &?010 H’ -?@@ 1@’.’&?0 -<? 1’ HB&-H9 <BD< 1’ -1’ +1-A1’ &?’ 0&?\’ B&@&? ’ A1’ A&?-’ &?’ R>1’ &?’ A<?C 1’ ’@1’ H &-H9 A<0B?-’ 1011’+1’ &-’ A<0B?-’ 1-’ <0B ’-1’ >< 1’ C’ <-’ &?’ C’ 1-. -’ <’@? ’ =1B1’ <CC &C ’1 ’ <0B?-10 10 &?’ 1- \’ 0? ’ =& =<’ 1’ A B1@@10 C’ H&’’ @10 A’ \’ 10 □’ 1- \’ C? &- ’ 1-’ <0B?-1’ >< 1’ A1+1-’ ’ <’ >& ’ >< -’ G 1 ’ H’ 0’ <0B?-’ 1@’.’&?0 ? <0B?-’ <? 1’ +1’.-1’ 1-B&- 1’ @1’ A’ ’ 10 < ? ’ C’ < ’ & ’ C’ 1-. -’ 1-’ <0B -1’ >< .9 #’1-’ 01 <?’ &’’ □’ <0 <? 0 = 0’ @10 A’ \’ 10 □’ 1- \’ 1- 1 G 0’B&>1’ 1-’ @1’ A’ ’ 10 < ? ’ 10 ’ B&- 1-?\’ C@?0 <?’ C@1’-’ 1 ’ & 1’ A1’ -&+1@’ C’ 0& ’@1’ ><.’-<B’<-’ I ’C’< ’ □’ 1-. -’ <0B?-0 .1- \’ A1’ 1@’.’&-’ C0&-0 +’a1 0 □’ <? 0 C0&-10 10C’ ’A1@0 0&-’ 1- 1\’ 1-’ A’ 010 10 □’ 1- \’ <A &’.-<- \’ <’@&? ’ 10.@’01 ’A B1@@10 ’ 0?=’;<-B1’ □’ <00>-’ A1’ 1-<- \’ &-’ D?’ B’>’ 0 □’ C’ #?@@10 A1@ <CC&0 &’@@ @10 &- ’ =<’ ’ A1A’1 ’ □’ 0<B 1 ’ □

C&’- \’ `K’ C& - \P S&# # ? !4
’T C& 10 S&# #, !
C&- \’ = ’ ’ ’

<@@ & D1 ’ D’-.0 ’0’-.’ K’ D’-’ D1’ &A’10 &=’ &?- ’10 <0 F1@@ # ’ <-A’ <0 # ’ < 1 9 <0 <=& 19 <-A’ <@0& F 1Ba’ &=’ D1’ 1<9 0D<@@ #1’ ’1A9 A1 1 >’-1A9 A’0B?001A9 <-A’ 1>1A’1A’ # ’ D1’ <K0 &=’ D1’ <-A9 <-A’ -& ’ #1=& 1’ -& ’ # ’ D1’ A>’ <@9 -& ’ D’0 ’1? 1-<- ’ ’-’ <- ’ K’01 ’ 1+1 D1@1009 &=’ D1’ ’’1< D’ &=’<’ <-9 <-A’ &=’<’ <’D1>’ A&-1’ ’-’ . 1< ’ D’C09 #1’-.’ <-A’ D&+1 ’-.’ ’-’ D1’ ><’-’ 1<>’ &=’ . 1< ’ ’+1 09 &-@ ’#1-1< D’ D1’ ` ’A.10 ’ &=’ D1’ 0<>1’ ’+1 0 ` - ’. D & ’ D1’ 1<9 < ’A’ ’-’ -&-1’ & D1 ’ @<B10 &=’ D1’ 0<>1’ ’+1 09 D1’ A>’ <@ 0D<@@ D<+1’ &. -’j \<-B1G <-A’ <@0& &’ < 10 ’ D’C0 ’-’ D1’ . 1< ’ !@& 10 =& ’ D1’ . 1< ’ & <.10 &=’ D ’ , ’-.’ <-A’ &=’ D1’ 1<@>G 0<+’-.’ <@K< 0 &’ D1’ , ’-.’ <@@ <--1 ’ &=’ ! & =A ? 10 <-A’ C &=’ 0 D1 1&=’ B&>’-.’G -A’ D1’ 0D<@@ D<+1’ <@0& ? ’08 A’ ’&-’ ?C&-’ D1’ 0<’A’ !@& 109 A? ’-.’ D1’ 0<’A’ & <.10 &-@ ;’ <+’-.’ <@K< 0 &’ D1’ & A09 ’ ’109 <-A’ & &?.D0 D>’ ’#1 ’10 <-A’ <-BD’010

9 F D1 1<0 ’ ’ ’0 & A<’-1A’ # ’ A’+1 0 < ? 109 D< ’ &-1’ 1<0? 1’ &=’ &>9 F ’-19 <-A’ @1’ 0D&?@A’ #1’ D &?.D&?’ D1’ 1<@>9 <-A’ D<’ ’.D ’ ?0D1@0 0 ’a1A’ >’a1’ D1’ ^?< 1 ’ &=’ & -G 1+1 D1@1009 #1B<?01’ D<’ -&’ <’-’ ’0 D1 1?C&-’ & A<’-1A’’-’ D1’0>A’ < ? 109A’+1 0 1&C@1’ &=’A’+1 0 ’ ’109 & &?.D09 &K-09 <-A’ < a1 09 K’@@ -&’ <a19 -1’ D1 ’ #? ’ ’-’ D1’ 0<’A’ ’ ’109 & &?.D09 &K-09 < a1 09 -1’ ’-’ -&-1’ & D1 ’ @<B19 #? ’ ’-1’ ?0D1@0=& ’ D1’ ^?< 1 G <-A’ ’=’ D1 ’ B<H-& ’#? ’ ’-’ D<’ <--1 9 D1 ’< 10 ’ ’ <0 =& =1’ 9 & D1’ . 1<’ ’ “<>< .1’ <-A’ CC 100’&-’ &=’<@@ D1’ 1&C19 <-A’ >< -’=10 @ ’ <.<’-0 ’ D1’ < ? 10 <=& 10<’A G ’ ’0 & <’-1A’ <-A’ <001- 1A9 D< ’ D1’0<’A’ < ? 10 0D<@@ #1’=’ >@ ’a1C ’ <-A’ D&@A1-9 .K1@@ ’-’ D1’ ’ ’H=’ &-A&-9 <0 ’-’ 1+1 ’ & D1 ’ @<B1’ D &?.Dj &? ’ D1’ 1<@>9 <-A’ D<’ ’<0 K1@@ # ’ F< 1 ’ <0 # ’ <-A9 -& K’ D0 <-A’-.’ <-’ 0<.1’ ’-’ ’>10 C<0 ’ &’ D1’ B&-j < G <-A’ D<’ ’-&-1’ = &>’ D1-B1=& D’ A& #? ’ ’-’ D1’ ^’ ’ &=’ &-A&-9 -& ’ ’-’ & D1 ’ @<B19 <- ’ <--1 ’ &=’ & >’ & ’ <@ 9 #? ’ <= 1 ’ ’.D ’ ?0D1@0=& ’ D1’ ^?< 1 9 <BB& A’-.’ &’ D1’ ? C& ’ &=’ D1’ 0<’A’ < ? 109 ?C&-’ <’-’ &=’ ! & =1’ ? 1’ &=’<@@ D1’ & <’ & ’ <@ ’0&’ ##&?.D G 0<+’-.’ &’ D1’ ,’-.’ D1’ <’A’ ! & =1’ ? 19 1LB1C ’ ! <-BD’010 & <@9 &’ KD&>’ D1’ ,’-.’ <’ D’0’ ’>1’ &=’ D’0 0C1B’<@ E <B1’ D< D’ . <- 1A’ D1’ 0<>1’ ! & =1’ ? 1G <-A’ =&<’ <0 K1@@ D1’ < & ’ <-A’ D1 ’==0 &=’ &-A&-9 <0 D1’ < & 0 <-A’ <’@’==0 &=’ & D1 ’ ’ ’109 & &?.D09 &K-09 <-A’ < j a1 09 ’=’ D1 ’A&’-& ’ D1 1&=’=?@@ <-A’ A?1’ L1B? ’&-9 0D<@@ ’-B? ’ @’a1’ <’-9 <0’K1@@ < ’ D1’ ?’ ’ &=’ == 1’ , ’-.’ <0 &=’ D1’ < 9 & ’ &=’<- ’ & D1 ’ 1 0&-’ D< ’ K’@@ 0C1’ =& ’ D1’ , ’-.

9 F D1 1<0 ’ ’ ’0 B&- <’-1A’ ’-’ D1’ < ? 1’ ’’ 1’ 1 .’&0’09 D< ’ -& 1@’.’&?09 -& ’ & D1 ’ KD< 0&1+1 ’ D1’ #1’9 A& #? ’ & ’01@@9 & ’?-A1 ’ &@&? ’ &=’E’= 9 & ’ 1 >’ & ’<- ’ & D1 ’ <--1 ’ &=’ ’ @1’ KD< 0&1+1=9 1B1’+1’ &=’<- ’ <-9 & ’ ’-’<- ’ <--1 ’ # ’ `E’= hP & ’ -.’-’1’ B<?01’ & #1’ <CC &C ’< 1’ ?- &’ D’>’ -- ’ <-A0 & ’ 1-1>1- 09 C&-’ <’-’ &=’ !& =1’ ? 1’ &=’ D1’ 0<>19 KD1 1# ’ D1’ 0<’A’ <-A0’ <-A’ 1-1>1- 0 ’-’ <- ’ <--1 ’ >’.D’ B >1’ &’ & > ’0 -A’ 0)’ ’=’<- ’ 1@’.’&?0G 1 ’<- ’ & D1 9 A&’ <.<’-0 ’ D1’ 0<’A’ < ? 1’ # ’ ’& ’ -.’-’1’-’<- ’ <--1 9 D<’ ’ ’ #1’ @<K=?@ &’ D1’ , ’-.9 <-A’ &’ & D1 ’ & A09 ?C&-’ D1’ 0<’A’ <-A0’ <-A’ 1-1>1- 0 &’ 1- 1 G <0 ’-’ D1’ 0<’A’ < ? 1’ A& D’ >& 1’ =?@@ ’ <CC1< ;’ -A’ -&K’ &=’ @< 1’ # ’ 0?# ’@1’ -K.’-< ’&-9 <-A’ # ’ 9 <’@A’ -.’-19 &>1’ 1@’.’&?0’ 1 0&-09 < 0&-09 ’B< 09 <-A’ & D1 ’ 0C’ ’ ?<@ 1 0&-09 D<+1’ 1- 1 1A’ ’-’ A’+1 0 <-A0’ <-A’ 1-1>1- 0 KD’BD’ #1’ <A &’-’-.’ &’ D1’ D? BD109 <-A’ &=’ D1’ 0<>19 # ’ ?==1 <-B1’ <-A’ 001- ’ &=’ D1’ 1-<- 09 D<+1’ <>A1’ D? BD8 < A09 <-A’ # ’ ?@@0’ &=’ D1’ ’0D&C’ &=’ &>1’ D<+1’ `A1A’B< 1A’ <-A’ D<@@&K1A D1’ 0<>19 hP <-A’ ’-’ D1>

=’ &’- 0’ *4$;’ ’ G &E’ & ’!’ & # ’’ !:
’ ’ ’ ’ ’
&’ & 0’ . ’6M %1 ’*I Z) ’>&0 ’-1L ’ ! ’V
h <=’ (’ $
&’ ’’ %’ ’ ’$’M ’% % % %’ **$2 %

402 !+Z . ’ .’’-’2 ’’&E! /’ 1 E!’ !’ 90 ’’ !’’

3!- + @’ .-’ 40@&-*’ !’’ -@’ . !’’ 6 !’ B.’’k !& 0’’!’ . ’ !’ .1)

’$ /7 ’ ’ /!’ 6! *&. 2

. -’ !’’ &-*’ WZ -/ . ’ ’ &0# L@ ’’/’ /!#+ ’’!/’ .’ 7& &- ’ 0 !

A&’ ><a1’B&- ’-?<@@ ’ < &BD’<@ ? ’-.’K’D&?’ ’B1-B1’ &=’ D1’ , ’-.’<-A’ &=’ D1’BD’1=’ & A0G D1 1=& 1’ ’ ’0 A1j B@< 1A’ ’-’ D’0 < @’<>1- 9 D< ’ ` ’ P’ ’0 ><-’=10 @ ’?’ D’-’ D1’ &>C<00 &=’ D1’0<’A’ < ? 1 ’ -A’ >& 1&+1 ’ ’ ’0 <. 11A’<-A’ <001- 1A9 D< ’ <@@ D1 ’ D< ’ #1’C&001001A’ # ’ !1&==>1- 9 & ’ # ’& D1 ’ <--1 9 &’ D1’ 01’&=’ 1@’.’&?0 1&C@19 & ’& D1 ’0C’ ’ ?<@ 1 0&-0 &=’ <-A0 <-A’ 1-1j >1- 0 !1109 A+&K0&-0 & ’<- ’ <--1 ’& D1 ’ &0010j 0’&-0 KD< 0&1+1 9 &’ <>& ’01’ D1>9 <-A’ KD1 1&=’ D1’ 0<’A’ 1@’.’&?0 <-A’0C’ ’ ?<@ 1 0&-0 <a1’ D1’ &=’ 0 D< ’ #1 K’L ’ D’0 <-A’ D1’ !1<0 ’&=’ ’BD<1@ -1L ’B&>’-.9 D1 ’ 0D<@@ B<?01’ D1>’ &’ #1’<>& ’01A’ # ’ D1’ ’B1-B1’ &=’ D1’ , ’-.’ <-A’ &=’ D1’ & A09 & ’ 1@01’ D< ’ D1 ’ 0D<@@ 01@@ <-A’<@’1-1’ D1>’ &’ 0&>1’& D1 ’ 01’#1 K11-’ D’0 <-A’ D1’ 0<’A’ !1<0 9 ?C&-’ <’-’ &’ #1’=& =1’ 1A’ &’ D1’ , ’-.9 <-A’ &’ D1’ & A09 <BB& A’-.’ &’ D1’ !& >’ &=’ D1’ 0<’A’ < ? 1’&=’ 1@’.’&?09 <0 <-A0 C? BD<01A’ # ’ 1@’.’&?0 1&C@1,’ -A’ D< ’ = &>’ D1-B1=& D -&’ 0?BD ? BD<01’ #1’ ><A19’0&’ D< ’ 0?BD 1@’.’&?0 & ’& D1 ’0C’ ’ ?<@ 1 j 0&-0 <a1’ D1 1&=’ D1’ &=’ 09 <0 <=& 1’ ’0 0<’A9 ?C&-’ <’-’ <=& 10<’A <-A’ D< ’ D1’0<>1’ W) < ? 1’1L 1-A’ <-A’ #1’ &#01 +1A’ &=’ <@@ <-A09 1-1>1- 0 !110 A+&K0&-0 <-A’& D1 ’ &00100’&-0 C? BD<01A’ & ’ &’ #1’C? BD<01A’ &’ D1’ 01’&=’ E’@A0’ & ’ ! < 1 -’ ’10’ -A’ >& 1&+1 ’ ’ ’0 <001- 1A9 #1B<?01’ < & 0 <’@’==09 <-A’ &>>&-0’ &=’ ’ ’109 & &?.D09 <-A’ & D1 ’ &K-0 KD’BD D<+1’ <’C1 j C1 ?<@ &>>&-<@ 9 <-A’& D1 0 KD’BD D<+1’ @ B10 C1 j C1 ?<@@ #1’<0 C1 C1 ?<@ <0 1&C@1’&=’ 1@’.’&-9 D< ’ I >’ D1-B1=& D D1 ’0D<@@ -& ’C? BD<01’ &’ D1>9 <-A’ &’ D1’ ’ &>>&-0’ & ’ ==’B19 ?C&-’ /)’ <’-’ B&- <’-1A’ ’-’ D1’ 0<’A’ < ? 1’A1’ 1@’.’&0’0 <-A’ `KD1 1<0’ & D1 0 #1’C&0j 01001A3P’ & ’ D1 1<= 1 ’0D<@@ C? BD<01’ &’ D1’ ’ 01 <-A’ D1 ’ D1 1&=’ <a1’ D1’ &=’ 0 ’ ’ ’0D<@@ #1’ A&-1’ ’-’ @’a1’ <--1 ’<0’ ’0 <=& 1’0<’A’ &=’ 1&C@1’&=’ 1@’.’&-

9 1B<?01’A’+1 0 "<>><.10 <-A’ ` ’-A <-B10 ’ &= 1- ’>10 D<+1’ D<CC1-1A9 <-A’ A<’@ ’A& D<CC1-’ &’ D1’ < ’0D’&-1 0 &=’ A’+1 0 @<B10@ # ’ D1’ CC &C ’< ’&-’ &=’ 1-1=’B10 &=’ D1’0<>1’ @<B10G ’ ’ ’<. 11A’<-A’<001- 1A’ D< ’ ’-’1 1 ’ ’B1-B1’ = &>’D1-B1=& D &’#1’><A1’ ’-’ D1’ D<-B1 9 &=’ D1’ CC &C ’< ’&-’ &=’ <- ’ < ’0D’ D? D9 ’ ’0D<@@ #1’1LC 100@ ’&- <’-1A’ <-A’ B&>C ’01A9 D< ’ D1’ "’&B10<-’ &=’ D1’ @<B19 ?C&-’ D1’ CC &C ’< ’&-’ &=’0?BD’ D? BD109 0D<@@ & A<’-9 <BB& A’-.’ &’ D1’ <@?1’&=’0?BD’ D? BD109 <’B&-+1-’1- ’ ?>’ &=’ &-1 ’ &’ #1’ C<’A’ <-A’ A’0 ’#? 1A’ 1< @ ’ &=’ D1’ ! ?’ 0’ <-A’ &=’ 0’ &=’ D1’ 0<>1’ D? BD109 # ’ D&01’ D< ’ 0D<@@ D<+1’ D1’0<’A’ D? BD10’ ’-’ C &C1 ’ 019 <-A’ # ’ D1’ ’ ?BB100& 09 &’ D1’ C&& ’ < ’0D’&-1 0’&=’ D1’0>A’ D? BD109 ’-’ ’A’&=’ D1’ ’ ’+’-.’ <-A’ ?0 1-<-B1’=& ’1+1 G <-A’<@0&’ D< ’ D1’ ’B< ’#1’K1@@ <-A’ ?==’B’1- @ ’ 1-A&K1A

’ F D1 1<0’ ’ ’ &Z’& A<’-1A’ # ’ D1’ < ? 1’ ><A1’ D1’ 1+1- D’ 1< ’ &=’ #? ’ & A’ D1’ , ’-.9 D< ’ = &>’ D1-B1=& D’-&’ 1 0&-’ @’1-’&’ ’’1-’\1-9 &=’KD< ’ 0 < 1’ & ’ &-A’ ’&-’ D< ’ D1’#19 0D<@@ <a1’ & ’ B< 9 & ’ B<?01’ &’ #1’ <a1-’ & ’ B< ’1A’ # ’ <-A9 & ’ 1<9 &?’ &=’ D1’ 1<@>’&=’ -.@<-A9 &’<- ’ > 0’&=’ B& @<-A9 C ’+’@ ’& ’ &C1-@ 9 <- ’ <--1 ’&=’ >&? 9 & -9 <@ 9 & ’& D1 ’ ’=D’<@@ & ’ <- ’ & D1 ’ 1= 10D>1- ’ KD< 0&1+1 9 ?C&-’ <’-’&=’ !& =1’ ? 1’&=’ D1’0<>1’ ’B ?<@@ & ’ >&? 9 <DA’ & D1 ’ D’-.0’ <=& 10<’A9 &.1 D1 ’ K’ D’ D1’ D’C09 10j 01@09 < 09 & ’ & 010’ D< ’#1< ’& ’ B< ’ D1>9 & ’ 1@01’ D1’ +1 ’ <@?1’ &=’ D1>’ ;’ KD1 1?C&-’ & ’ & A’ D1’ , ’-.’ < ’ D1’ 1H?10 ’&=’ D1’ &> >&-09 <-A’# ’ D1’ Aj +’B1’ <-A’ 001- ’ &=’ D1’ & A09 D< D’ A1B@< 1A’ ’-’ A’’0 < @’<>1- ’ D1’0<’A’ < ? 1’&-’0?BD’ <--1 9 D< ’ ’ ’K<0 -& ’ D’0 - 1- ’ <’ N) D1’ -<a’-.’&=’ D1’ <’A’ < ? 19 -1’ 1 ’ ’09 D< ’ D1 ’ D< ’ D<+1’B< ’1A’& ’ <a1-9 & ’= &>’ D1-B1=& D’0D<@@ <a1’& ’B< ’ ’B ?<@0’ & ’ 1 BD<-A’010 &’ D1’ &K-’ &=’ 1 K’Ba’ ?C&-’ K11A9 KD’BD’ ’0 D1

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01C?@ ? 1’ C< &BD’1@1’ =&-’ B&- ’-?1@>1-’ 1-’ B1@@10 0<-\’@’B1-B1’A?’ &” I ’A10 BD’1=0 = 0 G A1B@< 1’10 ’ 1-’ B10 ’ C@1>1-’ H’ B1’ 10 ’ &, 1>=1-’ 1-’ B<0 A?’ A’ ’10 < ? 9 ’ 1-’ &? 1’ <BB& A1\’ 10 ’ I ’ <001- ?\’ H &? \’ B1?L’ H’ 0&-’ C&001 0’&-1\’ C’ =1&==1>1-’ &?’ C’ <? 1’ +& 1’ <@ &1C0 A1’ .1- \’ A1’ 1@’.’&-’ &?’ <?R0 C0&-10 10C’ ’ ’1@09 A10 R 10 1- \’ =110 <A+&10&-0 &?’ <?R0 C&00100’&-0 HB&-H10 C @10’ <>& ’01 9 I ’A&-’ @10 A’ \’ 1@’.’&?010 I ’ C0&-10 10C’ ’ ’1@0 C .-1-’ @10 C=’ \9 H’ C1- 1’ B ’ I ’ @1’ =10 ’ A1’ 1’-’ ’BD1@ C0BD1@-’ 1-<-’ ’@0 @10 =<B1-’10 & <>& ’ 1\’C’@’B1-B1’A?’ C” I ’A10 = 09 &?’ <? 1>1-’ H’P0 @1 ’+1-A1-’ I ’ <@’1-1-’ <’ <? 1’ &1C0 C1- 1’ B ’ I ’ @1’ A’ ’ =10 9 0? ’ C1’-1’A10 1’=& I ’ \’ <?’ & ’ I ’ <0 = 0’ 0&@&-B’@<’ =& >1’ A1’ @10 < ? ’ A1’ 1@’.’&?0 B&>1’ 1 \’ C BD<01\’ C’ .1- \’A1’ 1@’.’&-G I ’ H’ A1’ B10 ’ 1>C0 1-<+<-’ -?@@ ’1@ C? BD<B101’=1B19 ’00’- H’A1# ’ 1, .’#?010&?’ < 0 C #-10 10C’ ’ ’1@0 1-’ C’.-1-’ @10 C=’ \’B&>1’A10?’0 0? ’ @<’C1’-1’ <+ - A 1G I ’ >1 >1’B10 ’10 < ? ’01L 1-A1’ I ’0C’ ’ 1-?\’A1’ &? \’R 10 I ’ 1 \’ =110 <A+&1 &-0 I ’ <? 10 &00100’&-0 C BD<B1\’ I ’<’ C BD101 0 <@ &1C0 A1 ’ .’@A10 I ’=’<R-’ 110 ’ ’1-&? B1’10 ’<001- ?\9 C ’B1’ H’ <’ 0 <’@@)=0 I ’ &10 A1’ ’110 ? .D0 I ’<?R0 +’@@10 H&-’ B&1’CC1 ?1@ I ’<? 0 H#-’ &=’B10 CC1 ?1@0 ! ’ <?00” CC1 ?1@0 B&>1’ .1- \’A1’ 1@’.’&-9 H’A1’B10 ’ 1>C0 1-<+D ’ ’@0 -1’ C/BD<B1-’ <’1?]’ I ’ <’ @&?’ &1’&?’ &==’B1’0? ’ @<’ C1’-1’B&- 1-?1’ 1-’ @1’ A’ ’10 < ? ’ A1’ 1@’.’&?010 ’ I ’A1’B1’H’ <?R0 0&-’ C&001 j 0’&-1\’&?’ <’ C BD<B1\’ ’ 1>C0 <+1-’ ’<’ >-’ & 0’ I ’ ’@0 1-’ =0’. -1-’ &?’ C-A &-’ @10 C=’ \9 0&’ ’ 01>#@<#@18 >1-’ =?’ B&>1’ A1+D’ ’ 10 ’ A’ ’ A1’ .1- \’A1’ 1@’.’&=@

1>’C/ B1’ H’ C@?0&? ’ A<><.10 I ’A10C’010 0&-’ 0&’ +1-’ ’<+1-?<’ I ’ <+1’. -1-’ A1’ P&?’ 1D’ <? 1’ <0 C&BD’1-0’ A1’A’1010 @’1?L’C’@<CC &C ’<B@&-’ `A10 D-=’B10 A1’ >10>1’ @10 @’1?L9 <BB& A1\’1 ’ I ’ <001- ?\’H1-’1D10B?-1’ =’B1-B1’ A10& 1’ <’ =<’ 1’ 1-’ @<’ D<?-B1@@< ’1’ A<CC &C ’<B’&-’P’ A<0B? 1’10.@’01’ C&BD’1@@19 0&’ ’1LC001>1-’ B&- 1’ ?\’ I ’ BC>C ’0 H’ @1’ ” ’&B10<-’ A1@ ,1?9 1 ’ @< &C ’<B’&-’ A1’ ’1@L’ 10.@’01 ’ & A1’-1’ 0&@&-B’ @<’ +<@?1’ A1’ ’1@L’ 10.@’010 ?-1’B +1-<#@1’ 0&>1’ A< .1-’ A10 1’ C<’1\’ I ’A’0 ’#? \’ <--?1@>1-’ A10 = ?’ \’ I ’C=’ \’ A1’ >10>10 @10 10.@’010 C’ 11?L’H< &-’ @10’ A(10’1.@’010 1-’CC 1’&1C ’ I ’C’@&? ’ 0?BB10 &? 0 <0 C&+ 10 C< &BD’1-0 A10 A110 10.@’010 1 ’ 1’A1’ A1’ @&? ’ +D 1’ I ’0?0 1-<-B1’ <’ &? \’ &? 0G I ’H’ @1’ ’a1 ’0&’ ’<?La’ ’ #’1-’ I ’B&+1-<#@1>1-’ A&K1\8

1>’B&>1’& A1’-1’0&’ ’C’ @10 < ? ’ =1’ ’ <-’ A?’ 1.-1’ +’2 -=1’B’ @1’ &” 01C ’0>19 H’ A1@& 0 1-<+0-’ -?@@1’ C0&-1’ <@’1-1’ ? A1-\1’-1’ A1’ HB&-H ’ B&-A’B’&-’ &?9 10 < 1’H’9 ! ’ <>10-1 &’ ’ &’ ’ 1<+>1 &’ ’ &?’ =1 &’ ’ >’+&’1 ’ &?’ <>10-1 ’C’ 1 1’&?’C’ >11 9 D& 0 A?’ &’<@>1’ ” 1-.@1R 1’ <0 <0B?-10 C ’10 ” 10B&B1’1-’C ’+1’ -1-’ <CC1 9 <0B?-1’ > 0 I ’ A< >/1’ A1’ #@11’ A1’ # 110 -1’ A<? 1’ +’ A@ &?’ A<- 1’ 1= 1 0D1>1-’ H &-H ’ ?’ C<-1’A1’=& = ’’ ? 1’A1’ >10>10 @10 +’ <’@@10 < >? 10 I ’ A1’ <?R0 BD&010 <+D’ 8 A 10 1-01>#@1’ &+10H ’ @10 -’1=1’ +1001?#B BD< 1 10 &?’ B’ ’+<@L’H’@10 C& 1 &’&’ ’&?’ <>10-&&’1-’ &?’ A1’@<’ <” +<@?1’A’B1@@1G ? ’ H?&@ & ’ @1’ &” <’@<’ 1H?10 ’A10 &10 I ’A1’ @<+ 0’ I ’ <001-’ A10 2!’ <A’ A1B@< 1’1-’ B10 ’ C@1>1-’ @1’ A’ ’ 10 < ? ’ 1-’ ’1@@1’ >< 19 H’@ -10 &’ ’ C<0 0<’1-1-’<?’ 1>C0 A1’ @<’ B&-=1BB@&-’A?’ A’ ’ 10 < ? ’ -1’ ?-H& 1’10 9 H’B1?L’H&-’ <>10-1\’&?’1-+&’1\’ &?’A10& 1’ 1-<+<-’ <>10-1 &-’ &?’ 1-+&@1 &-’ +’ <’@@10’ &?’ <?R ’ BD<-A’010’ <’ @<’ +” 1’ A1’ 1 1K a’ 0? ’ K1A1’ H10 ’ @<’

\’ - 1 @’-1A’ &-’ D1’ &@@

;f (*ʾ ʾ !ʾ ' V -- .-

'@@1' A?' &'' I ' A1' 0<' @'.1<-B1' 1-B ? .1- ' @<' C1'-1' A?' A' ' 1< < ? ⸗ -1' -1' 0&'1- ' 1-?\' A1' C<'1 ' B?0 ?>10' I ' 0?#0'A10' .0?- 1\' <?' &'' A10' BD<-A'010' H' 0&- ' &?' M &- ' <>10-1\' D& 0' A?' &'<@>1 ' ? +1?' &? \' =&' \' H' B1?L' ' <>10-1- ' <0B?-10' A <C ⸗ +' <'@@10' &?' <?R0' A'BD<-A'010' D& 0' A1' @<' A11' '@@1' A1' 1 1K a⸗ <0' <0B?-10' C '10' 10 1<- \' A1@ <>'0 1' A?' &'⸗ C< 1- ' @10' 0?#0'A10' B?0 ?>10' I ' <? 0' A1+&' 0' 1- ' A?10⸗ I ' 0'@0' @<>10-1- ' <0' <0B?-10' C '10' A1@ 1-1>'0 1' A?' & ⸗ 1-8 B&? .1- ' @<' C1'-1' A1@ A'' 10 < ? '

+'' ' 1>' B&>1' & A1'. 1' =?'0 ' <?' A< 1'-' C@1>1C ' H' @1' C<00<.1' A10 1 -' D& 0' A?' &'<@>1' 0&'' 1@ C& ' A1' "1 1> D' I ' -?@@1' C< ' <'@@&? 0⸗ <BB& A1\' 10 ' H' @<' A11' & A1'.-<-B1' 0&'' <A-?@@1\G ' H' C1- 1' B ' I ' @1' =10 ' A1' 1'- ' &D<-' @1' <C '0 1' C0BD1'-' +1-<- \' &? \' I D<- \' A1-\1'-0' I '<@'1-10' 0&'1- '<' @< .1' A1' BD< .10' 10 1 -' ' -'1=1' I ' <? 10' +1001?@L' C ' <>10-1 ' D& 0' A?' &'<@>1' 1-' H?1@H⸗ C& ' H'@0' +& &- ' 10@' 1' AOW \' @1' &'<@>1' I ' <' H?1@1' CQ H'@0' +& &- ' ' < ' @1' A' ' =10 ' 1C1' 1- ' <' <@B'0' C ' @1' 1>C0' H' @<' 1C<' 1' A10' @1'-10' ' M <⸗ C<'<< \' &? A 0' @10' ?0 ?>10' 0?#0'A10' I ' A1+&' 0' 1- ' A?10' <+W- ' @1' C<00<.1' A1@ 10 1 -' <+D?A' '

']⸗ 1>'T >1'B&- ' '0&' ' 1-' @10 < H ' A1' @10 <C@1⸗ <?'= -' H' @10' B - <B 10' =1' \' A1'-\' @10 <C@1' 0&'1- ' @1' >1?@ \' 1-?\' I ' @10' C<'1>1- \' C0 1>1- ' =0? \⸗ H' BD10B?-' <' ' A1' @10 <C@1' 1' ' C&<' ' A1' C-A 1' 1 -'0<-B10' A ' A1 10' H' D&>1'+ ?A < @<' 1' AT=B0 ' @<'' 1-' C01-B1' A10' E&-18⸗ 0 <#@10' A1' @10 <C@1' &?' &-' A1?L⸗ 1 ' H1-' BD10 ?-' A10' A110' `10 <#@100&' ' ?-' 01<@ & A1'-1' A1> <-' 1-' @< .< A1' A?' A' ' <' ' 0&? D' @10' 01<#' A10' A' \' &-10 <#@10G <BB& A1\' 1 'S I <001- ?\' H' @1' A' ' 10 < ? '0&' ' =1 'C1>1-' 1-?\' 5' .< A1\G I ' ' -?@ <' ' A1' @10 <C@1' C'.-1' &?' 10B1'+1' <0B?-1' 1B&-00<-B1' A1' A1 1' 1-B&- 1' @< =& >1' A?' A' ' 1 < ? ⸗ 0? ' C1'-1' A1' C<'1 ' <?' &'' @< >&' 1' A1' 0&>1' A1+D' ' @?'' 1B&-'001

⸗]' 1 ' <' @< C@1'- 1' A1' @<' 9B&1' =1' ' 1-' C@1>1-' A1' B1' H A<?-B'1C' 1>C0' 10 &'1-' C@?0&0' A <C0' =1' \' 1-' @<' '@@1' A1' E'@A1=& A' I ' <'@@&? 0' 1-' @10' &?- 110' A1' ? =' ?001L' I ' ? ' <CC1 1\' A <C0' A1' E'@A1=& A⸗ H' =1? 1-' A1' #&-1' =10? 1' I ' A1' #&-' +<@?1' I ' C& 1 1-' .D' ' -&?-'G 1' & 1' C' B<?01' H' =?@@1 0' I ' <? 10' A1' >10>1' @1' C<'' ' ?01-' A<BD<R' @10' A <C0' A1 ' A' \' C<''0' <+<- ' H'@0' 0&'1D ' =?@@1\' I ' C=<a\' B' 1-' @&? ' =10? 1' C ' B&+1 '01' A<+&' ' @10' A' \' A <C0' A1' . 1'-A 1' >10? 1' &? 1' @<' B&1' <00'01' H' <A 0' 10 &' ' ?011⸗ <'D1- ' B1@@10' A <C0' C@?0' @&-.1 ' I ' C@?0' @< .10' H10 1' -1' 0&@ '1-' &?' A1 &'1-' ' <' .0- ' =1#@1001' I ' 1>C1' 1>1-' A1' C10>10' @10' % <C0' I ' R0. ' A10B1' ' A?' C&1C@1;' BB& A1\' 10' I ' <001- ?\' C?' ' 10BD? ' A1# ' A<><.10' I ' A1B1' 10' 1-' 1>C0' <+1-' ⸗ H' A10& 1' 1-<+0-' -? ' =?@@1 ' -<? 1' C &-1' HB&-H⸗ <BD< 1' A1'C\' @10' A' \' +'@@1' I ' &?- 110' <0B?-' A <C' << < 'H' >10>1' @1' A ' 0&' ' =?@@1\' I ' C@<-1 <1-' C=<' ' 1-' 0<' -< ? 1' I ' 1-01<@@1' A10&?\' @1' 01<@ <' B1' & A1'-1' 0? ' C1'C1' A1' =& =<' 1' A'B1@@1 '

L ' 1>' <BB& A1\' 10 ' I @<001- ?\' ' &? \' @10' B1'- ? 1 0' A? &@<=<'1' H' &1++1-' B1'-@? 10' .< > '01\' A1' H@<-a' >1 <@ ' C? &-' &+1 ' ?01 ' B B&- '-?1 ' @&? ' A@ 1' >10 '1 1⸗ B10 <00<+&' ' A1' .< -'01 ' @10' B1'- ? 10' A1' H@<-a' >1'< @ B&>1' <?-B'1-1>1-' 0&@&'1- ⸗ -'1- B&- 10 1<-' <0B?-10' BD< 10' &?' C< 1- 10' .D'- 1\' <0' < B?-10' BD< 10' &?' C< 1- 11' 0&'1- ' =<' \' <?' B&- <' 1' H'@0' 0&'1- ' +&'A10' I ' A1' -?@@1' =& B1

f +*ʾ= '= 0 ʾ-/

, '- ./0' &K -⸗ <-A' &=' D'0' '1.<-B1⸗ 0D<@@' '-B? ' D1' <'-' &=' D1' 0<'A' < ? 1⸗ -1' 0D<@@ -& ' #1' #&?-A' &' CJ ' ?0j &>0' <-A' ?#0'A'10' . <- 1A' &' &? ' & A' D1' , '- .' &=' 1 BD<-A'010' D<' #1' & ' 0D<@@ #1' B< '1A' &? ' &=' D1' 1<@>⸗ &+'A1A' <@K< ' D<' D1 ' KD'BD' B< ' <- ' @& D⸗ 'B ?<@0⸗ & ' & D1 ' 1 BD<-A'010' &? ' &=' D1' 0<'A' &K -' &=' 1 K'Ba⸗ &' <- ' @<B10' #1'-.' '-' >' 'K' D' D1' , '- .⸗ 0D<@@ C< ' D1' ?#0'A'10⸗ ?0 &>0⸗ <-A' & D1 ' "? '10' D1 1&=' A?1' ` &' &? ' & A' D1' , '- .9P' <-A' '=' D1 ' A&' B< ' /)' &' <- ' < 0' &=' D1' , '- ./0' -1>'10⸗ D1 ' 0D<@@ '-B? ' D1' <'-' &=' D1' 0<'A' < ? 1

⸗ F D1 1<0' ' 'K<0' & A<'-1A' <' D1' @<0 ' < @'<8⸗ ' >1-⸗ D<' D1' <00<.1' &=' '-'&? ' &=' D1' 1<@>'0D&?@A' #1' <' D1' & '&=' "< >&? D⸗ <-A' -&' @<B1' 1@01;' ' '0' <. 11A⸗ D<' D1' 0<'A' A'-<-B1' #1' <A-?@@1A⸗ <-A' D<' #1 K11-' D'0' <-A' D1' !1<0 ' &=' <'-' &D-' <C '0 ' -1L ' B&>'-.⸗ <@@' 1 BD<- 0' "1-'\1-0' <-A' @'1-0' 0D<@@ #1' <' @< .1⸗ &' @<A1' '-' 'D'C0' <-A' & D1 ' 1001@0⸗ &' B< ' &?' &=' D1' 1<@>' '-' KD<' <+1-' D1 'K'@@ BD&&01' K' D'-' D1' 1<@>⸗ <-A' &' KD<' < ' ' ' C@1<01' D1>' -A' <= 1 ' D1' 0<'A' ! 1<0 ' D1 ' 0D<@@' 1C<' ' &' <@<'0' =& ' D1' '>1' D<' ' D1' 10& ' &=' F &&⸗ 0D<@@ #1' D1 1⸗ C< '-.' <@K< 0' D1' ?0 &>0⸗ ?#0'A'10⸗ <-A' `"1+&' 0'/P' D1 1&=' A?1' #1=& 1' D1' <00<.1' &=' D1' 0<'A' '-

⸗ F D1 1<0' ' 'O B&- <'-1A' '-' D1' < ? 1' &=' D1' <C@1⸗ &' D1' - 1-' D<' D1' &- < 0' '-<A1' K' D'-' D1' <C@1' 0D&?@A' #1' D1' #1 1 ' C1 =& >1A⸗ <-A' D1' < ' &1- 0' 1<A'@ ' ><A1⸗ D<' 1+1 ' < & ' &=' D1' <C@1' 0D<@@ D<+1' &K1 ' &' <a1' 1B&.-'0<-B10' &=' "1# 0' D<' <- ' <-' 7 & ' ><a1' #1=& 1' D'>' '-' D1' 101-B1' &=' D1' --0 <#@10' &=' D1' <C@1⸗ &' &-1' &=' D1>' ' <-A' D<' '-' 1+1 ' &=' D1' 0<'A' <C@10' #1' &-1' 1<@ & A<'-1A' &' 1><'-' '-' D1' ?0 &A ' &=' D1' 0<'A' < & ⸗ ?-A1 ' D1' 1<@0' &=' D1' 0<'A' &-0 <#@10G ' '0' <. 11A' <-A' <001- 1A ' D<' D1' 0<'A' < ? 1' #1' =' >@ ' a1C ' <-A' D&@A1-G <-A' D<' -&' < & ' &=' D1' <C@1' <a1' & ' 1&1'+1' <- ' 1j B&.-'0<-B1' &=' "1# ' B&- < ' &' D1' !& >' &=' D1' 0<'A' < ? 1⸗ ?C&-' >-' &' C< ' &' D1' , '-.' D1' &'1 ' &=' D1' ?>' 1B&.-'\1A' #1=& 1' D'>

⸗ ' D1' &>C@<'-' &=' D1' &>>&-0' ><A1' '-' D1' < @'<>1-⸗ #1B<?01' D<' &=' &@A' '>10' A'+1 0' @& D0' K1 1' ><A1' '-' D1' &K-' &=' E'@=& A⸗ <-A' & D1 ' @<B10' K' D'-' D1' &?- '10' &=' ? 1 ⸗ ?001L⸗ <-A' `' &? D9/P' B<@@1A' @& D0' &=' E'@=& A⸗ KD'BD' K1 1' &=' .&&A' ><a'-.' <-A' &=' .&&A' <@?1⸗ <-A' A'A' D&<' <'.1<' <>1;' -A' -&K' #1B<?01' D<'!?@@1 0' <-A' & D1 '&=' D1' 0<>1' &?- ⸗ A&'?01' &'#? ' D1' @& D0' &=' D1' 0<'A' &?- '10' #1=& 1' D<' D1 '#1'=?@@1A' <-A' C1 =& >1A⸗ <-A' '-' `'S O ><a'-.⸗ =& ' &+1 &?0-100' &'D<+1' D1' 0<'A' @& D0' &=' .1< 1' 1<0? 1' &+1 ' D1' B&>>&-' 00'01' D<'@< 1' K<0' ?01A⸗ A&' A <K' D1' @& D0' >& 1' @&-.1 '=1A' >& 1' @< .1' D<-' D1 'K1 1' K&-' & ' &?.D ' &' #1⸗ &' D1' . 1<' /)' '>C<' '-.' &=' D1' 0<'A' @& D0⸗ <-A' . 1<' " 1B1' ' &=' D1' 1&C@1;' !A ' &' 10BD1K' ?BD' "<><.10' <-A' " 1B1' 0' '-' '>1' &' B& -0' ' '0' <. 11A' <-A' <001- 1A ' D<' = <&>' D1-B1=& D' -&' !?@@1 ' -& ' & D1 ' C1 0&-⸗ KD< 0&1+1 ' D1' #1⸗ 0D<@@ #? ' K' D'-' D1' 0<'A' &K-0' <-A' &?- '10' <- ' @& D' #1=& 1' D1' 0<>1' @& D' #1' =?@@1A' <-A' =?@@ ' C1 =& >1A' '-' D'0' -< ? 1⸗ <-A' <@0& 01<@1A' ?-A1 ' D1' 1<@ D1 1 &' & A<'-1A⸗ ?C&-' <'-' &=' !& =1' ? 1' &=' D1' 0<>1

⸗ ' '0' <. 11A' <-A' <001- 1A ' D<' <@@' D1' E' A8⸗ 1 0' &=' D1' 1<D-' D<' = 'B' E' A@10' .< -'0D1A' K' D' KD' 1' 1 <@@' >< ' K& a' ?01' <-A' B&- '-?1' D1' ' <'A' <= ⸗ D<' '0' &' 0< ⸗ &' .< -'0D' D1' E' A@10' K' D' KD' &' 1 <@ <0' &=' &@A' '>10' ' ' D< D' #11-' ?01A⸗ -& K' D0 <-1 0' <-' D< 1 0' & ' < 1= 0><A1' & ' . <- 1A' h⸗ &' D1' &- < ';' -A' '=' <-' D< 1 0' & ' < 1- 0' #1' ><A1' &' D1' B&- < ⸗ D<' D1 '0D<@@ #1' +&'A' <-A' &=' -&' =& B1

) ' ' ⸗' A" ' ⸗ $" - $
((" ') (')7 " ' '?
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W 0 !' . ' !' +!' / 7 ' ' +'W' # ' ' "!#& !/' -/' /.- &"1!/

3!- +@ .-' @."2 ." #.-" '!-&-*' !"!.

W .-!'2 +' ;0@ +. 2' . ' b0&+/ ."/' 0- &' !@'%"!' C#

W b&"/+!"2 "!!/' ".1' 6!2" &-' ' '#!" &-' 3 !-2

]
&-1'0D<ĝĝ
#1' B&>C1@1A'
&'<-0K1 '
'-' C '+< 1'
&? 0'=& '
< 1 0'
A1 1 >'-<#@1'
' D1' <K'
&@' D1' <-A

ĝ ' D1' . '1+&?0' &>C@<'-'&=' D1' &>>&-0'
><A1''-0=?ĝĝ < @'<>1-ĝ=& ' D<'A'+1 0'&=' D1' <-./0' ?#ĝ
1=@0'#1'B<?01A' &'B&>1'#1=& 1' D1'` &?-B'@P' &=' A'+1 0'
& A0' <-A' <A'10ĝ &'<-0K1''=& ' D1'' ! 11D&@Aĝ <-A'
`0&'Ù' =& 'A'+1 0' & D1 ' D'-.0ĝ 1<ĝ <-A' C1 0&-<ĝĝ D<'
&?.D' &'#1' & A1 1A' # ' D1' <K'&=' D1' <-Aĝ <.<'-0'
D1' 0<1' <-A' D1' '.D' &=' &?' & A' D1', '-.' <-A'&='
D'0' &K-ĝ <-A' '-' A1=1< '-.' &=' D1' &>>&-' <K;'
'0' <. 11A' <-A' <001-1A' D<' = &>'D1-B1=& D' -&-1' &='
D1', '-./0' ?# 1 0' D1' B&>C1@@1Aĝ -< D1 '# '<-' 1<-'
B&-0 <'-1Aĝ &' B&>1' -&' &'<CC1<'#1=& 1' D1' &'>A@
&='<-' & A'& ' <A ĝ &' <-0K1 '=&' D'0' ! 11D&@Aĝ -&'
=&'<-' D'-.' &?BD'-.' D'0' ! 11D&@Aĝ -&'=&'<-'&DC'
D'-.ĝ 1<ĝ & ' C1 0&-<ĝĝ D<'#1@&-.1 D' &' D1' <K'&='
D1' <-A' '-' <-' <--1 ĝ -A' '=' <-' ='-A' D'>01@='
. '1+1A' '-' '>1' &'B&>1ĝ B&- < ' &' D'0 A'-<-B1'<-A'
. 11>1-ĝ D1'><'B&>C@<'-' &' D1' D<-B1@@&'=&' D1'
'>1'#1'-.ĝ <-A' D1'0D<ĝĝ .'+1'D'>' 1>1A

'M&-*' .' ! !'&' . ' &-#.+-'b"!! &-*' !" &-'
0 !2' -/' "/&- -#!2';@' 2'&-'.0"# + 2'3 "+& 1!-' .+/!-'
'V !2 1&-2 !"'7& ' !' 22!-'. ' !'b"! ' !-' -/' .1k
1.-2' . '.0"#6! +1' ' -*+ -/' 2'&-' !'2 & !'3 "+& 1!-'
' 22&2&-*' 1 /!' V !' 2!-/' .' @.0' &-' B."1' . ' ! !"2'3 k
!-2' 0-/!"# .0"# ! +'#.11 -/&-*';@' &"1+@'! -.&-&-*' '
!' 0!2' -/' "/&- -#!2' ."!2 &/' &-' @.0"# 0+' .0-@'
.0" ' -/' &-' &&!2' 4."./* 2' "E!' .7-2' -/' . !"
3+ @2' 7& &-' @.0"# 4 &+&7&#E' 7 !"!' @.0' 2 +' 2!!' &' 1.2'
!% !/&!-' @.0'/.'# 02!' .';!' 0;+&#+@' ".#+ &1!/' -/' .';!'
E! ' ##."/&-*' .' !' !-.'# . ' !'2 1!' V&-!22' !'M&-*'
'V !2 1&-2 !"=' !'B&"2' @'. ' B!;"0 "@
) .0- @+!2')' 1&' &2' V."/

1>'<'@<' . 1+&?01' B&>C@<-' A10' &10' =1@'<?'C@1'-'
C@1>1-' A1' B1'H' C@?0&? 0' @'.10' A?' &'' 0&-' ='? \'+1-''
A1+<-'@10'B&-01''L' A1' A@,01 ' !' I 'A<>10'<' ' 10C&-A 1'
A1'@&?'= <-a' 1-' I 'A1' C'? &? 0' <?R0' BD&010' 1<@10' I '
C0&-1@10'H' A1 &'1-' 10 1' A1>10-1\' C'@<@1 'A1'@<' 1ĝ
1-B&- 1' @10 <' I ' A #' ' A1' -=1' B?' @1' &'' I ' A1' 0<
B& &-1' I ' 1-' A1=10<-B1'A1' @<' B&1' @1 G' <BB& A1\'10' I '
<001- ?\' H' -?@@' @'.1' A?' &'' A10& 1' 1-<+<-' 0&' ' < 1\'
&>C1@@1\' -1' B&-0 1'-' C' --@@1'+&@1' A1' +1-' ' -1' A<C8'
C< &' ' A1+/D' ' @1' B&-0>@@ A<0B?-' ' & ' A<>1' C' ' 10j
C&-A 1' A1' &-' = <-a' 1-' -1' A1' BD&01' H' &?BD1' = <-a'
1-' -1' A1' '?@=' <? 1' BD&01' 1<@1' &?' C0&-1@1' H<CC '1-'
<' @<'@1 ' A1' @<' R 1' 1-' <0B?-1' >' 1' ' <' <0B?-' 01'
01-' . 1+1R' 1-' 1>C0' <+1-' ' 1-B&- 1' B10 1' & AA-<-B1'
'<B & A1ĝ 0?1' 'A' D<?-&1@@1 ' H'' , <' C? ' @1' 1>C0' I '
'@' 1-' =1 <' 1>1A1

'' 'B' '-B&@='ĝ 0<D>' ^?1A<>' <?<' I' A'-<8'
='&10'C' ''-'?@ '>&' C <>1-&' -=&' <C?A' F 10 '-' 1-&'
A1'<001-0?' <.-<?' I' &' <'0' D.-'' --' -.@' -&#' '-'
1&A1>' C@'<>1-&' <00'0 1-A?' = <@ '#'' '-' =# ><' D<\'
C< 1-A?' >' '>h' 0?#' 0'.'@@&' -=&ĝ C'1-10' =' >'C'
-?-.1-A&ĝ HA' <?<' I' A'-DB&10' CAB'<' '-' C@1-&'
&>' ?&' <B '+' <='# ' ?.'0' '@-'0' ' B<&'0' I '
-@''0' @&B'0' '-= <' #<@@'+<>' ?<>ĝ ?#'' '1@'?0' 1LC1A' 1'
+'A1 '0' C?#@'B1' CB'<>< '' I' 1-1 '' ' ?L <' 1-& 1>'
1& A1>' 8'C ' <C?A' F 10 >'C ?-10' A'1'!1#

)) ʻ ->Ĥ ! -N # ʻ ʻ -9Q?<9

+ + + ʻ 6'' 9 %% ʻ .'À'+ ʻ 6' & -' "*&-!'
6. 0+&

ʻ *=' ' % ' > !

BE'= ' ' 'G '6 #'H6' '
=1' ' @1' 1<' 'BD< A' 01B&-A' C?'0' @1' &-H?10' <'
0&-' C@1>1-' 1-?\' <' F -B10 =' 1-' @10' &1C <+10'
A1' A-' '@@1' <-' A1'0&-' 1.-1' 010\'0>1ĝ <A' & A1'-1'
I' 10 <#@'' 1'-10' BD&010' A1' @<001-' A1' 0&-' A'' C@1>1-'
1-' @<' =&? >1' H1-0?'
'' 1>1-' B&>1' C' 10 <?' =<' ' <' K a' <-' A?'
1.-1' A1@' '1@' -=1'=' @1' &'' -&1='0>1ĝ & A1'-1'=?'0' I '
10 <# ' H' &? \' >< BD< 0' <@'1-0' I ' A1-\1'<0' I ' &? \'
<?R0' I ' BD1B?-' A1' 1?L' A1' H?1@ 10 <' &?' B&-A'B@&-' H'@0'
&'1-' H' <1D< 1' &?' +1-A 1' +&'@@&-' #@1A\' +'-\' <+&' '
A1' C '0' BD<' C100&-' I' &? \' <?R0' +'+ 10' I ' +' <'@0'
A <C0' @1'-10' !' ', BD<-A'010' I' &? \' <?R0' BD&010'
+1-A<#@10' A1' H?1@@1' C ' H' 1' +'1.-1>' C' =& <-0' &?' C'
A1-\1'-0' <' H?1@@ @'1?' H' B1' 0&' ĝ 0&' ' '@ 1-' ' 1' ? .#'
@1' C& ' A?' >11ĝ =& 1ĝ >< BD1' &?' <? 1' @'1?' A<-\'
>10>1'@1' &'<@>1ĝ A1'-\' = <-BD'01' I ' A1D& 0ĝ @10' C?'08'
01-' '= <-BD1>1-' I ' 0<-\' A10 &@ 1 ' +1-A 1' <' H'' H' @&?'
C@10' 0'#'1-' <0' =& 1'-0' B&>1' <' A1-\1'-1' = ?8C '0' @10'
1-1> 0' -=1' ' @1' &'' I ' A1' 0&-' &'<@>1;' C?'0' C'
<-' <? 1' 10 <?' =<' ' <-' A?' A' ' '1@' +'-' I ' H?'-'
& A1'-1' =?'0' I ' <BB& A1' H' @1' A' ' 10 <?' =<' ' @1' A' ' <-'
-&1=10>1' &' ' 1-?\' .< A1\' I' ><'- 1-?\' 1-' &?\'
C&'- \' G ' &? 1' B1&' H' BD1B?-' >< BD<-' I' <? 1' A1

6!#E +.+' ' ' /7 ' ' ' '# ' ' ' !"k ' # -2' "!!+@';0@' -/' 2!++=

-/'. ' ' 5J' /7 ' ' ' '# 'V' - -1-*' .' /7 ' ' -/'!- / -*

/' 0<'A

H?1@a B&-A'B'&-' H'@ M &' ' <-L'#'1'" <@'1-' B&>1 A1-\1'-' H <>10-1 &' ' +'-0 BD< 10 C100&-0 &-' <? 1 ><51 A10 +' <'@@10 A <C0 C1<?L &?' <+&' ' A1 C&'0 &?' HB&-H0 <? 10 ',B10 &?' ' BD<-A'010 <' @<' 3 ' 1' A1 & A 10 &?' <0 <?R0 ' 110 ? .D0 I ' #&-10 '@@10 "1-.@1R 1@ &?' & ' A?' >11 @ @10 C &' ' = <-BD1>1-' I '0<-\' BD<@ @<-.1 &?' 1>C10BD1>1-' A1 -?@@ ' +1-A 1 1-' . &&0 &?' <' 1 <'@@1' &?' C CB1@@10 <' 0<' +&@?- 1' <0 H?1B&- 0 .1- \' H" @10 +&?A 1-' <BD< 1 @ -'1-' B&- 10 1<- R <0B?-0 = <-BD'010 .0- 1' &?' B?0 ?>1' ?01@ &?' HB&-H' <? 1' >< 1' BD&01' ='"' ' <' B&- <' 1@ I 'B1' 0<?-\' A10 &? #<-B1' &?' '>j C1A'>1-' A<0B?- ' 0' M 1'-10 C1'-10 B&- 1-?\' 1-' @10 <@ ? \' 0?0A' \' ;' ' <=20 <-' A?' 1.-1' -=1' @1' &" ?-\'0-'1' 10 &' ' <?La=' & A1'-1' I ' 10 <#@'1' C' 10 < ?' =<' ' >10>1' <-' H' @10 A1?L' 10 < ? \' 0?'0A' \' &'1-' 1-?\' .< A1\' I ' ><'- 1-?'' I ' C@1'-1>1-' 1L1B? \' 1-' &? \' C&'- \' I ' < 'B@10 A'B1@@10@ '1-' &- 110 1<-' <0B?-' ' 10 < ?@ & A'-<-B1@ B@ 1@ =1' C< 1-1@ = <-BD'010 CA<8' ><B'&'" ><-A1>1-' ?0<.10' <@@&?<-B1' 2? ?..1>1-' '=<' ' &?' ?01\' <' B&- ' 1' G 'B&>1' 1-' @10' A' \' 10 < ? \' 10' B&-1-?\' C@?'0' <?' C@1'-';' '1- >1 -0' C B1&' H'@ 01>#@1' <'-R1' = ' 1' & 'H' @10'< ? \'0< A' \' 0'@0' 0&'1-' C@1 1>1-' 1-?<' I ' 1L1B? \@ 010 1-A1-' 1-' .3-' < 1 '01>1-' I ' A<><.1' 0'#'1-' A1' @<' A' 1' ' 1' A1' &-A 10@ A&>1' A10 <?R0 ' 110 ? .D0 I ' '@@10' A?' &'<@@D1@ & A1'-1\' 10 ' I ' < 01- ?\' H' -?@@ 10 / -.1' ><=BD<-' <@'1-' -1' +1-A1' -1' <BD< 1' -1' @<< BD<-A1' A1'-\' @1' -<@>1' 10H@ <?R' 10 <-.1' >< BD<-' <@'1-' C' 1 1-A 1@ -1' H' -?@@ 10 <-.1' >< HD<-' <@'1-' +1-A1' <' 1 <'@@1' A1'-\' @1' &'<@>1' -1' -1' 1-BD1' <' +1-A =1' -?@@10' > < I ' 10' -1' BD<-A I 10' =& 0C '0' +'+ 10' I ' +' <'@@10' ;' ' H' &? \' <@'1-0' +1-A1-' <?L'-' +'-0' C' +1001@L' 1-'1 0' I ' 10C' 1' C' +1001@L' $' #<@10' 1-'1 0' I ' -1> 1' 1-' < 1' ><51< 1' H' -? ' ><51' 10C'R'1' <C0' H'@ 0&' ' C& 1' 1-' @1' &'<@>1' 0&' ' <> 10-1' D& 0' A1' >1 F1' @1' &'<@ <1' C' <@'1-' 1' C' A< ' \1'-' 0' C1'-1' A1' =& =1' 1' A'B1@@1' ' 1-&? 1' @1' &" +&1' H' @10 < ? \' 0?'0A' \' 0&'1-' 1-' &? \' @& ' <?R0 < 'B@10' I ' C&'- \' =1 >1>1-' 1-?\' I '.< A1\

1>' B&>1' 1@ A< 1'-' C@1>1-' <BB& A1\' 10 &' ' I ' <00< ?\' H' -? ' @'.1' A?' &" AA&>'1-' <+<-' M &' ' < 1\' B&>C1@@1\' -1' B&-0 1'-' C' -?=' +&'1' A1' +1-' ' -1' A<C' C< &' ' A1+W-' @1' B&-01' ' A<0B?-' I ' &?' A<>1' C' ' 10C&-A 1' A1' 0&-' = <-B' 1-1>1-' -1' A1' BD&01' H' &?BD1' <-a' 1-1>1- \@ -1' A1' -?@@1' <? 1' BD&01' 1<@1' & ' C0&-1@1' H<CC '1-' ' < @<' @1 ' A1' @<' , 1' 1-' <?B?-' >< 1' ' 0'B&>1' C' @10 < ? ' 1-' =<' ' C@?'0' C@1'-1>1-' <CC'1 ' <BB& A10' 10 ' I '<001- ?\' H' @1' A' ' 10 < ? ' 0&' '=1 >1>1C' 1-?\' I ' .< A1\@ 1' H' 0" <0 ?" T=' ? A<>1' &<' <? 1' @'1.1' A?' &" =<B1' <@1-B&- 1@ 1-B&? .1' @<' C1'-1' A1' +'-' @'+ 10' A1R0' =1' A 5 @1' &

1>' & A1'-1\' 10' I ' <001- ?\' H' &?\' @10' C& 0' I ' >10? 10' C> ' @1' &'<@>1' 0&'1-' <BB& A<-\' <' @10 <-8' A< A' A1' @10BD1H1 ' 0&@&-B' @<' =&/>1' A1' @10 < ? \' 1-' =<' \G 1' 1-&? 1' @1' &" +&1' H' @1' @1 B' A1@ < BD1' 1' ' &? \' 010 >10? 10' I ' C&'010' A< 10>1' <BB& A<-\' <' @10 <-A< A' A1' @10BD1H1 ' i' 0'.-1\' I ' ='BD1\' A1@ 0'.-1' A1' @10BD1H1 ' <' B1' & A1@-1@ I ' >10>1' @10' C&'010' I ' >1j 10'0<- ' 1\' I ' I # 1 \@' B< '1' I ' >-10-1' &+10'H@ @? ' <' &? \' @10' =&' \' H'@ =1 <' @<00< ' A1' C&'010' I ' >10? 1 ' <0B?-1' C ' A1'-\' @1' &'<@>1@ I ' H'@ -1' -?@@ <?R' @'.1' A?' &" ?01' -?@@ <? 1' >10? 1' -1 C&'0 0' @10' C1'-10 B&-1-?\' 1-' @10 < ? \' 1-' =1' \' A1+<-' B10' D1? 10 &=' KD< ' &-A' '&-' D<' D1' #1@ <0' K1@@ @'1-' <0 "1j -'\1-@ D<' # '-.1 D' F'-10@ !@10D@ !'0D' &' & D1' <-j -1' &=' '=@?<@0@ @& D@ !1@@0@ & ' +&' ' A1' C&'0@ &' & D1' F < 10' & ' 1 BD<-A'010@ &' D1' ' ' &=' &-A&-@ & ' & D1' ' '10@ & &?.D0@ <-A' .&&A' &K-0' &=' -.@<-A' & ' & 0' &=' D1' 1<@ >< ' = 11@ ' <-A' K' D&?' D<@@1-.1' & ' >C1<BD>1-' &=' <- @ 01@@ D1>' '-' E &00' & ' <' 1j <'@@ & ' # ' < B1@0 <' D'0' @1<0? 1@ &' <- ' 1&C@1' D<' K'@@ #? ' D1>@ -& K' D0 <-A'-.' <- ' ! <-BD'01@ E <- ' & ' -0 &>' ?01A@ & ' <- ' & D1 ' <--1' &=' D'-.' ><A1' &' D1' B&- < @ <-A' D<' K' D&?' "'0 ? #<-B1' & ' >C1A'j >1-' &=' <- @ ?C&-' B1 <'-' <'-0' B&- <'-1A' '-' D1' <=& 1j 0<'A' < ? 10;' -A' <= 1' '-' D1' @1+1- D' 1<' & =' D1' 1'.-' &=' &? '0<'A']& A' D1' , '-.@ ' ' K<0' <@0& & A<'-1A' <-A' 10 <#@'0D1A' # ' D1' < ? 1' ><A1' '-' D1' 0<>1' 1< @ D<' D&01' K & < ? 10' <=& 10<'A' 0D&?@A' #1' D&@A1-@ a1C @ ><'- <'-1A@ <-A' =&@@ ' 1L1B? 1A' '-' <@@ &'- 0' <-A' 'B@10' &=' D1' 0<>1@ -& K' D0 <-A'-.' <- ' < ? 1@ 8' A'-<-B1' D< 1@ 1 1 0' < 1-@ ! <-BD'01@ &B@<><j '&-@ &>><-A>1-0' 0<.1@ @@&K<-B1@ &' ?A.>1-' ><A1' &' ?01A' &' D1' B&- < @ <0' '-' D1' 0<'A' `` < ? 1' >& 1' =&@@ ' '0' B&- <'-1A;' 1+1 D1@100@ !& <0>?BD' <0' ' 011>1 D' &' &? ' & A' D1' , '-.@ D< ' D1' 0<'A' < ? 10@ '=' D1 ' 0D<@@ #1' =&@@ ' D&@A1-' <-A' 1L1B? 1A@ 0D<@@ 1L 1-A' &' D1' . 1< ' '-A <-B1' <-A' "<><.1@ <0' K1@@ &=' D1' ' ' &=' &-A&-@ <0' &=' & D1 ' ' '10@ & &?.D0@ <-A' &K-0' &=' 1' 1<@>' ' '0' & A<'-1A' <-A' <001- 1A' D< ' -&' 1 BD<-' <-.1 ' @'1-' 0D<@@ 01@@ -& ' #? @ -C ' >1 BD<-A'01' K' D'-' D1' 1<@>' K' D' <-& D1 ' 0 <-.1' 1 BD<-' @'1-@ &'01@@ <.<'-G -& ' < ' -&'0 <-.1 11' BD<-' @'1-' 0D<@@ 01@@ & 1 <'@ K' D'-' D1' 0<>1' 1<@>@ -& ' 0D<@@ ='C? ' &' 0<@10@' <-' <--1 '&=' F < 10' & ' 1 j BD<-A'010@ 1LB1C ' '+'-.0' <-A' '<;? I @<-A' <@0&' D<' k/)' @'1-0' 0D<@@ 01@@ F '-10' # ' KD&@1' 1001@0@ <-A' C'B1 '# ' KD&@1' 1001@0' <-A' <@10@ <-A' '-' -&' & D1 ' <--1 G <-A' < ' -&' <--1 '&=' C'B1 @<= 1 ' D<'' '#1'# &?.D ''`' =P' D1' 1<@>@ 0D<@@ #1' B< '1A' &? ' &=' D1' 0<>1' 1<@>' # ' @'1-' & ' "1-'\1-@ C&-' <'-' &=' !& =1' ? 1' &=' D1' 0< =1 ' CA' >& 1&+1 ' D1' , '-.' K'@@ D<' D1' 0<'A' < ? 10' '-' <@@ 'B@10' <-A' &'- 0' 0D<@@ D1' =' >@ ' D&@A1-' <-A' a1C @ @ F D1 1<0' <' D1' @<0' < @'<>1-' ' ' K<0' <Bj B& A1A' <-A' <001- 1A' D<' -&-1' &=' D1' , '-./0' @'1.1' 1&C@1' = &>' D1-B1=& D' 0D&?@A' #1' #&?-A@ B&>C1@@1A@ -& ' B&-0 <'-1A' # ' <-' 1< 0@ &' B&>1' -& ' &' <CC1< ' #1=& 1' <-' & A/0' <A /0' &?-B'@@ D1 1' &' <-0K1 ' &=' D'0' ! 11D&@A@ -& ' &=' D'-.0' KD'BD' &?BD' ! 11D&@A0@ -& ' &=' <-' & D1 ' D'-.' 1<@ -& ' C1 0&-<@ ' KD'BD' #1@ @&-.1 D' &' D1' <K' &=' D1' <-A' '-' <- KO1@@ <0' # ' D1' < ? 1' D1 1&=' ><A1' >& 1' =&@@ ' <CC1< 1 D@ ' '0' <Bj B& A1A' <-A' <001- 1A@ =D<' D1' 0<'A' < ? 1' 0D<@@ #1' =' >@ ' D&@A1-' <-A' a1C @ <-A' '=' <-' & A' &=' <A @ ' & D1 ' &=' D1' , '-./0' @'1.1' 1&C@1' A&' 1' B&- < @ D1 ' 0D<@@ '-B? 8 1' <'-' &=LLa' &' D1' '-.

5 ' ' ' '0' & A<'-1A' <-A' <00 1A@ D<' <@@ 1' F 1'.D 0' <-A' 1<0? 10' D &?.D' D1' 1<@>' 0D<@@ #1' <Bj B& A'-.' &' 1' <-A< A' &=' 1' LBD1H?1 @ <= 1' 1' ? C& ' &=' D1' < ? 10' D1 1&=' ><A1G <-A' kl\)' D1' , '-.' K'@@1 D' D<' D1' @1 a' &=' D1' < a1 '0D<@@ D<+1' <@@ D'0' 1<0? 10' -/' F 1'.D 0' = 1<A ' <BB& 1=' .' &' D1' <-j A< A' &=' D1' LBD1H?1 @ <-A' 0'.-1A' <-A' >< a1A' &=' D1' '.-' &=' 1' LBD1H?1 ' D1 1?-&' & A<'-1A@ <-A' D1' 0<>1' F >.D 0' <-A' 1<0? 10' 0&' 0'.-1A' <-A' >< a1A@ &' B< '<-A' # '-.' K' D' D'>' <' <@@ '>10@ KD1-' D1' 0D<@@ > 1' 1' 00< ' &=' F 1'.D 0' <-A' 1<0? 10' =&' <-' < ' K' D'-' 1' 1<@>G <-A' D<' D1@ -& ' <-' & D1' &=' D1' ,'-./0' @'1.1' 1&C@1@ 0D<@@ ?01' `<- 0P' & 1 1<0? 1' - ' F 1'.D @ ?C&-' 1' <'-0' B&- <'-1A' '-' 1' < ? 10' D1 1&=' ><A1' #1=& 1' D'0' '>1

3 < ? 10' U'Z' W0 8F 'm '<' /' <@@ / '- & '# - 2 4 \' <@0& '$ 'Q ' ' -&-1

' !"k # - 2' 1 @ 2!=' !&"' V "!2'&-' b".22'.'" ;@ 6! &+

0 !' &' 6&#' ' # ' I ' .- &"1L' &-<' ."1!" 0 !2

1 BD<-' " -*!"2 +' "! &' -@ !"# -/&2!2' ;0 ' &20 +2

.' &#!"@ 2 +' ;!' !% ." ! /

!' 0 !' J 6&!' # !" 5:' #.- &"1!/

!- + @ .-' !-/!"25

V !&* 2' -/' ! 20"!2' 2 +' ;!' ##."/&-*' .' !' -/ "/' &-' ;!' %# !SO!"'H' -/' ;!' C 101 +1A3 C# ;@ ! +!"E . ' !' !"E! 'C#

A11' B& &-1' I ' 0<' 1.<@'1' 1-' @1Ơ B<010Ơ <+ A' 1Ơ I ' 1-' &?\'<?RƠ B<010Ơ < 1>C 1\' 1-B&C ' 1' @? '0< B& &-1' I ' 0< 1.<@'1' 1-' &? \' C&'- \' < +'+ 1' I' - 1 ' I ' C '1 1-' &? 1' <' - 1' I ' @1' & ' I ' @? ' 1H?'0 1 - ' C' +& ' A1' ?0j 'B1' H'ḡ +& &' ' 1L<>'-1 ' &?\' @1Ơ = 0 ' 1-' C@1>1 - ' 0'#-' 0C?1@1Ơ B&>1' 1>C& 1@1Ơ 01, <@>1 - ' I ' &?\' @1Ơ 10 < \' A?' C@1>1 - ḡ B&>1 - ' @& ' 01>#@1' A1Ơ B<010Ơ <8 ' A' \' H' 0&?- ' 0" &, 1>1 - ' 1-1H - 1' @<' B& &-1' -R1' @1' &" I ' 1-' A1 &.<A&-' AA' 0<' 1.<@'1ḡ I ' B&>1 - ' '@0' &'@@1 - ' 10 1' 1-' >10'C1Ơ @1Ơ B<010Ơ &+10Hḡ - 1' ' @1' & ' 1-' ?0 1-<-B1' A1 ' A &' \' A1' 010' A' \' B& &-1' I ' 1.<@'1;' ? ' H?& ' @1Ơ = 0 ' 1>C& 1@L' 1-0" A1><-A1\' &?- ' 10ḡ C&-A?' BD1B?-' C' 0& ḡ H' >10>10Ơ @1Ơ B<010Ơ <+<- A' 1Ơ 0&- ' &, 1>1 - ' 1-' A1 &.<A&-ḡ A1' @<' & &-1' -R1' ' @1' & ' I ' A1' 0<' 1.<@'1' B&>1' -& &' 1>1 - ' 10 ' I ' <A' 10 1' A1' &?' 1>CƠ B&-?\ḡ 1 ' H' '@Ơ +1?@@1 - ' 10 1' &+1B' >10>10Ơ @1Ơ & &-1' I ' 1.<@'1' 1-' >10>10Ơ B10 10Ơ B<010Ơ 1-' 10C1B'<@ I ' 1-' &?\' <?,0' B<010Ơ H' , &-' < 1>C 1\' 1-B&?- 1' >10>10Ơ @1Ơ &C&-1' I ' 1.<@'1' 1-' & \' C&'- \' &+1' &?' @&' C&<' ;' 1 ' &? 1' B1' A1><-A1\' 10 &' ' A1Ơ = 0' 10C?1@Ơ I ' '@@1HƠ 10 1<- \' I ' A1Ơ C1? < & Ơ A1 i' <?, ' <&01- \' A1' @&? ' 10 1' <+ Ơ $ f +&@1 - 1' 1 -' B1?L' B<010ḡ H?1?L' = 0' B10 <00<+&' ' B1+10HƠ +10HƠ I ' <?,0' =@@< 10Ơ 10 1<- \' 1-' @1' A' ' C@1>1 - ' 01 <@>1 - ' 1L<>' - 1\ḡ =10<- \' C 10 <A&-Ơ H'ḡ -10 ' C<Ơ @&? ' 1 - 1-A&-' A1' `A' 1'ⅈ -1' <==1 >1 ' H' - 1' 1'- ' '1 1' @1' <C1' -1' C&1 ' 1LB&>1 - .1 ' +10'C'1Ơ -1' H?'ḡ C&1 ' =<' 1' <-0@<B'&-Ơ A1Ơ C@< \' 0&@&CB' @<' @1 ' A1' A 1' 0.@ 01ḡ 10C&'. - 1 - ' I ' A'&?- ' H' A' <?B?-10Ơ 1L1B?B'&-Ơ A1Ơ CB10010Ơ =<@ \' 1-' @<' &? 1' A?' &" B&>1' A1 0 - ' 0&'1 - ' (' \' C' <0B?- ḡ I ' B1 - 0? 10Ơ A1' 10B&>1 - .1>1 - \' 0&'1 - ' =1' \' 1 - B&?- 1' <0B?-' +10Hḡ "1 - .@1 1' &?' <0B?-' <? 1' @'1.1' A?' &" C B1' H'@Ơ &?- ' =<' ' 1L1B?B'&-' A1Ơ '1?L' >< ?-A1'= 1 - \ḡ 1 ' H' 0" <?B?-Ơ 1L1B?A&-Ơ A1Ơ '1?L' -0@<B'&-Ơ 0&'1 - ' =1' \' A<01 >Ơ C@< \' A1' >10>1' @1' &'<@>1' H?1?L' = 0' 0&?- ' >&?@ ' C=' <#@10Ơ I ' -1B100<' Ơ <' - 1' A' ' _ ' @1' &" I ' <' 0&-' &'<? '1' 0?'0A' ḡ &?' H' 010Ơ <.10Ơ @'1.10Ơ A1' 0&@" B&?-01'ḡ 0<?-\' 0&-' <001 - ' 5Ⅱ 1-B&?- 1' 0<' +&@?>1' 0&'1 - ' 0?0 1 \' I ' 10@&'. - 1\' D& Ơ A?' &'<@>1' Ơ'T ' @<+&@ ' I ' 10& ' A?' &'<@>1' C &' ' 10 1' A10 ?' ḡ H' 1' 10 ' 1-B&?- 1' @1' & ' I ' 0<' & &-1' 0'B&>1' 10 ' B&- ' -?\' 1-' @<' C1 @B'&-' <+<- ' -&>1;' I ' 01>#@<#@1>1>' @1Ơ A' \' C1? < & Ơ B '10B?-' C' 0& ' 1LC>' -1' 0 ' @1' A' \' -@< '1 1Ơ &?- ' 10C&-A?' I ' A' ' 1-' -&?-' I ' C ' @&? ' = 0' B&'C1' @1Ơ A' \' +10HƠ &?- ' A' ' I ' 1 -A?ḡ I ' H' @1Ơ A' \' !' 10C?1@1Ơ +1?@@ h ' I ' A1'+1 - ' 10 1 1' &+10H' @1' & ' - 1' = ' 1-' B1?L' B<01 ' @&'<@>1 - ' 1-' 0?0 1-<-B1' A1' 0<' & &-1' I ' 1-' &?\' <?RƠ B<010Ơ &?BD<- m' 0<' B& &-1' I ' 1.<@'1' B&>1' '@0Ơ 0&?- ' 1-?\' C' @&?' @' .1<-B1G ? ' H & ' - 1' A' ' ' @1' & ' A1@ <001 - ' <+[- A' ' I ' < @<' C '1 1' A1' 0<' A' ' B&1' <A' & A1' . - 1' I ' 10 <#@' ḡ H' 0" <0B?-' C BD<B1' &?' C 0?1' ? =<B1' C BD<B1 ' &?' C 0?1 ' 1-' @<' &? 1' A1' &>1' &?' <' @&? Ơ <0B?-Ơ -1?]' 0-0@<B'&-Ơ CB10010Ơ I ' 01 - 1-B1Ơ A1' 10B&>1 - .1>1 - \' #?@aƠ '-0 ?>1 - \' &?' <? 1' BD&01' HB&-H' H' &?BD1' @1' &" >1' ⅈ' 1-B&?- 1' @? ' 0<' B& &-1' I ' 1.<@'1' &?' 0&-' &'<@>1' B&>1' A1+W-=' 10 ' =' ḡ I ' B1?L' H' @1Ơ C& 1' A1' -\' @1' &'<@>1' &?' @1Ơ 10B1'+1' &?' =<B1' 1- ' -& '='B< <&-' &?' <? 1' 1L1B?B'&-' HB&-Hḡ ' ?-\' >10>1' @1' &'<@>1' &?' A1D& 0ḡ 0&'1 - ' '@Ơ @&? ' -& <' Ơ C1? < & Ơ >1' - 1-& Ơ <##1 & Ơ =<? & Ơ I ' B&-01'@@& Ơ > 0' D& Ơ A1' @<' C 1BB'&-' - 1' A' ' ' @1' & ḡ I ' @&? Ơ 10' I ' 1ḡ -1>1 - \' #'1-Ơ I ' BD< @1?L' =& =<' \' <? & ' - 1' =

ḡ ='A'1 ' *%' %' .$-
G / &" ! ' N$ ' ' " ' 5

0<'A' &K - ḡ <-A' D'Ơ 1.<@ ḡ '-' D1' <010Ơ <=& 10<'Aḡ <-A' '-' <@@' & D1 ' <010Ơ < 1>C 1A' <.<' -0 ' D'>ḡ D'Ơ &K - ḡ <-A' D'Ơ 1.<@ ' '-' <@@' &'- 0ḡ &' @'+1' <-A' &' A'1G' <-A' >& 1&+1 ' D1 ' C < ' D1' , '- .ḡ <-A' D'>' 1j H?' 1' # ' F < ' &=' ?0 'B1ḡ D<' D1' K&?@A' 1L<>' -1' <@@' D1' & AƠ '-' D1' < @'<>1 - ḡ <Ơ K1@@' C' ' ?<@ <Ơ 1>j C& <@ 1+1 <@@ ḡ <-A' <@@ D1' < 1Ơ &=' D1' < @'<>1 - ḡ D&K' D1 ' D' - a' &=' D1' <010Ơ <=& 10<'Aḡ KD'BD' #1' 0&' &C1 - @ ' <.<' -0 ' D1' , '- ./Ơ &K - ḡ <-A' '-' "1 &.< '&-' &=' D'Ơ 1.<@ ḡ <-A' D&K' D1 ' K'@@' 0 <-A' '-' D1' 0<>1' <010Ơ K' D' ?' & A' D1' , '- .ḡ '-' ?CD&@A' - .' D1' '. D Ơ &=' D1' 0<'A' & -' <-A' 1.<@ 'G F D1 1?C&-' D1' & AƠ 1>C& <@ 0&' A1><-A1Aḡ D<+1' <-0K1 1A' 1+1 ' &-1' # ' D' >01@=ḡ D<' D1' <010Ơ <=& 10<'A' #1' B@1< @ ' '-' "1 &.<j '&-' &=' D1' , '- ./0' &K - ḡ <-A' &=' D'Ơ 1.<@ ḡ <Ơ ' ' '0' K1@@ a - &K - ḡ <-A' D< D' #11-' &=' <' @&- . ' >1' a - &K - ḡ <-A' D<' D1 ' K'@@ `#1 P' K' D' D1' 0<>1' &K -' <-A' 1.<@ ' '-' D101' <010Ơ 0C1B'<@@ ḡ <-A' '-' <@@' & D1 ' <010Ơ KD'BD' 0D<@@ #1' < 1>C 1A' <.'''-0 ' D1' 0<>1' &K -' <-A' 1j .<@ ' '-' <@@' &'- 0ḡ K'=Ơ <@@ D-' ' &K1 ;' -A' >& 1j &+1 ' ' K<Ơ A1><-A1A' &=' D1' & AƠ C' ' ?<@ D1 1' #1' - .ḡ <-A' D1' &B? < & Ơ &=' & D1 Ơ #1' - .' <#01 - ḡ D1' ' A+'B1' <-A' F '@@' '-' <@@ D101' < G' KD'BD' & A0 ' D<' 'Ơ &' 0< ḡ D1' BD#'0D&CQḡ '0D&CQ<@ <-A' & D1 ' 1@< 10ḡ #1' - .' '-' D1' 0<'A' < @'<>1 - ' 01+1 <@@ ' 1L<>' -1Aḡ ><@A - .' & 10 < '&-0ḡ D<' ' ' 'Ơ -& ' D1' ' '-A' &' `A1 - 9Q ' - &' <'=' >ḡ D<' ` D1' '0D&C' &=' & > 1'(' >< ' - & '1LB&>>?-'j B< 1' '0D&CQḡ -& ' D<' D1' >< ' ><a1' <-0@< '&-' &=' 1j @< 10Ơ ?='1 ' D1' <K' &='D&@ ' D? BDḡ <-0K1 1A' <-A' 0<'A' D<' '=' <- ' L1B? '&-Ơ &=' &B10010Ơ ><A1' '-' D1' , '- ./0' &? ḡ <Ơ #1=& 1ḡ #1' ><A1' # ' <- ḡ <-A' 1-0? 10' &=' L8' B&>>?-'B< '&DƠ ` &' #1 (' ><A1' <.<' -0 ' <- ' ' &CƠ &=' - .@<-Aḡ &' <- ' & D1 ' =' D1' , '- ./Ơ '1.1' 1&C@1ḡ =& ' ' D<' D1 ' D<+1' ><A1' L1B?' '&-' &=' 0?BD' &>><-Aj >1 - 0ḡ <-A' D<' '=' <- ' L1B?' '&-Ơ &=' 0?BD' <-0@< '&-Ơ #1' ><A1' &=' <- ' 1@< 10' &=' D1' 0<>1' 1<@>ḡ KD'BD' ` 1@< 10' #1'+1 ' C &=' <#@1' <-A' -1B100<' &' &? ' 0<'A' & A' D1' , '- .ḡ <-A' & D'Ơ 0<'A' 1<@>ḡ & ' D<' ` D1' 0<.1' 1&C@1' U ' &=' =Ơ &?-B'@@ K' D&?' D'Ơ 0 1- ḡ <-A' <.<' -0 ' D'Ơ F '@@' #1' 1>&+1A' <-A' B< '1A' &?' ' &=' D1' 1<@>ḡ & D<' D1' ?#0 <-B1' <-A' 1<0? 1' &=' D1' 1<@>' '-< ' #1' B&-0?>1Aḡ D<' D1' 0<>1' 'Ơ <.<' -0 ' D1' , '- .' <-A' D'Ơ &K - ḡ <Ơ ' ' 'Ơ L> <' -1A' '-' D1' 1 ' '&-' #1=& 1' - <>1A;' - A' @'a1K'01' D1' 0<>1' &B? < & 0ḡ 1+1 ' &-1' # ' D' >j 01@=' 1L<>' -1A' ?C&-' D1' 0<'A' < 1 0ḡ D<+1' <-0K1 1A' <' +A' 0<'A' '-' D1' <>1ḡ <-A' =& ' =D1@ ' & A0ḡ <Ơ D1' 0<'A' 'OD&CƠ D<+1' 0<'A' <-A' <-0K1 1Aḡ <-A' D<' D1' 0<'A' & AƠ C' ' ?<@ K'@@ <-A' &?. D ' &' `#1'( ' K' D' D1' , '- .' '-' D101' <010Ơ `' -' @<K=<@@ ' ><' - <' -' - .'04' &=' D'Ơ &K - ḡ <-A' '-' <@@ & D1 ' <010Ơ &?BD' - .' D'Ơ &K - ' <-A' D'Ơ 1.<@ ḡ <Ơ D1 ' #1' #&?-A' # ' ='1' ' .1<-B1;' F D1 1?C&-' &? ' 0<'A' & A' D1' , '- .ḡ # ' D1' 001 - ' <=& 10<'Aḡ <-A' <' D1' 1H?10 ' &=' D' ' 0<'A' &> >&-0ḡ D< D' & A<'-1A' <-A' 10 <j #@'0D1Aḡ D<' ' '=' <- ' C? BD<01' # ' C? 0?1ḡ & ' B<?01' &' #1' C? BD<01A' & ' C? 0?1A' '-' D1' &? ' &=' &>1ḡ ' 1@01j KD1 1ḡ `# ' <- '?' 0 BD' <-0@< '&-0ḡ &B10010ḡ <-A' 1- 1-B1Ơ &=' LB&>>?-'B< '&-0ḡ ?@@0ḡ -0 ?>1 - 0ḡ &=' <- ' & D1 ' D' - .Ơ KD< 0&1+1 ḡ KD'BD' &?BD' D1' , '- .' <.<' -0 ' D'>ḡ D'Ơ &K - ḡ <-A' A0' 1.<@ ḡ & ' D'Ơ 1<@>ḡ <Ơ 'Ơ <=& 10<'Aḡ <-A' D1 ' KD'BD' # ' -.' 3)' K' D' -' D1' 1<@>ḡ & ' D1>' 1B1'+1ḡ & ' ><a1' D1 1&=' & '='B< '&-' & ' <- ' & D1 ' L1B? '&-' F D< 0&1+1 ' K' D' -' D1' 0<>1' 1<@>' & ' K' D&? ḡ D<' D1 ḡ D1' ' & < '10ḡ &B? < & 0ḡ <'-8' <'-1 0ḡ #1 & 0ḡ !<? & 0ḡ <-A' &?-01@@& 0ḡ 0D<@@ #1' C? ' &?' &=' D1', '- ./0' & I '&-ḡ <-A' D1' ' <-A0' <-A' 1-1j >1- 0ḡ E&&A0' <-A' D< 1@0ḡ =& =A ' &' &? ' & A' D1', '- .G

' 2 - /' (" (0" .+@' !'" !'3. !
)' ; !' ?IS' L$ % ')' &2' 2 *!' !-
f 2 - /' Q + 7 O+@' &-' 1 &- &-&-*
Q -'' .0" ." / ' NN

D1'@'a1' ' & > '01' &=' D1' & A0' 1>C& <@_

D1' & > '01' &=' D1' & A0' &"% 0 ⁴ C 101 - G

<-A' &=' D1' C & & Ơ &=' D1' & A0' &"% 0 ⁴ <#01 -

<1><- 1' =& ' C? BD<0K' '- .' < 0@<@' '&-0 ' ?@@0ḡ & '<- '& D1 ' -0 ?>1 - Ơ = & >' & > 1ḡ & ' 1@01KD1 1

&' '

<-A D< ' D1 ' #1 < <BD1A # ' D1' ' &A'10 '= D1 ' >< ' #1 =&?-A <-A # &?.D ' #1=& 1 D1 , '- .' <-A D'0 &?-B'@ D1 1 & <-0K1 ' & D1 <010 <=& 10<'A & ' D< &B100 #1 ><A1 <.<'-0 ' D1>' # ' <1>?-' 1 =<B'<0 '- <--1 '<0 ' ' '0 & A<'-1A '-' & D1 ' < ? 10 &= &+'j 0& 0 <-A & D1 ' KD'BD A&' 0?1 `' -' <- ' & D1 ' &? P '-' "1 &.< '&-' &= D1 1.<@@ ' &='&? ' & A D1 , '- .

F D1 1<0 '-' <-' B@1 &= ' < ? 1 ><A1 '-' D1 < @'<>1- ' D&@A1-' < ' F 10 >'-0 1 D1 &-A< ' -1L '<= 1 ' D1 ! 1<0 ' &= ' '@@< D1 D' 11- D 1< '&= D1 ` 1 '. -0P D< ' -&K' '0 ' ' K<0 & A<'-1A <-A . <- 1A D< ' -& D< 1 ' &= < A&-' = &>' D1-B1 0D&?@A' #1' <@@&K1A' #1=& 1 <- ' ?0 'B10 =& ' ? A1 ' "1< D &= ' <-' 0@<'-' # ' K<' 00<?@ & ' <@'B1' C 1C1-01A' 1<0&-& ' <C1' &= ' < F & > <-' '= `' '/P' K1 1' -& ' 0C1j B'='1A' '-' D1' 0<>1 D< 1 -A' '=<- ' D< 1 '&= D1' "1< D &= <-' K1 1 <@@1A.1A' #1=& 1 <- ' ?0 'B10 '-' KD'BD D< 1 ' K<0 -& ' 0C1B'='1A D< ' D1 &= KD&01' "1< D <- ' 0?BD K<0 < <'. -1A K<0 > ? D1 1A & '0@<'-' # ' K<' 00<?@ & ' <@'B1' C 1C1-01A D1 ?0 'B10 0D&?@A' -H?' 1 # ' < .&&A' -H?10 '&= D1 @0-1' KD1 1' D1 A1<A 1 0&-' K<0 0@<'-' '= D1' K1 1 > ? D1 1A' & ' 0@<'-' # ' K<' 00<?@ & ' <@'B1' C 1C1-01A <-A' '= D1 ' 0D&?@A' ='-A' D< ' D1' K<0 > ? A1 1A' & ' 0@<'-' # ' K<' 00<?@ & ' <@'B1' C 1C1-01A D1' D< 1 ' 0D&?@A' #1' A'0<@@&K1A <-A' > & 1&+1 ' A&-1' <0 D1' <K' 0D&?@A' 1H?' 1 KD'BD D'-.0' &? ' & A' D1' , '- .' A& D' K'@@ <-A' . <- D< ' D1 '0D<@@ #1'=' > @ 'D&@A1-' <-A' a1C ; -A' >& 1&+1 # ' D1' 001- ' T= D1' & A0' '-' D'0 C 1j 01- ' < @'<>1- <-A' < ' D1' < 1 '&=' D1' &> > &-0 D1' D< D' & A<'-1A' <-A' . <- 1A ' D< ' D1' 10'A?1'&= D1' 0<'A' 'B@1' 0D<@@ #1' KD&@@ ' &? 1C1<@1A <-A' <A-?@@1A D< ' '0 &' 0< W' =' <- ' #1' <' ?' 1 ' &' D1 , '- .' =& ' <' D< 1 '&= < A&-' =& ' ? A1 " 1< D' &=' <' <-' 0@<'-' # ' K<' 00<?@ & ' <@'B1' C 1C1-01A 1<0&-& ' <C1' &=' < F & > <-' '= D1' D< > #1 @<'-' '-A& 01& ' B<?01' &' #1' '-A& 01A' 0?BD' '@@ D1' 0D<@@ 01 ' D1' <> 1' &=' D' >' D< ' ><a1 D' ?' ' =& ' 0?BD' D< 1 ' ?C&-' D1' 0<>1' '@@ ?C&-' <'-' &= -1' D&?0<-A' < a0 <-A' '=' D1' -A1 8 D< >#1 @<'-' '-A& 01' 0?BD' '@@ D1' 0D<@@ A&' @'a1K'01 ?C&-' <'-' &=' !'+1' D?-A 1A' < a0 <-A' D< ' -&-1' & D1 ' D<-' D1' D< >#1 @<'-' & ' -A1 8 D< >#1 @<'-' '-A& 01' -& ' B<?01' &' #1' '-A& 01A' <- ' 0?BD' '@@ ?C&-' <'-' &=' -1' D&?0<-A' < a0 ;' -A' D< ' 0?BD' '@@ #1' 01- ' <-A' A' 1='@1A' &' D1' , 11C1 ' &=' D1 '+ ' 1<@ <-A' D< ' -& F < <- ' &=' D1' '+ ' 1<@ #1' >< A1' &' D<+1' 0?BD' D< 1 ?-@100 D1' , 11C1 ' &=' D1' '+ ' 1<@ D<+1' 0?BD' '@@ '-A& 01A' & '0'. -1A' # ' D1' D< >#1 @<'-' & ' -A1 8 D< >#1 @<'-' <0 <=& 1' '0' 0<'A -A' D< ' -& D< 1 ' &=' < A&-' & =' 1<0&-' -& ' &=' & D1 ' ! 1@& - C<00 D1' D< -B1 ' K' D&? ' F < <- ' &=' D1' '+ ' 1<@ #? ' '-' <01' KD1 1' D1' D< -B1@@& ' >< ' . <- ' ' ' &=' D'0 ='B1 K' D&? ' 0C1<a'-.' D1 1&=' &' D1' , '- .G -A' '= D1 <' KD&01' ?' ' <- ' D< 1 ' &=' < A&-' =& ' ? A1 " 1< D' &=' <' <-' 0@<'-' # ' K<' 00<?@ & ' <@'B1' C 1j C1-01A 1<0&-& ' <C1' &=' < F & > <-' #1' . <- 1A #1' <-' BD#'0D&C' & ' " ?a1 D1' 0D<@@ C< ' &' D1' , '- .' -1' D&?0<-A' &?-A0 ;' -A' '=' D1' #1' < '0D&C' & ' < @ D1' 0D<@@ C< ' &' D1' , '- .' -1' D&?0<-A' < a0 <-A' '= D1' D1' <-' ##& ' & ' '& < &-' & ' <- -1 1 D1' 0D<@@ C< ' ! '+1' D?-A 1A' < a0 <-A' '= D1' #1' < @1 a <j BD1@& & ' & D1 ' & ='@100 0 < 1 &=' KD< 0&1+1 ' &-A' '&-' D< ' D1' #1 D1' 0D<@@ C< ' &' D1' , '- .' K& D?-A 1A' < a0 <-A' D<+1' -1' 1< /0 > C '0& - > 1 - 1B<?01' D< ' D1' 0<'A' & > >&-0 &=' D1' 1<@>' 0' D1-B1' D<+1' C1 BA+1A' . 1< ' E '1+<-B1' &=' D'0 A'-<-B1' <=& 10<'A =& ' D< ' ><- ' 1&C@1' =& ' <@'B1' D<+1' '-A' 1A' A'+1 0 0Z 0 &< Z ' $ ' W , '- .

ĥ D1' 0<>1 ? A1 " 1< D' &=' D1' <-' 0@<'-' # ' K<' 00<?@ & ' <@'B1' C 1C1-01A' 1<0&-& ' <C1' &=' < F & j ><-' '*4 = 'HH

C S&+Z 2.&!-' # !j' '+.0"#." Z 2&+Z ('. - ' !2 "!' ". ' ! j' C 1!2-!j' /!')-' +!' 6.@ C 2.-' .-2!&' '@' "!2 .-/"!' !Z # 2!Z ' & /& j ' .0 S' #!22!' 2. ' &&&' /!')2 !0% ' 10-&"!' + # !-' 1 !' #.1!' !2' ."/!&*-!' !-' 032 !2 0 j' /!Z '&2.Z C 032 &S0 2!0!-' !-' 0 "@ .0" !' !-' /!".* #&.-' /!' + ' "!* +&!' - !' ' +!' 6.@

1>' B& >1' 1-' ?-' < 'B@1' A?-' 10 < ?' =<' ' < C@1>1- ' 1-?\' < F 10 '-' @?-1A ' CBD1'-' <C00 @1' =10 ' A1' 01'- ' '@@1 ' <-' L'' 3' -=1' Z @1' & ' H& 1' 10 & A1'. -1' =?@0 ' I ' ./?- 1' H' -?@@1' A' 1' A1' CA&-' A1@& 0 , &' ' <@@&K1' A1+D ' HB&-H?10 ?0 'B10 C' >? A 1' >& ' A1' D& >1' CBB 0 C' <.<' 1' <00<?' &?' ><@'B1' C C1-01' 10&-' &?' <C1' A1' =1>1 0 "> 10>1' @1' >? A 1' &?' >& ' A1' DJ>1' &BB 0 C' <.<' ' <00<? 1' &?' ><@'B1' C C1-01' 10&-' &?' <C1' A1' =1>1' -1' =1?001- ' 10C1B'='1\' 1-' >10>1' @<' BD 1,' 1 ' 0" A' 1' A1' >& ' A1' D& >1' =1?001' <@1..1' A1+0- ' HB& -H10 ?0 'B10 1-' H?1@@1' BD 1' -1' =1?001' 10C1B'='1\' H' B1@? ' A1' H" >& ' <0B?-1' ' =1?001' < 1-1' =1?001' >? A 1' &?' &BB 0 C' <.<' ' <00<?' &?' ><@'B1' C C1-01 1-H?1 .1 &'1- ' @10 ?0 'B10 C' #&-1' 1-H?10 1' A1 +'0-1' &?' @1' >& '=1?0 ' &BB 0 0' =1?0 ' >? A 1' &?' &BB 0 C' <.<' 1' <00<?' &?' ><@'B1' C C1-01 1 ' 0'0 &1 1- ' H' =1?0 ' >? A 1' &?' &BB 0 C' <.<' 1' <00<?' &?' ><@'B1' C C1-01' , &' '@<' BD 1' A'0<@@&K1' I ' &? 1' =<' ' 0&@&-B B1&' H' @<' @1 ' A1><?-8 A1 &' G @10 H?1?L' BD&010 -=1' = ' @1' & ' +&1 ' I ' ./- 1' H'@0 0&'1- ' =1 >1>1- ' 1-?\' I ' .< A1\' ;' I ' &? 1' A1' @<001- ' A10 = 0' 1-' B10 ' C01- ' C@1>1- ' I ' <' @<' C '1 ' A1' 0<' A' ' B&1' <A' & A1'. -1' I ' ./?- 1' H' @1' 1>1-<- ' A?' A' ' < 'B@1' 0&=' A1' &?' &?0 1' 1C1@@1' I ' <A-?@@1@ B10 ' <00<8 +&@ 1G' H' 0" <0B?-' C '1 &@ ' <?' & ' C ' A' 1' A1' CA&-' C ' >? A 1' >& ' A1' D& >1' &BB 0' C' <.<' ' <00<?' &?' ><@'B1' C C1-01' &?' <C' A1' =1> >1 0" @1' D<?> D@< -' 1-A&01 &' ' '1@1' #'@@1' &?' =1 &=' 1-A&01 ' >1 1 &' ' @1' -&?-' A1' B1@? ' H' C '1 &' ' C ' @1@ BD 1' 0 ' >10>1' @1' #'@@1' 0 ' C1 -1' A1' W > < B\' G 1 ' 0" @1' &? DBD<?> #@< -' 1-A&j 01 &' ' '1@1' #'@@1' '@ =1 &=' 01>#@<#@1>1- ' 0 ' C1 -1' A1' ' ' > < B\G 1 ' H' -?@@ <?,' H' @1' D<?> D@1 -' &?' @1' &? D8 BD<?> #@1 -' 1-A&01 &' ' &?' =1 &=' 1-A&01 ' -?@@1' A1@1' #'@@1' 0 ' C1 -1' A1' ' > < B\G 1 ' H' -?@@ .?< <- ' A1' C '+1' 01<@ M & '=<' ' C ' BD 1' <+&' 1' 0'-&-' H' @1' .< AA-' A1' C '+1' 01<@ <, &=' '1@ #'@@1' 1-A&01' &?' 0' .-1' C' @1' D<?> D@< -' &?' &? DBD<?> #@< -' B& >1' A10?'0G 1 ' H' -? ' BD 1' A1' CA&-' `A1' 10&- P' &?' A<? ' =1@&-'1' -1' C<001 &' ' @<' D<?-B1@@< '1' 0<-\' .< <- ' A1' C '+1' 01<@@ =& 0H@ 1-' B<0' &?' @1' D<-B1@@1 ' @1' C &' ' ./?- 1 ' A1' 0&-' &=='B1' 0<-\' 1- ' C'1 ' <?' & G 1 ' H' B1@? ' <' H" C '1 ' <0B?-' BD 1' A1' CA&-' C ' > ? A 1' >& ' A1' D& >1' &BB 0' C' <.<' ' <00<?' &?' ><@'B1' C C1-01' 10&-' &?' <C' A1' =1 > >1' M &' ' .= '- 1@ =1?001' B1+10H@ &?' " ?1' C<'1 &' ' <?' &" ' @ 1 ' 0'@ =1?001' +10H@ &?' &?- ' C<'1 &' ' <?' &" ' > < B\@ 1 ' 0'@ =1?001' ##1@ '&?' < &-' &?' < 1 ' C<'1 &' ' <?' & '+' ' > < B\@ 1 ' 0'@ =1?001' @1 a' <BD1@1 ' &?' <? 0' A1' >1'-A 1' 10 <' A1' H?1@ B&-A'B'&-' H'@ M &' @ C<'1 &' ' `<?' &'0P ' > < B\' I ' <C&' ' @<' C '0&-1' A?-' <-;' C B1&' H' @<' A11' &1' A?' &'<@>1' C?'0' 1-B1<' C?-' 01->' >&?@ '. W-' . 1+<-B1' A1@ & A'-<-B1' <+0- A' 1@ <' B<?01' H' C@?0&0' .1- \' C' ><@'B1' &?-' 1-A' 1' A'C010

-!"+&-!/'.-' !' 6.++= -2!" !/'&-' ' '6&#'

!' 0 !' ' 6&#' ']¯5 # ' &' "!#& !/= ' 10# ' !"!. ' Z "!k + !Z .' !' ' !"1)' . ' " !"Z . ' 3 "/.-' #.-@"1!/=

.' 10# ' Z "!+ !Z .' ! 22&-*' .' 3 "/.-2' -/' .' 3!"2.-Z2.K +&#& &-*' !1 ' "! ! +!/

(*ʻ ʻ .:

C0&--1 ' A1' >< A 1' 'D& ' A1' D& > 1' &BB 0' C' <.<' ' <00<?' I ' ><@'B1' C C1-01' I ' 10&-ʃ &?' 1-' + ' 1' @1' B<0' -1' =1?0 ' C<0' '1ʃ <' ' -' H' -?@ʃ D& > 1' &01 1' ' C '1 ' <' ' 1' _ ' @1' & ' C ' '@1' BD 1

Œ 'B' ,<- ʃ 0< > ' ^?&AA<>' < ? ?>' '-' C@'<ʃ >1- &' -=&' <C?A' F - &-' '-' =@<= ' Qʻ' '@@< ' ?@ '>&' C R' '0' B&-+&B< &' A1' <001-0?' C2@<&ʻ <.-< ? >' I ' &' < '0' 1.-'' -=' -.' '#'A1>' 1 A0 1-B'?>' <A' B&1>' ? '@' < 1>' CC@ʻ 1 ?0A1>' 1.-'' 1A' ?>ʃ '#ʻ >' '>h' 0'.'@@&' - &' B&-0'.-< ?ʃ <-A<- 10' HA' < ? ?>' CAB@>' <B' &>10' I ' 0'-.?@&0' 'B?@&0' '-' 1&A1>' B&- 1- &0' '-' <' #<@@'+<>' ?<>' '-' @&B'0' ?#ʻ >1@'?0' 1LC1A' 1' +'A1 '0' @1.ʻ I ' C''#@'B1' CB@<>< ʻ' <B' H?<- ?>' <A' 1' C '-1 ' '-+'&@<ʃ #'@'R' &#01 +< ʻ=<Q ' ' ' <C?A' F 10 >' C ' >&' A'1' ?'

C' 'C>' 1.1>

&-0' # '<' A' ' <-.?@'0' 'B1B&>' '#4' C' -.ʻ' ' <B' &D ʻ ʻ ?A' H?'=' I ' <-B<0 =' I ' 1 ?0' <AB1 <' '-' AB&' ʻ ?B< ?' <-B<0 ' 0?# 1<A1>' A<#

C' 'C>' 1.1>

1 0&-0' &=' ? A1 ʃ ʻ 1< D' &=' <' <-' 0@<'-' # ' K<' ʃ 00<?@ ' <-A' <@'B1' C 1C1-01Aʃ <-A' 1<0&-ʃ KD1 1' '-' ? D' D1 1' K<0' -&' 0?BD' <?01ʃ &' D1' - 1-' D<' -& <-' 0D&?@A' #1' #&@A' &' 0?1' &' D1' , '-.' &? ' & A' =& ' 0?BD' D< 1

!' M&-*' .' !' !"& ' . ' M!- ' b"!! &-*' ' #!" &-' 0 !' &-' .0'ʻ B "&& 1!- ' 22!1;+!/' ' V&-# !2 !'ʻ &-' !' / ' !' . ' &-' &+ "@' + 2 ' 2 ' 7 & ' !' 22!-' . ' !' 3"!k + !Z' ."/Z' -/' .11.-Z' . '.0'ʻ 6! +1' . ' -*+ -/' !"!' ;!&-*' .'ʻ !' #.11.-' 3". &' . ' !' 2 1!' 3!. +!' 1 /!' V !' /.' 2!-/' .' @.0' 2! +!/' 7 & ' .0'ʻ ! +' .11 -/&-*' ' !' 0 !' &."!2 &/' -/' +' -/' 2&-*0+ ʻ' !' "&#+!Z' &-' !' 2 1!' #.- &-!/' 7 & &-' @.0'ʻ 4 &+&7&#E' &-' 3+ #!2' 7 !"!' @.0' 1 @' !!' 1.2' & ' @.0' /.' # 02!' .' ;!' "! /' -/' 0;+&#+@' ".k #+ &1!/' -/' Z' 'ʻ Z' &-' @.0' +&! ' .' ;!' &-'&.+ ;+@'.;2!"'!/' V & -!22' !'M&-*' 'V !2 1&-2 !"' !'B&"2' @'.'V @

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ME' = ' ' 'G '6 #'H ' ':

' 01-' @10' BD&010' & A1'.-1\' I ' 10 <#@'\' C' - 1' '@1' &'' <' 0&-' C@1>1-' <' F 10 ==" <@ H?'-\A-1'8A1' 1'-' '@@1 ' <-' A1' 0&-' 1.-1' A 0' I ' 01C '0>1ʃ C' <001 ' A?' A' ' C@1>1-' @10' H?1@@10' '@ +&1 ' I ' B&>< -A1' H'a' 0&'1-' =1 >1>1-' 1-?\' I ' .< A1\' 0&@&-B' C/C& ' A B1@@10

'='1>1-' H' B&>1' & A1'.-1' ='''0' C' @1' &#@1' &" AK< A' <'1@ --=1' _' @1' &" =>' A1' 0&-' 1.-1' `A'0>1 U ' H' -?@@ 10R@ -.' ><'@ -1' =1 @ -.' 0&'@ =&?-A?' C ' +1001@ -<? 1' BD&01' 1-' <==<' 1' C' & =1? 1' -<?R ʃ ? ' C1'@ 1' A1' =& =1' 1' A1@ >&-&'1' =&+>A?' I ' 1>C '0&-1>1-' A1@ =&?-A& ' <-H'@ <, <' 1@ A?R' <?' &" @<' >&'1 1' A1' B1&' H'@ <, <' 'OAC ' =&?-A?ʃ '1-B&- 10 1<-' 1=' 1' &?' = <-BD'01' . 1\' &?' ?01\' <' B&- @ 1G <BB& A1\' 10 ' I ' <001- ?\' H' @<ʃ A I ' & A'-<-B1' 0&'@ =1 >1>1-' 1-?\' I ' .< A1\' ' 1- ? 1' 10 ' & A1-1\' I ' <001- ?\' H' '?@ . 1' -1' A'> . & 1' 0&' ' =&?-A?' C' -?@@ ' C? ' +1001@ -<? 1' BD&01' 1-' <==<' 1' 0? ' >10>1' @<' C1'-1' ' H' >=' >&-'1' A& 1' -1' A< .1- ' A10B&B1' -1' A1 ' <?R0R 10' A1@<' @<' >11 ' B&? .1' 1-' -?@ ><' 1' C<'1>1-' A1'-\' @1' &'<@>1' "1-.@1R 1ʃ ><'0' 0&' ' C& 1\' <' @<' #?@@'&-' C ' ' 10 1' & -1\' 1-' @<' B&'.-1' "1-.@1R 1' 0? ' C1'-1' A1' =& =<' 1' A'B1@@1' I ' A1>C '0&-1>1-' I ' = -' I ' <'>B1C-' A1' B1@ ' H' =<B1' @1' B&- 1G 1 ' ' -?@' C& 1' -1-+&'1' <0B?-1' >&-&'1' "1-.@1R 1' 1-' 0B&B1' C? ' @1' BD<?-.1 ' 1-' >&-&'1' &?' C? ' >&-&'1' "10B&B1' 0? ' @<' C1'-1' C0BD1'-1' <+<- A' 1

Ñ !' +/' B"&0 !/' . &!Z *"!!'&-' &Z' 6! /&-*

' #1' UD1' D'-.0' & A<'-1A' <-A' 10 <#@'0D1A' # ' C? ' & A' D1' , '-.' <' D'0' < @'<>1-' D&@A<" <' F 10 >'-0 1' D1' !'= 11- D' "< ' &=' <'-' '@@< ʃ D1' 1+1- 11- D' 1<' &=' D'0' 1'.-ʃ # ' D1' 001-' &=' D1' 0<'A' < @'<>1-ʃ KD'BD' D1' A& D' K'@@' <-A' B&> ><-Aʃ D<' D1 ' 0D<@@ #1' =' >@ ' D&@A1-' <-A' a1C ' <= 1 ' D1' ? C& ' &=' D1' 0<- 1

= ' F D1 13' ' K<0' & A<'-1A' # ' D1' -&#@1' , '-.' AK< Aʃ E <-A=< D1 ' &' ? ' & A' D1' , '-.ʃ ` D1' '- D' 1< ' &=' D'0' 1'.-ʃ D<' -&' 1 @@-.' <@=C1--' -& ' !< D'-.ʃ 0D<@@ #1' >&@ 1-' =& ' 1001@ʃ -& ' & D1 ' D'-.' D1 1&=' &' #1' ><A1' # ' D1' E&@A0>' Dʃ -& ' & D1 0ʃ ?C&-' > -' &=' !& =1' ? 1' &=' D1' &-1 ' 0&' >&@ 1-ʃ <-A' > j C '0&->1-' &=' D1' ! &?-A1 ʃ '@@ #1' D<+1' '1@A1A' &' D1' , '-.' D1' <@=' &=' D<' KD'BD' D1' D<' D' 0&' >&@ 1-ʃ -& j K' D0 <-A'-.' <-' D< 1' & ' ! <-BD'01' . <- 1A' & ' ?01A' &' D1' B&- < 'G ''0' <BB& A1A' <-A' <001- 1A' D<' D1' 0<'A' A'-<-B1' 0D<@@ #1' =' >@ ' D&@A1-' <-A' a1C ' -A' >& 1&+1 ' ' ''0' & A<'-1A' <-A' <001- 1Aʃ D<' -&' E &<' ' & ' <@=8. &<' 0D<@@ #1' >&@ 1-'# '<- ' <-' &' ><a1' 1001@ʃ & ' & D1 ' D'-.' D1 1&=ʃ ?C&-' D1' 0<>1' <'-' -A' D<' -&' E&@A' -& ' '@+1 ' &=' B& @<-Aʃ -& ' &=' & D1 ' <-A0' #1 &-A' D1' 1<ʃ 0D<@@ ?-' '-' <-' ' <--1 ' &=' < >1-' KA D'-' D1' 1<@>' &=' -.@<-Aʃ #?' D<@@ #1' # &?.D ' &' D1' -@ &-ʃ D1 1' &' #1' >&@ 1-' `'-'04' D1' &'-' &=' -.@<-Aʃ ?C&D' <'-' &=' !& =1' ? 1' &=' D1' 0<>1ʃ <-A' &=' >C '0&->1-ʃ -1ʃ <-A' <-0&>' &=' D'>' KD'BD' A& D' B&- < G <-A' D<' -&' <-' D<@@ 01-A' <-' -.@'0D' &-1 ' '- &' B& @<-Aʃ &'BD<-.1' D1' 0<>1' `'-' &-1 ʃ & ' =& ' B& '0D' &-< (' S C&-' D1' <'-' -1L ' <=& 10<'A) *%' ! (" ' % D1' L ' 1 1' < $' I /' '-' &-1 '& ' =& ' &-1 '&=' B& @<-Aʃ " G '

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+' 2.+/' ." .-/ .-' 2 +/ ;!' #+! -2!/' ". 1' 402

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L -' 0- "0!

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 g D<' 1+1 ' <-' &=' D1' 1<@>3 >< ' ><a1 <-A' C? ' &' <@1' <-A' 01@@ @& DOg <0' K1@@ , 1 01 0' <0 & D1 0g &=' 0?BD' 1- . D'<-A' 1<A D' <0' D' >' C@1<01g C< j '-.' D1' ?@-<.1g ?#0'A g <-A' & D1 ' " ? '10G D<' '0' # 0< g &=' 1+1 ' '1B1' &=' @& D' <= 1 ' D1' < 1g -& K' D 0 <-A'-.' <- ' < ? 1g A'-<-B1g &B@<>< '&-g 1j 0 <'- g & ' " 1=1-B1' ><A1' &' D1' B&- < ' -A' D<' -&-1' 0D<@@ 01@@ & ' C? ' &' <@1' <- ' @& DO' #1=& 1' D ' D1 '#1' >1<0? 1A' # ' D1' , '-./0 ?@-1.1 g <-A' 01<@1A' K' D' D1' 1<@ &' D<' & A<'-1Ag ?C&-' D1' <'-0' B&- <'-1A' '-' D1' < ? 10' D1 1&=' ><A1' -A' D<' -&' <-' 0D<@@ C? g `>'-.@1g B<?0 1 9 P' -& ' ><a1' & D1 ' " 1B1' ' '<' D1' @& DO' &=' , 1 01 0g ?C&-' <'-' &=' !& =1' ? 1' &=' D1' 0<>1

 g D<' D1' 1 BD<- 0' <-A' F & a1 0' &=' @& DO' B<@@1A' 0'-.@1' F & 0 1A g ><' B< ' &@ 0' &=' 0'-.@1' F & 0 1A' &' KD<' < 0' D1 '3K'@@ 1LB1C ' &' D1' ,'-./0 -1>'10=' C< '-.' D1' ?0 &>0' <-A' ?#0'A'10' D1 1&=' A?1G K' D&?' C< '-.' D1' " ? '10' &=' <@<'0g -& K' D0 <-Aj '-.' <- ' < ? 1g A'-<-B1g &B@<>< '&-g -D'#' '&-g `'/)' &> ><-A>1- 0' &' D< 1 0g '#1 '&0g 0<.10@8& ' '+'@1.10g . <- 1A' &' &' #1' . <- 1A' &' D1' ? .100 0' &=' <@<'0g & ' &' D1' 1 BD<- 0' &=' D1' <C@1' &=' <@<'0g & ' &' <- ' & D1 ' ><A1' &' &' #1' ><A1' &' D1' B&- < G <-A' D<' D1' #@'.< '&-0' <-A' ? 1 '10' <a1-' #1=& 1' D'0' >1' =& ' D1' " ? '10' &=' <@<'0g 0D<@@ #1' 10 & 1A' <-A' A1@'+1 1A ' &+'A1A'<@K< 0g D<' ?-A1' D1' &@&? ' &=' D1' 0<'A' &@ 0' &=' 0'-.@1' F & 0 1Ag D1 ' 0D<@@ B< ' -& A&?#@1' F & 0 1A0g -& ' D<@=' A&?#@1g -& ' F & 0 1A0' < g -& ' >& @1 g ?C&-' <'-' &=' !& =1' ? 1' &=' D1' 0<>1

 g D<' D1' <@ ' KD'BD' 0D<@@ #1' ><A1' '-' D1' &?- '10' &=' ?- '-.A&-g ` <- <# 'A.1g/P' & D<>Cj &-g <-A' 1A=& Ag D<' 0D<@@ #1' 0&@A' <-A' # &?.D ' &' D1' ' ' &=' &-A&-g &' +'A?<g D1' ,'-./0' &?01D&@Ag <-A' & D1 ' & A0/' &?01D&@A0g <-A' E1- @1>1-0/' D1 1' AK1@@'-.' <-A' 1C<' '-.g <-A' <@0&' =& ' ?0 1-<-B1' &=' <@@ D1' 1&C@1' &=' D1' 0<'A' ' g 0D<@@ #1' K1@@' <-A' 0?==' B'1- @ ' 0'= 1Ag B@1<-01Ag <-A' C? '='1Ag #1=& 1' D1' <@1' &=' D1' 0<>1g = &>' " ?0 ' <-A' <@@ & D1 ' ! '@ Dg 0&' D<' D1' ? 1 0' >< ' D<+1' '.D ' ?0D1@0' &=' B@1<-' <@ ' =& ' D1' ^?< 1 G <-A' D<' D1' < & 0g <'@'= g <-A' F < A1-0' &=' &K-0' <-A' @<B10' KD1 1' 0?BD' <@ ' 0D<@@ #1' 0&@Ag 0D<@@ D<+1' &K1 ' <' 1+1 ' <-/0' ?' ' D<' K'@@ B&>C@<'-g &' 011' <-A' 01< BD' D1' 0<'A' <@ g <-A' '=' "1='' D@ ' #1' =&?-A' D1 1&=g &' ><a1' A?1' 1A 000

 g ' '0' & A<'-1A' <-A' 10 <#@'A'1A ' D< ' -& 1< BD1 g E<?.1 ' &=' F '-10g ? &1.1 g `!'-A1 'S P -& ' F 1'.D1 ' &=' F &&@0g & ' <- ' & D1 ' 1 BD<-A'010g &@@1Bj & ' &=' ?0 &>0' <-A' ?F A'10' KD< 0&1+1 g & ' &>Cj &@@1 g 0D<@@ D<+1' 0 < 1' '-' D'0' ==' B1' =& ' 1 >' &'=' '=1g & ' &=' 1< 0G #?' D<' D1' 0<'A' ='B10' 0D<@@ 1j ><'-' '-' D1' , '-.G/0' <-A0' ?-A1' D1' E&+1 -<-B1' &=' D1' 1<0? 1 '=& ' D1' '>1' #1'-.g K' D' D1' 001-' &=' D1' &?-B'@@ KD1-' 1A' '0G <-A' '=' <- ' D< 1 0' & ' 1 1 0' C< 1- 0' #1' ><A1' &' D1' BB>= < g D1 ' 0D<@@ #1' B@1< @ ' <A-?@@1Ag +&'Ag <-A' &=' -&-1' ==1=

 g !& <0>?BD' <0' 1&C@1' #1' B&>C1@@1A' &' B&>1' #1=& 1' D1' , '-. 0' C?-B'@@ & ' '-' D1' D<-B1 '# ' F ' 0' . &?-A1A' ?C&-' ?- ?1' ?. .10 '&-0' G D<' D1' D<-j B1@@& ' =& ' D1' '>1' #1'-.g C 101- @ '<= 1 ' D<' 0?BD' ?. .10A&-0' #1' A?1@ ' =&?-A' <-A' C &+1A' ?- ?1g 0D<@@ D<+1' &K1 ' &' & A<'-' <-A' <K< A' " <><.10' <BB& A'-.' &' D'0' " '0B 1 '&-g &' D'>' KD'BD' '0' 0&' &?#@1A' ?-A?1@ g <0' <=& 1' '0' 0<'A8

 5 ' D1' , '-.g <' D1' 1H?10 ' &=' D1' &> >&-0' &' D'>' ><A1' '-' D'0' C 101- ' < @'<>1- g D< D' . <- 1A' 'B1-B1' &' <@@ D'0' @'1.1' 1&C@1' &=' D'0' 1<@>' (=' -.@<-A@' &' 0D'C' <-A' B< ' & -' &? ' &=' D1' 0<'A' 1<@>g &' KD<' < 0' D< ' C@1<01' D1>g 1LB1C ' &' D'0' -1>'10@C< '-.' D1' ?#0'A'10' <-A' ` " 1+&' 0/P' D1 1&=' A?1G -& K' D0 <-A'-.

($ ' 1* ' $ ' 'L 2 <>#'.1g 1 =& A@ ! '0' (&-&?' +! 'V ' A"

 1>' H' BD10B?-' D >1' A?' &'<@>1' C? <' I ' 1' I ' >1 1' <' +1- ' I ' +1-A 1' A'<C0'90'#'1-' A1' , < 01 0' B&>1' <?R5' A1' A1@ @&-.? 1'' '@<1' 1' B&>1' D' ' C@1 <g C<'<- ' @<?-<.1' 0?#0'A1' I ' <?R0' A1+&' 0g 10 <00<+&' ' A1' BD10 ' B?-1' C1B1' A1' A <C' 0&@&-B' @<==' 1 <- g -'1- ' B&- 10 1<- ' <0B?-' 10 < ? ' & A'-<-B1' CB@<><B'&-' 10 1'-=' &?' A1=1-01' =<' ' <?' B&- 1' ' H' -?@@ ' +1-A#' -1>1 1' <' +1-A 1' <0B?-0' A <C0' <+/- ' H'@0' 0&'1- ' <?-1\' C' @<?-&' A?' &" I ' 1-01<@@1\' A?' 01<@' <' B1&' & A1' 1' 0? ' @10' C1'-10' B&- 1-?\' 1-' @10 < ? \' 1- ' '=<@ \' ' H' -?@@ ' >1 1' -1' >1@@1' B<?B1' -1' = B1' <? 1' = <-A1' 1-' @10' A ?C0' A1' , 1 01 0' 0' C1'-1' A1' =& ='A 1' A'B1@@10

 1>' H' @10' < BD<- \' I ' &A&? 0' A1' A <C0' <CC1@@1\' 01-.@1' F & 0 1A1' C/ &- ' <>10-1 ' #&@ 10' A1' 01-.@1' F & 8' 0 1A1' <0' H?1?L' C '10' H' a> ' C@1 <' =& 0C '0' <0' 1 1> 0' A?' &'g C><- \' @10' B?0 ?>10' I ' 0?#0'A10' 1- ' A?1m' 0<-\' C<@1 ' @10' A1+&' 0' A1' <@1 0G -'1- B&- 10 1<- ' <0B?-' 10 < ? ' & A1-W-B1' CB@<><B'&-' '-D'#'B'&-' 10' 'C<?-8' A1>1- \' &?' BD 10' @'# 10' ?0<.10' (?' C '+'@1.10' .= ' 1\' &?' <' .= ?'1 0' <' @10' ? .1'0' A1' <@1 0' &?' <' @10' BD<- \' A1' @10 <C@1' A1' <@1 0' &?' <0B'>0' <?R0' '<' \' &?' <=<' 0' <' B&- 1' I ' H' @10' &##@'.<B'&-0' '01? 10' C '01\' A1 ' ' B10' D1? 10' C? ' @10' A1K ' 0' A1' <@1 0' 0&'1-' 10 ' ? \' I ' A1@' 1\' ? +1?\' &?\' =&' \' H' A10&? \' B&@&? ' A1.' A' \' #&@ 10' A1' 1-.@1' F & 0 1A1' '@0' -<>10-1-' <0B?-0' A&?#@10' F & 0 1A10' -1' A'> ' A&?#@10' -1' F & 0 1A10' <'1\' -1' >& @1\' 0? ' C1'-1' A1' =& ='A 1' A'B1@@10

 1>' H' @10' # 110' H' M <' =<' ' 1-' @10' &?- 110' A1' ?- -.A&-g <- 1# g 1 =g & D' I ' 1Ag ' M <' +1-A?\' I ' <>10-1\' <' @<' ' 11' A1' &-A 10' C? ' +' <'@@1 ' @&0 '1@ A?' &'' I ' @10' D&0 '1#B' A<? 0' W' Z' .1C '@0' '@@&1H10' A1> <- \' I ' 1C1' <- \g I ' <?L'-' C? ' 0?0 1j -<-B1' A1' &? ' @1' C&1C@1' A1' A11' ' 11' 0&' ' #'1-' I ' B&+1-<#@1>1-' -1 1\' >&?-A1\' I ' C? '='1\' A1+= ' ' @1' +1-' A'B1@@ A1' C&?A 1' I ' A1' &? ' <? 1' & A? 1G '00'-' H' @10' <BD< & 0' C &-' <+&' ' &1C ' #?001@L' A1' C? 1' # 110' C? ' @1' H < R' I ' H' @10' <' 0' <'@@'=0' I ' E< A1'-0' A10' '@@10' I ' @'1?L' &?' A1@' # 110' = <' +1-A?\' 1'1-' C& ' ' < BD10B?-' 01? 1' H' C@1'-A 1' 01'+&?A <' A1'+11 ' I ' BD1 ' @1' A' '# 110' I ' 0" A1'<? 1' &' ' &+1' A1-' '=''' 1' A?1' 1A 1001

 1>' & A1'-1\' 10' I ' 10 <#@" H' -?=' ,BD1&? ' .< .1&? ' A10' + - ' ?-1&' &C&' &?' 1'0&? ' A1' 1 -10' &?' <0B?-0' <?R0' >< BD<-A'010g &@@1= & 0' A1' ?0 >-10' I ' ?#0'A10' HB?-H10' &?' &?- &@@&? g 1' ' 10 <' 1 ' 0&-' &=='B1' <' >1' A1' +'1' &?' A10' <-0G 1'-0' H' @10' A' \' &=='B10' A1> .1-' 10' ><'-0' A?' &" 0&?\' .& -<-B1' A1' 10& 1 ' C? ' @1' 1>C0' 10 1<-' &+10H ' @<001-' A?' B&-01'@ H3-' ' #&0&' .-1G 1 '0" <0B?-0' BD 10' &?' 10' C< 1- 10' 0&'1-' =<' \' <?' B&- 1' 0&'1-' &? 1>1-' +&'A10' I ' A1' -?@ 1==1^

 1>' H' H<-' .1- \' 0&-' =<@ \' +1-' ' A1+0-' @1' &?-01'@ A?' &'g &?' 1-' @<' D<-B1@@< '1' C' # '1=0' =&?-A?\' 0? ' 0?..10 '&D0' -'1-' ' + <'0@ H' @1' D<-B1@@1 '' C? ' @1' 1>C0' 10 1<-' ><@- 1-<-' <C0' H' '1@L' 0?..10 '&-0' 0&-' A?18' >1-' &+1\' I ' C+1\' -'1-' ' <#@10@ 1' ' C&<' ' A& 8' A1'.-1 ' I ' <.< A1 ' ><.10' 0&&'?;' 0<' A'0B 1B'&-' <' B1@? ' H10 ' '00'-' =+<'@@1\' -&?-' A?1>1-' B&>1' A10?'0

 1>' @1' &" <' @<' 1H?10 ' A10' &10' <' @? ' ='' ' 1-' B10 ' ? ' C@1>1-g <A' .0?- 1' @'B1-B1' <' &?\' 010' @'.10' A1' 0&-' &'<@>1' "1-.@1 1' A10a'CC1 ' I ' <>10-1 ' @#@1A0' D& 0' A1' A' ' &'<@>1' <0' H?1?L' C '10' H' @&? ' C@1 <' D& 0C '0' <0' 1-1> 0g C<'<- \' @10' 0?#0'A10' 50' A1+&' 0' 1-' A?1\G' -'1- B&- 10 1<- ' <0B?-1' & A'-<-B1

B@<> <B'&-' &?' A1=1-01' =<' ' A1+0A ' B1Ơ D1? 1Ơ <' B&-8 0' 1'G' '1- ><-Ơ '@ +&1 ' H' 0 -' B&''01=@ C? <' 10 1'-8 A 1'@1' A' ' C<00<.1' HO- ' @&< ' 01 > #@1 <' #&0&'. -<#@1' C? ' C=' ' A1' &'<@>1

1>' B&>1- ' H<' C@1>1- ' 1-?\' <' F 10 >' <-' A?' 1. -1' -=1' _ ' @1' H" 'H& 1' 10 ' H+'- ℊ C? ' B1&' H' +'@@> 0' I ' <?RƠ >1==10&? Ơ < A' A1+ ' @1+1 1- ' C' <001> #@110Ơ I ' &? <.1&?01' '@&># 1' 1-' A'1010Ơ C '10Ơ A1' &'<@>1 ' 1-8 BC- 1' @<' " '.#' 11' - 1' ' @1' &" I ' 0<' & --1' I ' @10Ơ 1'10Ơ A1' 0<' 1ℊ A1=1-A'" =?'0 ' C' - 1' ?' @1' &" 10 &' 18 >1- ' <' &?\' -@< Ơ A1\' .1- \' H' -?ℊ A1@& Ơ =1 &' ' &?' 1B&>1-B1 &' ' '1@L' '&' &?' ?> ' -<? 0Ơ 01> ##<#@10ℊ 1' 0" >?@@ ' @1'=1 &' ' I ' B1&' C+1' A?1>1- ' = &' ' =<' ' A1' @?' B&>1' A1' <' ' <?' &" I ' 0&-' &'<@>1 ;' '1- >1'-Ơ . 1+&?01' C@<- ' =?'0 ' =1' ' <' -=1' A' ' ' @1' &" 1-' B10 ' =0 1- ' C@1>1- ℊ H' A', 01Ơ .1- \' -'1- ' 1'<- \' B&-0'A1 <8 B'&-' <' A' ' A1=1-01' 0'#'1 ' 1-' @1 ' &?- 11Ơ A1' 10 1' <-B<0 1' I ' <'@@&? Ơ 1-' -.@1R 1ℊ &-' I ' \' '1@L' <001>j #@110Ơ 1-' &? 0.1&?01' @'&># 1' C? ' <BB&>C@' ' @&? ' ><@'B1' 1-B&- 1' @<' C110Ơ -=1' K?' @1' &'ℊ 0<' & &-1' I ' 0<' " '. -' 1' I ' @10Ơ <10' A1' 0<'R 1;' 'H?&" -=1'_ ' @1' &" '1-' B 1 ' C01- ' C@1>1- ' <A' A1=1-A?' <' &?\' 010Ơ @'1.10Ơ 0'= -' _ 0' B&>1' <?RƠ A1' H1B?-B ' 10 <' H'@Ơ 0&'1- ' H' -? ' =<B1' '#@L' <001>#@110Ơ '&' &?' ?>&' 1-B&- 1' @<' C110Ơ 1-' -?@ >< 1G'@1 '0* 0B?-' A1ℊ <001>#@1' 0&' ' BC>1-B1<- ' <' C@?'0Ơ &M ' H' '0B&- \' I ' <?RƠ '-'0 10Ơ @1' &" C&1- ' 1- ' <+&' ' B&-'00<-B1ℊ &+1' @<' =& B1' A?' &?- 11' I ' C<'Ơ &?' '1@ B<Ơ <+'1. -1' >1 1-' A10 &? #<-B1' 1-B&- 1' '1@ - <@'B1' &+1' &?' '@&?' C&<' ℊ I ' C'. -1- ' '1@L' >1==10&? Ơ I ' @10Ơ >1 1-' 1-' C '0&-Ơ <-H ' A?1' 1L1B? '&-' A1' '1' 0&' '=<' ' A1' 1?LG' I ' H' &?\' ! ' I ' <?RƠ @'.10Ơ A?' &'<@>1' 0&'1-' 1- 1 'A<- \' I ' <'A<- \' A1' &?' @&? ' =& 1' I ' C&<' ' <Ơ '0B&- \' I ' '-'0 10Ơ <+0- A' \' 1-' '1@ B<0

1>' B&>1' B&- 1- -' 0&' ' 1-' @10 < ? ' A1' F 10 >' 0 A1' H' 0<@>&01?L' -1' 0&'1- ' C''01\' -1' A10 ? \' C' 110Ơ -1' C' <&,Ơ 1-. '-10Ơ <' @10 ?'a10Ơ A10Ơ &@ -Ơ' A1' A'> ' C '@@ <-H ' @<' < '+' 1' A1' 1'- ' &@'-' A1' <C '0 1' 0? ' M 1'-1' C1'-1' @'>' 1' 1-' >10>1' @10 < ? 1' ' ' B&>1' C' 1 < ? ' =' ? ℊ <-' 10\'>1' -=1' _ ' @1' &" H& 1' 10 ' & A1'. -1' =?'0 ' H' @1' A' ' 10 < ? ' A1' F 10 >' 0 A1'= &' ' =1 >1>1-' 1-?\' I ' .< A1\@ < &?0 1' <' 'B1 ' H' 0<@>&01?L' -1' =?01- ' C '01\' <' @10 <-a1Ơ A10Ơ &@ -Ơ' -<'@@&Ơ 0? ' >10>1' @<' C1'-1G I ' H' -?@@ H0BD&? ' -1' E< D><-' '1' -?=@ <?R1' A1' H?1@ 10 <' &?' B&-A'B'&-' H'@ =&001ℊ -1' >1 &' ' A1@& Ơ <'' <+?-' 1H' @1Ơ 1<K1Ơ A1' =<>'01' ?># 1' ?01' 1-' -1' -? 1' <? 1' 1<K1' A?' &'<@>1' C' @1' A' ' 1>CƠ -1' C' -? ' <? 1' 1>CƠ A1@ <-' <0B?-Ơ 1AƠ <CC1@@1\' <@a1 Ơ -<?RƠ 11Ơ -1-.'-10Ơ HB?-H1Ơ C' @1Ơ H?1@Ơ @1' ==' 1' &?' # &&A' A1Ơ <@>&-0@ <?>C 0?Ơ &?' A<? 1' C10Ơ 0&?-' HB?''H@ C <' 1-' <0B?-' >< 1' 1' C 'Ơ &?' A10Ơ ?' \' 0? ' @<' C1'-1' 0?'0AB1' ;' ' <?L'- ' =&'@' 1D1 B1' 1-' @1' A' ' 10 < ? ' =<' ' <-' 10\'>1' <+3- A' ℊ H' B >1' B&- 1-?' 0&' ' 1-' >10>1' @10 < ? ' A1' F 10 >' H' &?\' @1Ơ 1<K1Ơ 1-' H?1?LG 0<@>&-0' 0&- ' C '01Ơ 1-' @1' &'<@>1' 0&'1- ' >'01\' 1-' A1=1-01' H<- ' < 'C '01' A1Ơ <@>&-0' A1@ &? ' A1' @<' < '+' 1' A1' -=1' "<>1' <-H<@ &? ' A1' 1'- ' < -ℊ & A1'. -1' =?'0 ' I ' <001- ?\' 1-' @1' A' ' 10 < ? ' =<' ' <-' 10\'>1' ' @10Ơ 1K1Ơ A1' &-1' F 1' 1 011' '##'@@ I ' &?\' <? Ơ 1K1Ơ 1@ &?- 1' A1' <- <0 1' =?01- ' >'01Ơ 1-' A1=1-01' H<- ' <@ C '01' A1' <@>&-0' A1@ &? ' A1' 1'- ' 'BD1@ <-H<@ &'' ' A1' @<' ? '='B<B'&-' -=1' "<>1' I ' 1-' -?@@ Q<?@ 1 P' 1>CƠ A1@ <-ℊ <' B<?01' H' <@>&-0' -1' 0&-

<- ' A'-<-B1ℊ &B@<>< '&-ℊ & ' <- ' " 1=1-B1' ><A1' #1=& 1' D'Ơ ' >1' &' D1' B&- < ' G' 1+1 D1@100Ơ D1 K'@@' D< ' D'Ơ &?-B'@ >< ' 10 <'-' D1' 0<'A' <00<.1' KD1-' D1 ' 0D<@@ D' -a' #10 ' =& ' D1' &=' ' &=' D1' 1<@>' ' ℊ F D1 1<Ơ <' D1' < @'<>1- ' D&@A1-' <' F 10 j >'-0 1 ℊ D1' `` 1- D'ℕP 1< ' &=' D1' 1' .-' &=' &?' &+1j 1'. -' & A' D1' , '- .' D< ' -&K' '0G =& <0>?BƊ <Ơ '@@<'-Ơ <-A' & D' ' ==1-A1 Ơ &=' @< 1' `D<+10P' '01- # ' 001>j #@'10Ơ <-A' &? <.1&?Ơ ?>#1 ' '-' A'+1 Ơ < '10Ơ &=' D1' 1<@>ℊ <.<'-0 ' D1' , >./Ơ Q)'. -' ' <-A' D'Ơ &K-ℊ <-A' D1' <KƠ &=' D'Ơ <-A'G ' ' K<Ơ 0 D' @ ' A1=1-A1A' # ' D1' , '- .' &' <@@ <--1 '&=' 1&C@1ℊ D< ' -&-1' = &>' `D1-B1j =& D/P' 0D&?@A' ><a1ℊ & ' #1. '-' <.<'-' 0?BƊ '&' & ' ?j >&? ℊ -& ' & D1 ' @'a1G <-A' '=' <- ' <" A'Aℊ <-A' D< ' A?@ ' C &+1Aℊ D1' 0D&?@A' #1' <a1-' <Ơ <' < & ' &' D1' , '- .' < 'A' D'Ơ 1<@>';' 1+1 D1@100Ơ <' . '1+&?Ơ &>8' CD?- ' K<Ơ ><A1' &' &? ' &+1 1'. -' & A' D1' , '- .' '-' D'Ơ C 101- ' < @'<>1- ℊ D< ' A'+1 0' 1&C@1' -& ' D<+'- .' &#0'A1 <A&-' &' D1' 0<'A' " 1=1-B1ℊ <Ơ K1@@' '-' D1' &?-8 '10' &=' D10 1 ℊ <-B<0 1 ℊ <-A' 1@01KD1 1' '-' -.@<-Aℊ D<+1' ><A1' 0?BƊ 001>##'10' '-' &? <.1&?Ơ <--1 ℊ &' <BB&>C@'0Ơ D1' ' <@'B1' <.<'-0 ' D1' , '- ./Ơ 1<B1ℊ D'Ơ &K-ℊ D'Ơ " '. -' ℊ <-A' D1' <KƠ &='D'Ơ <-A;' F D1 1j =& 1' &? ' &+1 1'. -' & A' D1' , '- .' '-' D'Ơ C 101- ' < j @'<>1- ' D< D' A1=1-A1A' &' <@@ ` D1'OP' @'1.1' 1&C@1ℊ <Ơ K1@@ & AƠ <Ơ & D1 ℊ &='KD< 0&1+1 ' 0 < 1' D<' D1 '#12 D<' -&-1' 0D<@@ ><a1' 0?BƊ 001>##'10@ '& ℊ & ' = ' <. >0 ' D1' 1<B1' '-' -&' K'01G <-A' '=' <- ' 0?BƊ !! & ' #1' #1. ?-' <Ơ 0&&-' <Ơ D1' D1 '==Ơ <-A' & D1 ' D1' , '- ./Ơ '-'0 1 Ơ >< ' $ ' D<+1' R 7& #, ' D1 ' K' D' =&1' 1-. D' &='=&1' &?- ' <-A' &?- ℊ KD1 1' ?BƊ <01' 0D<@@ D<CC1-ℊ 0D<@@ 01 ' " '0 ? #<-B1' <.<'-0 ' 0? D' <@'B1' K' D' <@@ DA ' &K1 ℊ <-A' 0D<@@ <a1 ' 0?BƊ ==1-A1 0@ <-A' D1>' C? ' '-' '0&-ℊ '@@ A?1' L1B? '&-' &='=&1' <K' #1' &=' D1>' ><A1G <-A' D<' <@@ & AƠ <-A' & D1 ' @'1.1' 1&C@1' &='=&1' 1<@>ℊ 0D<@@ #1' < 1-A'-.' /)' K' D' <@@ D1' ' 1-. D' <-A' &K1 ' &' =&1' D1 '=1' <-A' '-'0 1 Ơ <=& 10<'A' ℕ)

ℊ F D1 1' ' '0 B&- <'-1A' '-' =&1' < ? 1' &=' F 10 j >'-0 1 ' D1' 1B&-Aℊ D<' &?-.' <@>&-0' 0D<@@ -&' #1' <a1-' -&' A10 & 1A' # ' 1 0@ & ' # ' & D1 ' -.'-10@ <' =&1' <-aƠ &=' '@@0ℊ = &>' D1' 'A0 ' &=' C 'ℊ '@@ D1' < '+' ' &=' ' &D-' D1' <C '0 ℊ ?C&-' <' B1 <'-' <'-' @'>' 1A' '-' =&1' 0<>1' < ? 1;' -A' KD1 1<Ơ # ' <' < ? 1' ><A1' =&1' L'" ' 1< 'H= D1', '- .' D<' -&K' '0ℊ ' ' K<Ơ & j A<'-1Aℊ D< ' =&1' 0<'A' < ? 1' &=' F 10 >'D '1' D1' 1B&-A' 0D&?@A' #1' =' >@ ' D&@A1-' <-A' a1C ℊ & -'-.' &'=&1' 0 >1ℊ D<' &?-.' <@>&-0' 0D&?@A' -&' #1' <a1-' <' D1' ` '@@0ℊ <?a /P' & ' 1@01KD1 1ℊ ?C&-' =&1' 0<>1' <'-G' <-A' D<' -&' !'0D1 ' -&' E< D><-ℊ -&' -&#1' & D1 ℊ &='KD<' 0 < 1' & ' &-A' '&-' D<' D1' K1 1ℊ 0D&?@A' -&' C? ' = &>' `D1-B1j =& D' hP' -' D1' F < 1 0' &=' @'<> '01ℊ ?>#1 ℊ ?01ℊ 1- ℊ -&' ' -&-1' & D1 ' F < 1 ' &=' D1' 1<@>ℊ # ' D1' 0<'A' ' >1ℊ -&' # ' -&-1' & D1 ' ' >1' &=' DH 1< ℊ <-' ' 1 0' B<@@1A' <@a1 0ℊ -& ' & D1 ' 1 0' & ' -.'-10' KD< 0&1+1 ℊ KD1 1j # ' =&1' ! ' & ' 11A' &=' <@>&-0ℊ <>C 1 0ℊ & ' &=' <-' & D1 ' ! '0D' KD< 0&1+1 ℊ `>< '/P' '-' <-' K'01' #1' <a1-' & ' A10 & 1Aℊ ?C&-' D1' <'-' <=& 10<'A;' -A' <@0&' ' ' K<Ơ 1D1< 01A' '-' D1' 0<'A' < ? 1ℊ ><A1' D1' 0<'A' D' 11- D' 1< ℊ D< ' KD1 1' ' ' '0 B&- <'-1A' '-' D1' 0<>1' < ? 1' &=' F 10 >'-0 1 ℊ D< ' A@' D1' F < 1 0ℊ '-' KD'BD' <@>&-0' #1' <a1-' '-' D1' 1<@>ℊ 0D<@@ D1' C? ' '-' "1=1-B1ℊ <Ơ o' D1' <a'-.' &=' <@>&-0ℊ = &>' D1' " < ' &=' D1' < '+' '&='&? ' <A ℊ '@@ ' < '-/0' " < 'G ' ' K<Ơ & A<'-1A' <-A' <0j 01- 1A' '-' D1' 0<'A' < ? 1' ><A1' '-' D1' 0<'A' L'' ' 1< ℊ D< ' =&1' F < 1 0' &=' &-1ℊ F 1ℊ 1 011ℊ ## @@' <-A' <@@ & D1 ' F < 1 0' '-' D1' &?- '&=' <-B<0 1 ℊ 0D&?@A' D1' C? ' '-' "1=1-B1ℊ <Ơ &' D1' <D -.' &=' <@>&-0ℊ = &>' D1' " < ' &=' ' 'BD<1@ A@@ =&1' " < ' &=' D1' ? '='B< '&-' &=' &? ' <A ℊ <-A' '-' -&-1' & D1 ' '>1' &='=&1' 1< ℊ #1H<?01

D<' <@>&-0 #1')' 01<0&-<##@1' '-' D1' 0<'A' F < 1 0' # ' D1' '>1' <=& 10<'A'G <-A' D<' '-' D1' < 0' KD1 1'0?BD' '+1 0' #1@ .&&A' <-A' 0?==''B'1- ' &-01 +< & 0' &=' D1'0<'A' < ? 1' ><A1' D1' 0<'A' D' 11- D' 1< ' 0D&?@A' #1' <0j 0'.-1A' <-A' 0K& -@ <0' ' ''K<0' & A<'-1A' '-' D1' < ? 1'&=' F10=>'-0 1 @ <-A' D<' D1 ' 0D&?@A' C?-'0D' D1' ==1-j A1 0' ?C&-' D1' <'-' B&- <'-1A' '-' D1' 0 >1' ? 1' &=' F10 >'-0 1 @ K' D&?' 0D1K'-.' <- ' !<+&?' D1 1&=' KD'BD' < ? 10' D<+1' -&' #11-' D' D1 &' A?@ ' 1L1B? 1A' =& ' "1='''?@ ' &=' .&&A' &-01 +< & 0@ <0' &? ' 0<'A' & A' D1' ,'-.0D< D' C1 B1'+1A' # ' &>C@<'-' ' D'>' ><A1''-' D'0' C 101-' < @'<>1- ;' F D1 1=& 1' '0' <BB& A1A' <-A' <0j 01- 1A@ D<' D1' ?0 'B10' &=' D1' 1<B1' &=' <@@ D1' &?-j '10' &=' -.' A' 0D<@@ #1' &-01 +< & 0' &=' D1'0<'A' <j ? 10' '-' D1' &?-'10' KD1 1' D1' #1' ?0 'B10G <-A' D<' D1'<-A' 1+1 ' &=' D1>@ <' <@@ '>10' FD1-' D1' ><' < 1-A@ 0D<@@ 0? +1 ' D1' ==1-B10' <-A' "1 I ?@ 0' 1>C 1A' <.<'-0' D1' <?10' <=& 10<'A'G <-A' <@&' 0D<@@ 0? +1 ' <-A' 01< BD' <@@ D1' F1< 0'-'0?BD' '+1 0@ D<' D1'0D<@@ -&'#1' `+1 ' '0 <''=&' D1'"10 ?=@'&-'&=' BD' ! '<-A' &&A@ #? '%&=' 1<0&-<##@1' F'A1-10 ' <= 1' D1' &@A' 00'01' `?01A' &' <BB?0 &>1AP'G <-A' D<' D1'$ 0<>1 .+ '.B & '<- '&=' D1>@ KD'BD' 0D<@@ ='-A' "1=<?@' & ' #?01'<.<'-0' D1' <?10' <=& 10<'A@ 0D<@@ ><a1' A?1' ?-'0D>1-' &=' D1>' KD'BD' #1' =&?-A' '-' "1=<?@' <= 1' D1' &-1-' &=' D1'0<>1' ` <?1GOP' <-A' D<' D1' 0<>1' ?0 'B10'0D0A@ C?' .&&A' <-A' 0?=='B'1-' -A1 8 &-01 +< & 0' &=' D1'0<>1' <?10' ?-A1' D1>@ KD'BD' 0D<@@ #1' 0K&>' &' ><a1' @'a1' ?+1 '-.@ 1< BD@ <-A' ?-'0D>1-@ F' D&?' <-' !<+&?' D1 1&=' &' #1' 0D1K1AG <-A' >& 1&+1 @ D<' D1' <>1' ?0 'B10@ '-' D1' ' 100'&-0@ 0D<@@ '-H?' 1' <0' K1@@ #' D1' ' ==''B1@ <0' <' D1' -=& >< '&-' &=' D1' "-A1 8 &-@ 01 +< & 0' <=& 10<'A@ &=' <@@ 10C<0010@ '0C '0'&-0@ <-A' "1=<?@ 0' ><A1' <.<'-0' <-' &=' D1' &'-0' <=& 10<'A@ <-A' 0D<@@ B<?01' D1>' KD'BD' #1' D1 1&=' '-A' 1A' &' B&>1' #1j =& 1' D1>@ <-A' '=' D1' #1' D1 1&=' B&-+' @ D1' 0D<@@ D<+1' >C '0&->1-@ <-A' ><a1' !'-1' +' 1' D1' "'0B 1 '&-' &=' D1' 0<>1' ?0 'B10G <-A' '=' D1' <>1' #1' <' D1' -=& j >< '&-' &=' <-' &=' D1' -A1 8 &-01 +< & 0' <=& 10<'A@ D1' 0<>1' -A1 8 &-01 +< & ' 0D<@@ D<+1' D1' D<@=' &=' D1' 0<>1'!'-1' -A' !& <0>?BD' <0' ' '0' . <- 1A' &' D1' ' 'j \1-0' &=' &-A&-@ # ' D1' '-./0 &.1-a& 0@ D<' D1 ' >< ' 1>&+1' <-A' <a1'<K< '<@@ D1' F 1< 0' '-' D1' F< 1 0' &=' D<>10' <-A' 1A1K< @ <-A' D<' D1 ' 0D<@@ D<+1' D1' ?-'0D>1-0' D1 1&=' C1' ?-.' &' D1', '-.G &?' <'A' & A' A'1', '-.@ '-' D'0' C 101-' < @'<>1-@ # ' D1' 0j 01-' <=& 10<'A' D<' D' . <- 1A' D<' D1 < ' & ' F< j A1-' &=' &-A&-'=& ' D1' '>1' #1'-.' D<@@ D<+1' D1' &-j 01 +< '&-' &=' D1 ' < ? 10' <=& 10<'A@ <-A' 0D<@@ ><a1' D1 1&=' A?1' L1B? '&-@ <-A' @'a1' ?-'0D>1-@ <0' <=& 1' '0' & A<'-1A' &=' D1' ?0 'B10' &=' D1' 1<B1@ '-' D1' 0<'A' F< 1 ' &=' D<>10@ =&>' D1' 'A.1' &=' <-10' &' &-j A&-@ <-A' = &>' D1-B1' `&+1 'O@' >' D1'0<>1' F< 1 @ <-A' '-' D1' 0<'A' F< 1 ' &=' 1A1K< @ <' =<' <0' ' '0' . <- 1A' &' D1' 0<'A' ' '\1-0@ <0' <=& 1' '0' <'A

@ !& <0>?BD' <0' D'1+10' -& & '&?0@ ' A1=<>1A@ <-A' & D1 0' <a1-' K' D' D1' <-1 @ # ' D1' '@&-.'<#'A'-.' '-' '0&-@ <= 1 ' D<' D1 ' #1' < 10 1A@ #1' A1@'+1 1A' # ' D< 1 0@ <-A' =<+&? <#@1' -H?10 0' C &B? 1A@ &' D1'. 1<' '-A <-B1' &=' D1' 1&C@1G ' '0' <BB& A1A' <DA' <001- 1A' D<' '-' 1+1 ' &>>'00'&-' &=' D1' 1<B1' D &?.D' D1' 1<@>@ KD1 1' 11A' 0D<@@ #1' K&' 1-' &=' <+G &=' D1' 90<>1' &?- ' KD1 1' 0?BD' &>>'00'&-' 0D<@@ #1' ><A1@ 0D<@@ #1'<00'.-1A' &'.&'<-A' C &B11A' ' D1' "1@a1'<-B1' &=' 0?BD' D'1+10' <-A' =1@&-0@ <0' &= 1-' <0' D1 ' 0D<@@ D'-a' ' ' 1LC1A'1- '

8 -& 2 < ? 10

C<0' 0 '0&<<##@10' 1-' @10' A' \' 1K10' C @1' #>C08 K0A' 8G I ' H' 10' C '10' &?' A1'L' '+1 0' 0&-' &'1 ' ' <0 '.-1\' I ' ? 1\' #&-10' I ' 0?=='0<- \' B&-01 +< & 0' A=' 10 . ?' ,"' <-' 10\'>1@ B&>1' =?'0 ' & AA.-1' 1-' @1' A' ' 10 < ?' A1' F10 ' '@ I ' H'@0' C?-'001 1'1-' @10' R0C<00&W0' 0? ' @<' C1'-1' B&- 1-?1' 1-' >10>1' @10 < ? ' A1' F10 = "0< \' <0&?-' =1+&' 1-' I ' 1';' H?1?L' 10 < ? \' -&?-' C ' 10 1' A?1>1-' 1L1B? \' <-H@ 1-' B1<' C? ' A1=<? 1' A1' # -1 ' B&-01 +<8' &? 0@ <' B1&' H' -=1' = ' @1' &"<A' >' 1-A?' ?' C@1'-' '<'@? ' =1' ' 1-' B10 ' C01-' C@1>1-G 'HA' <B& A1' 10 ' I ' <001- ?' ' @10' ?0 'B10' A1' @<' C110' 1-' &?\' @10' &H-10' "1-0' .@1 1' 0&'1-' B&-01 +< & 0' A10' A' \' 10 < ? \' 1-' @10' &?-110' &?' '@0' 0&-' ?0 'B10G I ' H' 1?L' ' BD10B?-' A1' 1?L' < &?\' @10' =1? \' H<-' '@0' C&'1-' 1-1-A 1' 0+1'1-' @10' >10C '0'&-0' I ' A1=<? 10' < 1>C 1\' >B&-1' @10' 10 <j ? \' <+#' A' \G I ' <?L'-' 0+A1-' I ' BD1-' &?\' @10' .& 0' 1-' '1@L' '+1 0' H'@0' -1' 0&'1-' &C' 10 1' \' C ' A18' 0 ?EB'&-' A1'='1@ = '1' I ' # &&A' <10' A1' 10&@+<##@1'&, ? 1' 0&@&-B' @< -A1-' <00'01G I ' H' >10>10' @10' ?0 'B10' &?' B1@@" A1' A?L' ' &+1' A1=<? 1' &?' >10C '0'&-' 1-B&- 1' @10' 10 < ? \' < - A' \' ='B1-' A?1' C?-'001>1H ' A10' 08' C<00&? 0' 0&@&-B' @<' B&- 1-?1' A1' >10>10' @10' 10 < ? \' B H' >10>10' @10' ?0 'B10' >1 1-' #&-' I ' 0?=='0<-m' 0?#B&-01 +< &/0' A1' >10>10' @10' 10 <> \' A10## \' 1 L' H' 0&'1-' ? 1\' A1' =<' 1' 01>#@<##@1' 0? +1K1' MBD1' I ' C?-'001>1-' 0<-\' <0B?-' =<+&' 1-' =<' 1G' B H' &? 1' B1&' >10>10' @10' ?0 'B10' 1-' @&? ' 0100'&-0' 1-H?1 .1-' 0'#-' A1' @&' &==''B1' B&>1' <@' '-=& ><'B'&-' A10' 0?#B&-01 +< & 0' <+/-A' \' A1' &?\' 0C<0010' >10C '0'&-0' BA1=<? 10' =<'=\' 1-B&- 1' <0B?-0' A10' C&'-\' <+0-A' \9' B =1B1-' +1-' ' A1+3-' 1?L' B1?L' H' 0&'1-' 1-' 1-A' 1\' B 0'@0' &'1-' 1-' '&-+'A=\' 1'1-' 1>C '0&-1>1-' B =<B1-' =-' 0 @&-B' @<' A'0B 1A&-' A1' >10>10' @10' ?0 'B10G 1' 0" B1&' 0&=' <@' '-=& ><'B'&-' A<0B?-' A1' 0?#B&-01 +< & 0' <+#' A' \' 1=' >10>1' @1' 0?#B&-01 +< &' @<' >&' 1' A1' >10>1' @1' =' -' ' C ' B1&' H' .W-1' 10 ' <' ' 1'-0' A1' &-A 10' C' @10' C.18' -' & 0' -=1' ' @1' &@ H'@0' C&1-' 1>?1 ' B A 1' &?\' @10', A1@0' 1-' @10' 1K10' A1' <>'01' B 1A1K<'1' I ' H'@0' 1'1-' @10' C?-'001>1-\' 1-' <' &" <CC/1-J- <@ K1' A' ' ' @1' &" 1-' B10 ' 01-' C@1>1-' A1' @<001-@ <+# A'=' <A' .W-1' H' @1' <' ' &?' E< A1'-' A1' &-A 10' H" C' =1' 1>C0' , <' A ' @<' B&-01 +<A1' A10' 10 < ? \' < - A' \' I ' =<B1' 1-' A?1' 1L1B?B'&-' B01>#@<##@1' C?-'001>1-' Q(>1' A1+W-' 10' & AA.-1' A10' ?0 'B10' A1' @<' C110' 1-' @<' A' 1' K1' A1' <>'01@ A1@ C&-' A1@ <-10' <' &-A 10' I ' A'@8' @&1H10' &? 1' 1-' >10>1' @1K1' B 1-' @<' A' 1' 1K1' A1' 1A18' K< 1' 0" @& -1' B&>1' . - 1' 10 ' <0' A' \' 1 -0' B&>1' A1+ - ' 10 ' A'

1>' C? ' B1&' H' @< &-0' -& &' 1>1-' A'=<<>1\' B <?C0' C '01\' &+1' ><'-&1? 1' C ' @&-.' A1> 1' 1-' C '0&-1' <C'0' B1&' H'@0' 0&-' < 10>\' 0&-' A1@' 1\' C' B# 10' B =1+& <#@10' 1-H?10 10' CB? 1\' < . - ' <-'1- '001>1-' A?' C&1C@1;' BB& A1\' 10 ' B <001- ?\' H1-' BD10B?-1' B&>'00'&-' A1' @<' C110' C> ' @1' &'<@>1' &?' ' #&0&'. <' 0&'1-' < <.-1\' A1?L' D&>10' A1 1 ' A1' >10>1' @1' &?-1' &?' 'A' B&>=18' 0'&-' 01'= <@ A<@1 ' I ' CB1A1 ' <' A1=' + F B1' A10' '1@a' @< &-0' I ' =1@&-0' @<& ' B 0" 0&+1-' B&>1' # >'@&? ' 01>#@1 <

ME= # 6' >= H6'

&?''A 10 5J0

&>#'1-'H' & A1'-1' I' .h-1 =@''0' C' @1' & ' AK< A' #10<'1=' I' <?L'-' C'@1' & ' AK< A' @1@' - 1' T?' @1' &'' H& 10 @ J' @10' @A1 >1-' A1' @<' ' 1' A1' &-A 10' B1001 8' &'1-' I' 0 &'1-' 1>?1\' A1' @& 'A'' &=='B1' BD10B?-' '-' <' @1' =10' A1' ' E 1.& 1@' I' H'@0' -1' M &'1-' > 1' 1108' @?\' D-' C0BD1'-' 1-0?<>@ 1#'\' H' <? 10' 0?=='B1<- 10' C0&-10' A?' A' 1' ' 1' &'1-' BD10B?-' <-' A1' -&+1=' 10@?\' I' > 0' 1-' @&=='B10' <+<- A' \;' '1- >1 -0' -=1' A'' ' @1' & ' C3' IA-10' B<?010' @?' 10C1B'<@>1-' >&1+<- \' 5B -'10 -B?' C' >1'@@&' .&, -<-B1' A1' 0<' A' 1' ' 1' 1-' 1>C0' <+1-' ' &1' I' <A' & A1'-1' C' <A+ 0' I' <001-' A1' 0&-' B&-0A ' 1-' B10' C 1-' C@1>1-@' H' A10& 1' 1-<+<-' @10' @A1 >1-' A1' @<' A' 1' ' 1' -1' 0&'1-' &?0 1\' -1' 1>?1\' A?' A' ' &=='B1' A1' @A1 >1-' '1' <' @1' A' ' =10' A1' 1'-' E 1.A 1' -1' -- ' <? 1' 1>C0' A1@' <-@ 0<-\' D&-10 1' I' 10&-<#@1' B<?01@' -1' -?@@10' <? 10' 10@?\' -1' > 0' 1-' @&' 1?L@ 1'-\' A1> .1-' <+<-' A<-' 1-' <-' 1-' @& ' A'' &=='B1@' <-H ' 0' 0&'1-' 1>?1\' C' &?0 1' I' 10&-<#@1' B<?01' B&>1' A10?'0C' '1-' B&- 10 1<-\' H A'-<-B10' 0?0A' 10

.0-/"!2

&>1' C' 10 <?' =<' ' 1-' 1>C0' @1' & ' AK< A' '1@ -=1' ' @1' & 'H& 10' <-' A1' 0&-' 1.-1' + -' &1C '0>1@ 0&' ' & A'-1' I' 10 <#@'' H' @1' 1'' '0 &-\' I' @A1 >1-' A1@ @<' ' 1' A1' &-A 10' H&-' @1' .&, -1>1-' A?' A' 1' ' 1' =1B1-' 1A 1001' 5B B& '.1' @10' 1 & 0' A1=<? 10' Ib>108' C '0'&-0' H' 0&-' -& &' 1>1-' ?01\' 1-' @<' A' 1' ' 1' C' A1=1? 1' A1' #&-' .&, -1>1-' 10' A' \' A ' '0B&- '' I' @A1 >1-@' 5B @10' A?1>1-' C?-' ' A1' 1>C0' 1-' 1>C0@ 00 R 1'-1' C1'-1@ 10 <00<+&' ' <?' C ' ' A1=<?' '=' >< B\' <?' & @' I' <' @<' 01B&-A' A1=1? @ A1?L' ' ' >< Bm@ 5B <' @<' '1 B1' A1=<? 1@ H' @<'$= <-BD'01' A?' A' 1' ' 1' 0&'' C '0' 1-' @<' >< -' d1 &' ' & ' H' BD10B?-' A10' A' m' 1' ' '08' B&-\' I' @A1 >1-' H' +1-A <' A1+<-' @10' ?0 'B10' @1' &'' 1-' ><51' I' =C >1' H10' & A1'-1' C' @1' A' ' 10 <?@ 18' 8 0C&'.-1' 0'-.?@1 >1-' C' @?' >10>10' 0'#'1-' <0' C'@' A10' <? 10' H' 0&-' <#01-\@ B&>1' A1' @?' >10>10' ' H' B10 1' & A'-<-B1' 0&' ' ?' =1 >1' 5B 10 <#@1' '1- B&-8' 10 1<-' = <-BD'010' C '+'@1.10' &?' B?0 ?>10' HB&- 0' ! 0'B&>1' 1-' @1' A' ' 10 <?' 10' B&- 1-?\' C@?'0' <?' C@<-;' ' & 1' -=1' @1' & ' 1'<-' BC-0'A1 <B'&-' <' @<' .1 <@ 1' A10' A' \' C&@10' 10 <i0<+&' ' 1 & 0' A1=<? 10' I' >10C '8' 0'&-0' I' <0' A'1010' 1-1-A1>1-\' H1-' C &-' 10 1' B&-8' B1?\@' 0'' <A' <' @<' 0?CC@'B<B'&-' A1' @10' 1' ' ' B&-\' I' @A1 >1-' A1' @<' Aa1' ' 1' A11D 1' 5' .0-1' C' <A+ 0' 5B V <001-' A10' ?!' 10C' ' ?1@0' I' 1>C& 1@0' 1-' B10' 01-' C@1>1-@' H'@' -10' C<0' 0<' +&@?>1' -1' 0&-' 1-1-' -1' @1-1-' <?' A' ' 10 <?@' H' @1' 1' ' 0B&-\' I' @A1 >1-' A?' A' 1' ' 1' H& 1' 0&-' &?' &?' 10 1\' A1+<-' B10' D? 10' ? 1-' M=&-@' -1-B&? .1-' -1' C& 1-' @<' C 1' A?' A' ' 10 <?' C' <0B?-' ?..1>1-' 1 &'.-1' 1-A?\' &?' <' 1 A 1' 1-' @<' A' 1' ' 1

.0-/"!2 5I

1>' B&>1' @<' .<A1' A1' !< -A&-' A1A1'-0' 5B A1D& 0' A1' @<' ' 11' A1' &?-A 10' 10' <?-' 1-B 10B11\' A10' C&0j 0100'&-0' 5B 1-D<#' <-\' 1-' 'B1@@1' 1-' C&'' A10' <-0' C<001\@' H' @<' .&5-<-B1' A'B1 ' 10' &C' @<#& &?01' 5B . 1+&?01' C0' ?-1' C0&-1' A1' @1' &BB?C'1' I' A?1>1-' .&5-1 'G =1' ' @1' &'' C' <001-' A1' 0&-' B&-01'@' 1-8 B10' C01-' C@1j >1-@' <'@1' C '1' A1@ 0?' @A1 >< -0' I' @<' B&'<@1' A?' A' 1' ' 11@ <A' & A1'-1\' 5B . 1\' H' C1- 1' B' 5B @1' =10' A1' 1'-' E 1.&' 1' C0BD ' <+1-' ' @10' .1-\' A1' @<' A' 1

b ' ' &'7!"!' ."/ &-!/' -/' *" - !/' ;@' M&-*' /7 "/' b"! 'b" -/ !'" &+/' +2.' ;@' M&-*' /7 "/' b" -/k !'" .' .0'" ."/' !' M&-*' '-.7' &2' ' !' +/!"1!-' . ' !' &@'. ' .-/.-' 2 .0+/' #! 2!' -/' 2 .0+/' ;!' "!1.'!/' ".1' !&'" 2 &/' &#!' !'!"@A! '" ' !'B! 2'. ' &-'b"!*."@' -/' ' !@' 2 .0+/'-.' ;!' "!L!+!^+!/' !' A! '" -!%'!-20&-*=' ;0' '. !'" 20 &#&!-' 3!"2.-2' . ' /&!' 2 &/' &@' 2 .0+/' ;!' !'!"@A! '" -!7+@' !+!# !/' -/' 0' &-' !' &#!2' ."!2 &/@ !'!" !+!22' .0'" 2 &/' ."/' !' M&-*' .'" #!" &-' 02!2' &1' !2 !#& ++@' 1.'&-*' -/' ' !' 2 1!' &1!' ."!' !' ;! !'" b.'!"- -#!' . ' &2' 2 &/' &@' &-' &1!' ,' #.1!' 7&+!' ' -/' ' ."/ &-!/' ;@' !' /'&#!' -/' 22!-' . ' &2' .0-#&+' &-' &2' "!2!-' 3 "+& 1!-' ' !-#!." ' !' +/!"1!-' . ' !' 2 &/' &@' ;!' -.' .02!/' -.'" "!1.'!/' ".1' !' _ &/' &#!' . ' +/!"1#0 2 &' ' !' &/' B! 2' . ' &-' b"!*."@' -.'" ' -@' . !'" &1!' . ' !' A! '" ' 7& .0' *../' -/' "! k 2.- ;+!' 02!' -.'" -@' !'" !+!# !/' -.'" 0' &-' !&'" 3+ #!2+ ;0' 2 +' "!1 &-' .-' ".1' A! '" .' A! '" &-' !&'" 2 &/' &#!' 0- &' !@' ;!' "!1.'!/' ." H02' -/' "! 2.- ;+!' 02!' 2' ;.'!+' .7& 2 -/&-*' !' "/&- -#!2' .'!2 &/

W +/!"1!-' . ' .-/.-' < +' -.' ;!' "!1.'!/' 7& .0' /0!' 02!

V 6 ';@' ' 0!'1 /!'&-' !' &1!' 'M&-*' /7 "/' b" -/ !'" .' .0'" ."/' !'M&-*' & '-.7' &2' -' !' 7!-@L' !&* 'A!' '" .' &2' 6!&*-' & ' &2' "/ &-!/' -/' !2 ;+&2 !/' ' !' @."' !"& 2' -/' +/!"1!-'. ' !' & @'. ' .-/.-' 7 &# ' '!' !' b.'!"- -#!' . ' !' 2 1!' & @' 2 +' # 02!' .' ;!' "!k /"!22!/' -/' #."!# !/' !' "".'2' ! 0+2' -/' &2 "&2&.-2' 7 &# ' ;!' -. ."&.0 @' 02!/' &-' !' 2 &/' & @' .'" ! 0+' . ' *../' b.'!"- -#!' . ' !' 2 &/' @."' !"& 2' -/' +/!"1!-' -/' !' 2 1!'/0!+@' 0-&2 ' ".1' &1!' .' &1!'0K.-' '#!" &-' 3 &-' =' &2' .' 2 @' ' !'B&"2' ! 0+' ' .02 -/' "E2' .' !'M&-*' -/' ' !' !#.-/' ! 0+' <.' .02 -/' "E2' -/' ' !' &"/' ! 0+' ' !'B" -# &2!' . ' !' 2 &/' & @' ;!' E!-' &-.' !'M&-*(2' -/= -/' ' !'!"@'. ' !' 2 &/' @."' !"&2' -/' +/!"1!-'7 &# '2 +' ! "';! ."!' !' M&-*(2' 02 &#!2'&-' --!" -/'B."1' 2'&2'./' &-!/';@' !' 2 &/' 0!' 2 +' -27!" "&#0+ "+@' ."' &12!+' 2' 7!+' ' !' 3!"&' . ' ! " 7 &# ' ;!' ;2!-' 2' . ' &12!+ =' -/' '"&/2' "/&-#!' 2 +' ;!' .+/!-' &"1' -/' 2 ;+!' -. 7& 2 -/&-*' -@' --!" . 'B" -# &2!2'3"&'&+!*!2'." 02 . '=' 2'&-' !' 2 &/' 0!' &2' 1."!' 0+@' #.- &-!/'0 -/'-.7' 0" ."/' !' M&-*'#.-2&/!"&-*' !' b!-!" +& @' . ' !' 2<&/' V ."/2' ' &2' .' 2 @' "".'2' ! 0+2' -/' &2 "&2&.-2?' -/' !' 2!'!" +' -!-/1!-2' 7 &# ' 1 @' !"!.' ;!' #.-#!&'!/' ' ' !' 0 +&# &.-' .' !' @."' !&&<'--/' +/!"1!-'.' !'2 &/' & @' /!#+ "!/' -/' *" - !/' ;@' &1' /'&#!' -/' 22!-' . ' !' ."/2' &"& 0 +' -/' !1 ." +'&-' &2' "!2!-'3 "+& 1!-' ' &'&2' -.' &2' V &+' -.'" &2' - !-' -.'" !' - !-' . ' !' 2 &/' 0!' ' !' @."' !"& 2' -/' +/!"1!-' . ' !' 2 &/' & @'7 .' -.7' "!'.'" '!' !"!. ."!';!!-'.'" !"! !"" 2 +' ;!' 2 .0+/' &-#0'" -.'" 20 !'" !'3 &-' . ' !' 2 &/' 0!' .'" -@'!"".-!.02' 0/*!1!-' *&'!-' .'" .' ;!' *&'!-' 7& &-' !' 2 &/' & @

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!& ' D1'V "/' . B &"&-*/.-' V& &-' -/' V& .0' . ' !' & @'. ' .-/.-' &2' 2.' &-#"! 2!/' &-'3.22!2&.-2' -/' - ;& -2' !"!&-' 7& &-' !2!' !7'A! "2' 2' ' !' b.'!"- -#!' !"!. '&2' ..'+ ;."&.02' -/' *"&7.02' ." .-!'3!"L<' 2.-' .'.##0 @' -/'/0+@' *.'!"-' !'2 1!-' 0'" ."/' !'M&-*' ;@' !' 22!-' . ' &2' .0-#&+' &-' &2' "!2!-'3 "+& 1!-' ' !'3" @!'" . ' !' @."' +/!"1!-' -/' .11.-+@' . ' !' 2 &/' & @' '."/ &-!/' -/' *" - !/' `';!7!!-' &2' -/' !'B! 2' . ' &-' b"!*."@'-!%'#.1&-*' !'3!<+! . ' !'2 &/

)' !' !"2' *&'!-'&-' !' !%' ". 1' !'3 "+& 1!-' 6.+' . ' &2'A! "'-0' 5J' 5 ' -/' 5I' 7!"!' &"2' "&- !/' ". 1' !-#!'&-' @(2' /& &.-' . ' !' 0!2' 2' -' !"2' 6 'W ' -/'W '. ' ! 0!<' E .0<'-. '!-!"!/'.-' !' 0!'6.+' ' !' &"2 . ' !2!'&2' SO. !/' 2' -' <&'&-' ' -2 '5J' J -/' ' -/' !'2!#.-/' "!' ;"&/*!/' 2' /&2' . ' &2'A! '"&-'30+ .-(2' 0!2' 'C#

=1' 1'.-?'@1' & 'B#- A1 <-' @1' . 'B@<'= #?'<@?'
=<''1-'B10'C01-'C@1>1-'A1'B1'H'@1'A''10<?'-10'
> 1' 1-?\' " <A' & A1'.-1\' I' 10 <#@'\' 1-' >10>1'@1'
C@1>1-'H'@10'A'\'10 <=? \' &'1-'C@1'' 1 <1-' 1-?\' I'
.< A1\' I' A?1>1-'1L1B? \Ȼ 1'H'@10'A'\'@<-B1.< 10'
0&'1-' &?'&? >1-' &?0 1\' 0? '@<' C1'-1' B&@ 1-?1' 1-'
@1' A''10 < ?'A1' & D<>C &-' I'&? 1' A1' =1'' = -' I'
<-B1&-'<?' & ' '&? 1' B1' H' -?@@ D'+<@1''-<? 1'
C1''-1'.3-'<'@Ř -1' BD'+<BD1' C' -&1'-1' & ' < -'1\'
-1' C& 1' <@1'-1' BD<C1@' A1' =1 1'-<? 1' < >? 1' 0? '
@<' C1'-1' 0?0AB1Ȼ <?+1\' I' 1LB1C \' @10' &= I0' I' '8
-'0 10' A?' & '1-=<'0<- \' @1? '&=''B10' '&'' 1' B1' @1'
& '+&1' I' <A' & A1'.-1\' '@10 < ?'=<'' <-' A1' 0&-'
.-1' C '='1' A1'@',11' A10' D<C1 &-0' 0&'@' 1-?\' I'.< A1\'
?'@<' C1'-1' B&- 1-?1' 1-' >10>1'@10 < ?'I' 0? ' C1'-1'
A10 1' 1>C '0&-1\' I' A1' =1'' = -' I' <-B1&-'<?' &
1>' H' <A@1 \' <CC1@@1\' & -1-' -1' -?@@' <?R' A1'
>1'-A 1' 10 < 'H10H?'1' -1' ?01' -1' C& 1' -?=' 0'.-1' -1'
@'R11' <CC1@@1' @'C11' A1' B&>C<'.-'1' A<0B?-' K?' A1'CO' @1'
&'<@>1ȹ 0'ȹ -1' 0?'' >1-'<ȹ I'='?-'@'1' &?' &=='B1' BT> '8
-?1ȹ A1' 0&-' A'' ?' 1' H' @10' ?0 'B10' A1' @<' C<'L' <'1-'
C&<'' A1-H?1' A1' B1?L' H" =&-' <' @1-B&- 1' I' A1' @10'
C?-'' 01@&- '@1?' A'0B 1A&-
1>' @1' & '+&1' I' A1=1-A1' H' -?@@ T=' -<? 1' A?'
C<'0' C1 a' -1' . ' -1' 0&' 01<-' 1-' <-a' &+10 '@10'
?0 'B10' <0' <00'010' C0-A 1' 1-'@1?' 010 &-0' 1' &?- 110'
"1-.@1R 1'0?'. 'A'=& =<' ? 1 0'@1 & Ȼ '<A' BD< .1\'
010' A' \' ?0 'B10' H'@0' -1' 0&1=' 1-' @1' B&- <' 1' 10 1' Q''
ȹ 1>' H' B&>1' 'ȹ 0&' 'B&- 1-?\' 1-' ?-' 10 < ?' A1'
AK< A' -<A.<' 0' & ' "1-.@1 1' '1@' <' -=1' B' @1' & '
H& 10' <-' A1' 0&-' 1.-1' + - ' I' &1 '0>1ȹ H' -?@@1' >< 1'
A1' -'1=' H' 0&' ' ==1 1' A1 0' -.@1 1' &?' A@@&? 0' 0&' '
< 1\' A1' +1-' ' <' -?ȹ C& ' "1-.@1 1' -1' 'A1>1' B&- 1'
@1'. 11' A10' 10 10' I' < '<'0' A'B1@@1ȹ&?' A10' < BD<- \'
<0' H?1?L' e10' # 1-0' 0&- ȹ 1' <' '1@L' -'1=1' +1'.-1-" A=1
. 11' C?' 0&'1-' BD<B1\' C' 1>C10 1'&?' <?Ř'-=& ?-1'&?'
>10BD'1=' <' <0B?-' C& ' "1-.@1R 1' I' @10' 1'0 10' I'
><='<0' &?' < #<-\' A1' >10>10' @10' -'1=0' +&'@@1-'
+1-A 1' I' A1@' 1' C '1' A1' @1? '='BD<-A'010' C' @&? 1' #&-1'
+&@?- 11ȹ #'1-'@'01' <' BD10B?- ' '1@10' BD<-A'010' <BD< 1'
= <-BD1>1-' 0<-\' 1 <C10BD1>1-' 1-' @1' C& ' &?' '1@10'
-'1=0' +'1-A &- ȹ &?' -' 0&'1-' @10' ='BD<-A'010' >'010' <'
@<' R 1' C? ' +1-A 1Ȼ Q 'H' @10' 1'0 10' < ' 0 I' < j
BD<- \ȹ <C0' B1' H'@0' < &-' '00'-' +1-A?\' B1' H' @&? 'C@1 <'
A1' @1? ' A' \' #'1-0' I' C<'1' 1-' @<' B?0 ?>1ȹ CH'001-'
=/?-BD1>1-' A1CA1' I' <@1' &+1' @&? '-'1=0' I' &?' @1'
1>1-<-' A1' @&? '#-0' C@<' &?' @&? 'C@1 <' 0<-\' B?0j
?>1' 1-' C=='1' =1' 1 ? '@1' & 'C' \' H?'1 1' I
Ɣ 1<01' A1' 0&-' C&1C@1' +&1 'H' @1' A' '10 < ?'0&' ' 1-?\' I'
.< A1\'91-' &? \' C&'-' \' I' A?1>1-' 1L1B? 1m' -'1-' B&-8'
110 1<-' <0B?-1' & A1'.-<-B1' &?' ?0<.1' <' B&-= '18
1>' C? ' B1' H' @10' &>?-10' &?-' =<'' B&>C@1'-' H'
C@?0C? 0' .D' \' >10BD'1=1' 1L & 0'&-0' I' A'01<01' 0&-' =1' \'
C' A'C010' .1- \' A1' ><?+1#' &-A' '&-' H' A1' @1? 1' <?Q &8
' 11' A1>10-1' C'. &-' I' =&-' ȻC-A 1' &'<@-@1-' BD'+<@L'
I '<?R0' BD&010' I' #10 10' D& 0' A1' @1? ' 1D< ?10' BD< 1 10'
I' >10&-0ȹ A'0<- \' I' '><.'-<- \' H'@0' 0&-' '<' BD'+<?BD1'
1-' D<0 '=0' >100<.10' &?' #&0&'.-10ȹ @<' &?' 1-' 1' '@0' -1'
0&-' <?B?-1>1-' C '+1\' A1' -?@@1' #&0&'.-1' &?' >100<.1ȹ
>10' 0&?@1>1-' 1-' A1B1' 1' I' 0?# '@' 1' C' C-A 1' BD'+<@L'

? ' & A' D1' ,'-.ȹ B&-0'A1 '-.' D1' . 1<' @<>&?'
><A1' &' D'>' '-' D'0' C 101-' < @'<>1-ȹ #1B<?01' D<'
D1' 0<'A' <?1' '0' -&'D&@A1-ȹ D< D' & A<'-1A' <-A' 10 <j
#@'0D1A' '-' D1' 0<'A' < @'<>1-ȹ D<' D1' 0 ?A' <?10'
0D<@@ #1' =?@@ 'D&@A1-' <-A' a1C ȹ <-A' A?@ '1L1B? 1AȻ <-A'
D<' D1' 0<'A' <?-B1.< 10' 0D<@@ #1' B@1<' C?' &?' ?C&-'
D1' <'-' B&- <'-1A' '-' D1' 0<'A' <?1'&=' & D<>C &-ȹ
<-A' <@0&' &' ><a1'!'-1' <-A' <-0&>' &' D1',' -.' -A'
>& 1&+1 ȹ D<' -&' & Aȹ ,-'.D ȹ -&' & D1 ȹ @' @1' -&'
.1< ȹ 0D<@@ .&' -&' 'A1' # ' '.D' -&' # ' '' < '< >1Aȹ
-&' #1<' ` <@@1 -& ' a?@@ &=' &-ȹ -&' ` &=& D 1 '
>&? ȹ ?C&-' D1' <'-' <=& 10<'A'Ȼ 0<+1' <-A' 1LB1C' D1'
,'-./0' ==''B1 0' <-A' '-'0 1 0' '-' A&'-.' D1' ' ==''B1'
-A' & 1&+1 ȹ D1',' -.' K'@@ <-A' D< D' & A<'-1Aȹ D<'
D1' < ? 1' ><A1' D1' !' 0' 1< '&=' D'0' '.-ȹ &=' '+1j
'10'&=' < 0ȹ 0D<@@ #1' D&@A1-' <-A' a1C '?C&-' D1' <'-'
B&- <'-1A' '-' D1' 0<>1' < ? 1ȹ <-A' ?C&-' <'-' &' #1' '>j
C '0&-1Aȹ <-A' ><a1'!'-1' <-A' <-0&>' &' D1',' -.
ȹ D<' -&' < @1 0' B<@@1A' 1&>1-ȹ -&' '-&-1'
& D1 '&=' @100' 0 < 1' D<-' 0H?' 1ȹ 0D<@@ ?01' -&' #1<' -&'
` '.-' &=' '+1 /P' B<@@1A' '+1 '&=' &>C<-' &=' <-'
& A' K' D'-' D1' 1<@>ȹ ?-@100' D1' #1' >1-'<ȹ <-A' =1>'8
@'<' & 'B&- '-?<@ ==''B1 '&='D'0' 0<'A' & A' -A' D<' $'
?0 'B10' &=' D1' 1<B1' 0D<@@ D<+1' &K1 ' &' 1-H?' 18&='
D1>ȹ KD'BD' A&' &' D1' B&- < ȹ <-A' D1>' 'C?>/0D'
<BB& A'-.' &' D1DO '"'0B 1 '&-ȹ
ȹ D1' ,'-.' A& D' K'@@ <-A' =& #'A' D<' -&'
& Aȹ -&' & D1 ' =' D1' &?- ȹ @' @1' -&' . 1< ȹ 0D<@@
0''?C&-' D1' 1-BD' K' D' D1' ?0 'B10' &' <a1' 00'010ȹ '-'
D1''100'&-0' '-' D1' &?- '10' &=' -.@<-Aȹ ?C&-' . 1<'
!&=1'>1' &' D1' '-.' Ȼ <-A' D< D' BD< .1A' D'0' 0<'A' ?0j
'B10ȹ D<' D1' 0D<@@ -&'0?==1' D1' B&- < ' &' #1' A&-1
ȹ F D<81<0' '' '0' B&- <'-1A' '-'<' < ? 1' &=' D1'
@<1',-.' AK< Aȹ E <-A=1 D1' &' D1',' -.' D<' -&K'
'0ȹ D1' Lm+<' 1<' &='D'0' 1'.-ȹ D<' -&' <--1' &='
D'Cȹ KD'BD' '0=1'.D 1A' &K< A' -.@<-Aȹ &' 1@01KD1 1ȹ
0D<@@ #1' B&>C1@@1A' &' B&>1' &'<-' & '&=' -.@<-Aȹ '
D1 1' &' < '<.<'-0' D1' ` .11>1-'/'P' &=' D1' <0 1 0'
<-A' <'-1 0'&=' D1' 0<>1ȹ &' &=' D1' 1 BD<- 0' &' KD&>'
D1' E&&A0' #1Ȼ <-A' '=' 0?BD' D'C0' B&>1' &=' D1' '&K-'
E&&A8K'@@ȹ &'#1' A '+1-'# ' 1>C10 ȹ ` <0?<@ ȹ &' & D1'
'0=& ?-1ȹ'P' &' <-' & '&=' -.@<-Aȹ <-A' D1' <0 1 0'
&' <'-1 0O' &' 1 BD<- 0' &=' D1' 0<>1' D'C0ȹ K'@@01@@ &'
A1@'+1' ' '&=' D1'' 1 BD<-A'\10' F' D' D1' E&&A8K'@@ȹ
'' 0D<@@ #1' @<K=?@ &' 1+1 ' 1 0&-' &' #?'0?BD' 1 j
BD<-A'\10'= 11@'K' D&?' >C1<BD>1-''-' D1' & 'KD1 1'
?BD' D'C0' 0D<@@ B&>1ȹ <@#1'' D1' 1 BD<-A'\10' #1' -&'
`C?' &' <@1' &' D1' <-AGNP' -A' D1' <0 1 0ȹ <'-1 0ȹ
<-A' 1 BD<- 0ȹ <= 1' D<' D1' D<+1' 0&' 0&@A' 0&' >?BD' <0'
C@1<01' D' D1>' &=' D1'' 0<'A' E&&A0ȹ <-A' D1' ?0 &>'
D1 1&=' C<'Aȹ >< '= 11@'A1C< '<-A' .&'F' D' D1'' D'C0ȹ
<-A' <@@ D1' 1>-<-' &=' D1'' E&&A00' KD1 1' '' iD<@@
C@1<01' D1>ȹ K' D&?' C< '-.' D1 1&=' ?0 &>;' ?'0<'A'
& A' D1',' -.ȹ =C' D1' ^ ?'1>100' <-A' <01' &='D'0' 1&C@1ȹ
K'@@1 D' D<' D1' 0<'A' < ? 1' 0D<@@ #1' D&@A1-' <-A' a1C '
'-' <@@ &'- 0ȹ <-A' A?@'1L1B? 1Aȹ -& K' D0 <-A'-.' <-'
A'-<-B1'&' 0<.1' &' D1' B&- <
ȹ !& <0>?BD' <0' D1' &>>&-0' D<+1' ><A1' &>ȹ
C@<'-ȹ D<' ><-'. 1<' '0BD'1=0ȹ L & '&-0ȹ <-A' Cj
C 100'&-0' #1' A&-1' # 'A'+1 0' 1&C@1' &=' 1+'@' &-A' '&-ȹ
KD'BD' &=' D1' '&K-' ? D& ' ' <a1' <-A' B<?01' C' #1' <a1-'
& <@@ ' & 010' <-A' & D1' D'-.0ȹ <CA' 1<0 0' &'@' &=' D1' '
F<'-0ȹ < 0ȹ <-A' &?0100ȹ 0< '-.'<-A' A1+'0'-.' D<' D1'
#1' &' 'A1' &-' D<0 ' 100<.10' <-A' ?0'-100ȹ KD1 1' &='
? D' D1' #1' '-' -&' K'01' C '+' &=' <-' ?0'-100' &'
100<.1ȹ#?' '-'"1B1''<-A' ?# '@ '# '0?BD' &@&?
(4 1') 1&' &Ƶ7."/' < $'L 2 ' @ F'@@
/' =' & D1' '0=& ?-1'&' '0BD'1=ȹ 'C?' &'@<-Aȹ &'01@@

.-&"1 &.-
!"!.

.' -'2 +#
"&/!'.'"*.'
"1!/

!' 0!'
'6&#' ' $'
.0# &-*
&=
1
#.-&"1!/

&'!"&!Ƶ.'
.1 -&!Ƶ
"!2" &-!/

Ł ++'
.-!'2 +#
2&'0 ,-' !'
4!-# '7& '
02 &#!Ƶ.'
22&2!

6!#& ' .' '
5' /7' '
!'" 3'
#.-#!"-&-*
!"# -Ƶ
<-.1

.-&"1 &.-
!"!.

3!- +@'
.'" E&-*'
."2!2'C#'
;" !M&-*<'
!"'&#!)7&)'
.0'V "" -

<-A’ "1+'B1’ & <a1’ & 010 <-A’ D1’0AA’ & 010 ` && P’ D<0 '@ ’A&’ 'A1’<-A’1+'@’- 1< D<+'-.’-&’ <--1 ’1’<- \’<0B?-’ >< 1’ B&-0B'1-B1’ &-’ B&>C<00'&-’ 1-’ B1@@1’ C '1 '00'- ’ H’ @10 A’ \’ BD'+<#’ A1+'1.-1- ’ &?’ A1CA?\’ I ’ =&?-A1\ -?=’ >< 1’ BD&01’ -1’ A1-'1 ’ C<'<- \’ C?’ B1@@109/ -1’ <0B?-’ >< 1’A1’+'<-A’A&-<- \’<’ 1?L 1 ’ <? A’H<0B -0 A1’A1@L’ >< 0’ A1’.1- \ BD<?-.1<- L’ I ’ +< '<- \’ @&? ’ -&?-0 0 C’. -1- ’ I ’ BD'+<BD1- ’ '1@L’ BD'+<#B I ’ @10 <>10-1- ’ &?’D& 0 @@&? 0 '00'- ’H'@0 <0 H?1?L’ '@0 0&- ’ -1’ C/ &- ’ ?-H0 1-< ’ C -?@ >< 1’+& 1’ @&?’ A’ \’ BD'+<@L’ +1’ 1’ 1<+&’ ’ -1’ 0<+&’ ’&?’ '@0 0&- ’A1+1-?\@ < .D’ ’ >10BD'1= CA1’ I ’ <-'1- '001>1- ’ I ’ A10 ?B '&-’ I ’< 1 '01>&- ’ A< C&? 1’ C&1C@1’A?’ & ’@1? ’ D?0#<-A 1’ I ’A1’ @1? ’ +'+ 1 =1’ ’@1’ & ’ +1?@@<- ’ C ’H?'1 1’ I ’ 1<01’A1’ 0&-’ C&1C@1’ 1- ’ =1' 1’ 1>1A1 +&1 ’ I ’ <A’ & A1-1’ H’ -?@ A10C 1’ 1-’ <+<- ’ C2’.-1’ -?@@ A1@ BD'+<@ -1’ #10 1’ 1-’ A1@ >0 1’ B&- 1’@1’ . 11’`A1’B1?L/P’ < H?” '@0 0&- G 1 '0 <0B?-’ @1’ =<B1’5B -1' '0'. -1’&?’<?=@& ' 11’A?’ & ’0?=='0<- 0&= ’C '0 I ’ 1>C '0&-1\’ <-H '@ <7< = '' ’ A?1>1- ’ . 11’ < C< A1

1>’ -=1’ ’@1’ & ’10 ’ <001- ?\’ 5B <A’ .D’- 1\’ A1’ 0< . <B1’ 10C1B'<@1’ C’ <001- ’ 5B <BB& A’ A1’ &? \’ _ 0 10C' '8 ?1@L’ 5B 1>C& 1@10 5B A1’ &? \’ @10 &>?-10 1-’ B10 ’ C< @1>1- ’ < &# ’ 1<@a-<CC’ &D<-’ &@ ’ 5B F '@@'<>’ A1’ ? .D’ D'+<@1 0 #<--?L’ 5B A1> <- \’ 1-’ 1@<-A H'@0 1+1-A &-’ 1-’ -.@1R 1’ '@@1&H?10 < A1>? 1 ’ C? ’ R>1’ A1’ @&? ’ +'10 1 ’ H'@0 0&@1-’ C0&-10 #<#'10 <@ B&>?-1’@1 ’ B >1’ @'1.10 A ’ & ’ 0<-\’ 10 1’ A1’ B1’ 1>C1 BD11\’ '1- ’ &- 10 1<-’ @10 < ? ’ 1- ’ =1’ ’ <-’ A?’ 1.-1’ -=1’ A’ ’ _ ’@1’ &" ?-\'0>1 ’ <?+<- ’ &? A'\’ , 0 1?L’ &? \’ <?R0 C&'- 0 1-’@1’A’ ’10 < ? ’B#- 1-?10

Z - !"+&-!/’.-’ !’6.++

C’A1@ B&@&-’ I ’ ><.'-<B'&-@ I ’ @10 A’ \’BD'+<#B’90 D<00 +1>1-’BD'+<BD1-’ I ’A1=&@1-’ -'1-’1'<- \’<0B?-’ >< 1’ B&-0B'1-B1’ &-’ B&>C<00'&-’ 1-’ B1@@1’ C '1@ '00'-’ H’ @10 A’ \’ BD'+<#’ A1+'1.-1-’ &?’ A1CA?\’ I ’ =&?-A1\@ -?=’ >< 1’ BD&01’ -1’ A1-'1 ’ C<'<- \’ C?’ B1@@109/ -1’ <0B?-’ >< 1’A1’+'<-A’A&-<- \’<’ 1?L@ 1 ’ <? A’H<0B -0 A1’A1@L’ >< 0’ A1’.1- \@ BD<?-.1<- L’ I ’ +< '<- \’ @&? ’ -&?-0 0 C’. -1- ’ I ’ BD'+<BD1- ’ '1@L’ BD'+<#B’ I ’ @10 <>10-1- ’ &?’D& 0 @@&? 0 '00'-’H'@0 <0 H?1?L’ '@0 0&- ’ -1’ C/ &- ’ ?-H0 1-< ’ C -?@ >< 1’+& 1’ @&?’ A’ \’ BD'+<@L’ +1’ 1’ 1<+&’ ’ -1’ 0<+&’ ’&?’ '@0 0&- ’A1+1-?\@ < .D’ ’ >10BD'1= CA1’ I ’ <-'1- '001>1- ’ I ’ A10 ?B '&-’ I ’< 1 '01>&- ’ A< C&? 1’ C&1C@1’A?’ & ’@1? ’ D?0#<-A 1’ I ’A1’ @1? ’ +'+ 1 =1’ ’@1’ & ’ +1?@@<- ’ C ’H?'1 1’ I ’ 1<01’A1’ 0&-’ C&1C@1’ 1- ’ =1' 1’ 1>1A1 +&1 ’ I ’ <A’ & A1-1’ H’ -?@ A10C 1’ 1-’ <+<- ’ C2’.-1’ -?@@ A1@ BD'+<@ -1’ #10 1’ 1-’ A1@ >0 1’ B&- 1’@1’ . 11’`A1’B1?L/P’ < H?” '@0 0&- G 1 '0 <0B?-’ @1’ =<B1’5B -1' '0'. -1’&?’<?=@& ' 11’A?’ & ’0?=='0<- 0&= ’C '0 I ’ 1>C '0&-1\’ <-H '@ <7< = '' ’ A?1>1- ’ . 11’ < C< A1

1>’ -=1’ ’@1’ & ’10 ’ <001- ?\’ 5B <A’ .D’- 1\’ A1’ 0< . <B1’ 10C1B'<@1’ C’ <001- ’ 5B <BB& A’ A1’ &? \’ _ 0 10C' '8 ?1@L’ 5B 1>C& 1@10 5B A1’ &? \’ @10 &>?-10 1-’ B10 ’ C< @1>1- ’ < &# ’ 1<@a-<CC’ &D<-’ &@ ’ 5B F '@@'<>’ A1’ ? .D’ D'+<@1 0 #<--?L’ 5B A1> <- \’ 1-’ 1@<-A H'@0 1+1-A &-’ 1-’ -.@1R 1’ '@@1&H?10 < A1>? 1 ’ C? ’ R>1’ A1’ @&? ’ +'10 1 ’ H'@0 0&@1-’ C0&-10 #<#'10 <@ B&>?-1’@1 ’ B >1’ @'1.10 A ’ & ’ 0<-\’ 10 1’ A1’ B1’ 1>C1 BD11\’ '1- ’ &- 10 1<-’ @10 < ? ’ 1- ’ =1’ ’ <-’ A?’ 1.-1’ -=1’ A’ ’ _ ’@1’ &" ?-\'0>1 ’ <?+<- ’ &? A'\’ , 0 1?L’ &? \’ <?R0 C&'- 0 1-’@1’A’ ’10 < ? ’B#- 1-?10

Z - !"+&-!/’.-’ !’6.++

&#!-#!’ .’ 4!+E- ’ ./’ . !"Z ;’ "! 0"-’ ; -*+ -/’= -. 7& 2 -/k &-*’ 0 !’ ’ 6&#

’ <-A’ "1+'B1’ & <a1’ & 010 <-A’ D1’0AA’ & 010 ` && P’ D<0 '@ ’A&’ 'A1’<-A’1+'@’- 1< D<+'-.’-&’ <--1 ’1’<- \’<0B?-’ >< 1’ B&-0B'1-B1’ &-’ B&>C<00'&-’ 1-’ B1@@1’ C '1@ '00'-’ H’ @10 A’ \’ BD'+<#’ A1+'1.-1-’ &?’A1CA?\’ I ’ =&?-A1\@ -?=’ >< 1’ BD&01’ -1’ A1-'1 ’ C<'<- \’ C?’ B1@@109/ -1’ <0B?-’ >< 1’A1’+'<-A’A&-<- \’<’ 1?L@ 1 ’ <? A’H<0B -0 A1’A1@L’ >< 0’ A1’.1- \@ BD<?-.1<- L’ I ’ +< '<- \’ @&? ’ -&?-0 0 C’. -1- ’ I ’ BD'+<BD1- ’ '1@L’ BD'+<#B’ I ’ @10 <>10-1- ’ &?’D& 0 @@&? 0 '00'-’H'@0 <0 H?1?L’ '@0 0&- ’ -1’ C/ &- ’ ?-H0 1-< ’ C -?@ >< 1’+& 1’ @&?’ A’ \’ BD'+<@L’ +1’ 1’ 1<+&’ ’ -1’ 0<+&’ ’&?’ '@0 0&- ’A1+1-?\@ < .D’ ’ >10BD'1= CA1’ I ’ <-'1- '001>1- ’ I ’ A10 ?B '&-’ I ’< 1 '01>&- ’ A< C&? 1’ C&1C@1’A?’ & ’@1? ’ D?0#<-A 1’ I ’A1’ @1? ’ +'+ 1 =1’ ’@1’ & ’ +1?@@<- ’ C ’H?'1 1’ I ’ 1<01’A1’ 0&-’ C&1C@1’ 1- ’ =1' 1’ 1>1A1 +&1 ’ I ’ <A’ & A1-1’ H’ -?@ A10C 1’ 1-’ <+<- ’ C2’.-1’ -?@@ A1@ BD'+<@ -1’ #10 1’ 1-’ A1@ >0 1’ B&- 1’@1’ . 11’`A1’B1?L/P’ < H?” '@0 0&- G 1 '0 <0B?-’ @1’ =<B1’5B -1' '0'. -1’&?’<?=@& ' 11’A?’ & ’0?=='0<- 0&= ’C '0 I ’ 1>C '0&-1\’ <-H '@ <7< = '' ’ A?1>1- ’ . 11’ < C< A1

1>’ -=1’ ’@1’ & ’10 ’ <001- ?\’ 5B <A’ .D’- 1\’ A1’ 0< . <B1’ 10C1B'<@1’ C’ <001- ’ 5B <BB& A’ A1’ &? \’ _ 0 10C' '8 ?1@L’ 5B 1>C& 1@10 5B A1’ &? \’ @10 &>?-10 1-’ B10 ’ C< @1>1- ’ < &# ’ 1<@a-<CC’ &D<-’ &@ ’ 5B F '@@'<>’ A1’ ? .D’ D'+<@1 0 #<--?L’ 5B A1> <- \’ 1-’ 1@<-A H'@0 1+1-A &-’ 1-’ -.@1R 1’ '@@1&H?10 < A1>? 1 ’ C? ’ R>1’ A1’ @&? ’ +'10 1 ’ H'@0 0&@1-’ C0&-10 #<#'10 <@ B&>?-1’@1 ’ B >1’ @'1.10 A ’ & ’ 0<-\’ 10 1’ A1’ B1’ 1>C1 BD11\’ '1- ’ &- 10 1<-’ @10 < ? ’ 1- ’ =1’ ’ <-’ A?’ 1.-1’ -=1’ A’ ’ _ ’@1’ &" ?-\'0>1 ’ <?+<- ’ &? A'\’ , 0 1?L’ &? \’ <?R0 C&'- 0 1-’@1’A’ ’10 < ? ’B#- 1-?10

Z - !"+&-!/’.-’ !’6.++

)) ’?’’ ! # ’ -9Q:<.

H*&/0&& ,! --.’ H#!*1.’ "1.

(’ *6’ 8’)% ’ 5

-’ "*&-!’ 6.0+&

ME’= ’ ’G ’6 #’ZZ’ e’%9 4 9 6 9* 0

! ’<00<+&’ ’H’ -=1’ _’@1’ & ’ 'BD< A’ C< ’ @<’ .0B1’ A1’ "’1?’ & ’ "1-.@1R 1’5B A1’! <-B1’ 5B 1’.-’&/’ "’ @<-A9’ <’ 0&-’ C@1>1-’ 0&>&-0 5B B& <1-B1\’ < F 10 >’ @?-A ’C0BD1’-’ < 0’@1’ =10 ’A1@ L<@ <B'&-’ A1’ @<’ 1’- 1’ &'B15B’A’@@&1H10 <A &/-1\’ <’ ` &@&C#’ 0 P’ < @<’H?’-\1>1’ A1’ 1’- ’ ’@@1 ’ <A&-H10 C0BD1’-’ 1-0?<- ’ 5B ’@@&1H10 R>’-1\@ <@ D&-’A1’ "’1?’ 5B A1’ 1’- 1’ 0.@'01’ 5B C ’@< 0<@+<A&-’ 5B 01? 1 11’ A1’ 0&-’ &'<@>1’ 5B #&-1’ .& <-B1’ A1’ 0&-’ @'1.1@ C&1C@1@ A1’ @<001- ’ ’ <BB& A’ A10 1@< 10 "?10 &- 10 < &-0 5B &10’ A1’0&-@ &'<@>1’ ’@@&1H10 <0@ 01>#@1\’<A’ =<’ ’R 1’-10 10 < ? \’ I & A1-<-B10 H1-0?’1-

’- 1>1-’H’ 1’- 1’ 0.@'01’ 5B @10 = 0’ 10C' ’ ?1@0 5B 1>C& 1@0 5B <?L’-’ ’ 110 5B ? .D0 5B <?R0 &'<@ 110 A?’ &'<@>1’ A1-’ 5B 1- & 1-’ @1? ’ @’D 110 5B = <-BD'010 0 <+<-’ B&>1’ @0 <+&'1-’ 5B 1- &'1 1-’ 10&-<#@1>1-’ 1-’ 1>C0 A1’ 010 -&#@10 .1-’ &? 0 & 0 "1-.@1R 1’5B 1-’0&-’ 1>C0

’ <@&C#’ 0

:-&"1 &.-’ . ’ &;!A &!2

)N %’)’ &-

!’ "&.0Z’6! /&-*Z’&-’ !’ .!Z’ "!’ ".1’ ’2! " !’6.++’#.- &-&-*’ ’ 0 +&# !’.’+!’ 0 !’.’ &2’ 7!-@L &"2’A! "

?-f (*ˢ ˢ *ˢ?

E

1>' B&>1' @10' &10' A?' C@1>1 ' ' 1'1@' ' >&'@0 1\' <? & ' B& -1- 8'1-' @1' C@1<'1- ' 1-?\' <' F 10 <<' @1' C ''5' &? ' '" &= &# 1' <-' A1' 0&-' 1. -1' A'0>1⁹ D&>< 0' " ?1' A1' E@&?B10 -' I ' 'BD< A' &- 1' "< ?-A1@@' <' &? 0' <?' & ' ' 0&-' &'<@- B' C' ><.'-<B'&-' I ' B&>C<001>1- ' =' 1- '=1' 1' C' 10 < ? ' ?-1' BJ>' i0'&-' A' 1 I 1' <' 1?L' >10 -10' ' <?R0' C0&-10' <' 1? ' A1-&>'-<B'&-' C ' <+&' ' @<' &, 8' -<'@@1' A?' & ' I ' A1' &'<@>1' A#'1-'A -\' @&0 '1@ A?' & ' B&>1' A1D& 0' I ' 1=' @10'= '10' A1' & ' A1CA1@<' B&>1' B&- ' R= ?\' 10 ' 1-' =B' A' 1' B&>'00'&-⁹ A1' H= 1@1'@1' 1-1? '01- ?' 'BD< A' C< ' @<' .0B1' A1' " @1?' & ' "1-.@1 1' I ' A1' ! <?-B1' I ' " ' @<-A' <' &?\' B1?L' H' B10 10' ' 10' +1 &- ' &=' & &- ⁹0<@? \ ' &?0' <+#-0' A-1>1-' B&-B1?\' A1' @<' . 1+ ?01' B >C@1'- 1' A1'_ 0' I ' &10' <)' A1' - 1' &'< >1' 1=' B10 ' C201= ' C'1>1-R' <001>#@1 ' H' -&\' \' 1- 10' I ' 1+1= ?\' A1' - 1' &'<@>1⁹ C' 0'- .?@1 ' I ' = &?-0?=='B1<- ' B&-01'@ I ' ><@1' -<'@1' 0'#'1-' A<0B?-0' -<A.<' 0' = &\' . A\= ==' R0' &>1' A10' A',010' <?R0' 0&-10' 10 1<- \' 1-8' &? ' --=1' C0&-1⁹ 0&- ' 1-' <- '0?0 1 \' A1.<0 1\' 10@&'.-1\' A&-1\' .0- 1\' <@'1-1\' A10 ?@ \' I ' = <@1>1- ' A10C1-A?\' %' -&?0' 0?>10' < ' ' 1>C&+/1\' +&'A10' I ' ?10' A1' 10& 1' I ' A<+& ' I ' @< 0?#0 <-B1' A1' -R1' & &-1' 1=' <- '<>1-?01' I A10 ?\⁹ H' a0 < ' A1' = 1?0' I ' A1' - >' D10A1@ -1' C&1 ' D&- <#@1>1- ' 10 1' 0?0 1-?\' B&>1' <==' 1 ⁹ -1' @10' .?1 10' H' 01' D<#?-A ' &? ' 1-+' &-' - 1' &'<@>1' A1' &? ' 1-' <? 1' >< - 1-?\' -1' .& -1\' 0<= \' R<.[-A\' I ' &? [8' .1&?010' &C@ &-0' I ' '>C& <#@10' BD< .10' A1' - 1' A' ' C&1C 1⁶' I ' <?L'- ' H' @10' #&-10' @1 0' 10 < ?\' I ' B?0 ?>10' A1' - 1' A' ' &'<@>1⁹ <0' H?1?L' -&?0' 0?>10' <0 'Q@\' I ' &#@'.1\' A1' A-' ' I ' .< A1 ⁹ -1' 0&- ' -1' &- ' 10 1' A?1>1- ' 1-?\' -1' 1L1B? \' -1' kA1 -1' ?0 'B1' -1' A &' '@<' \' <' - 1' A' ' C&1C@1⁹ C&- ' C@?0&? 0' A'0D1 10&-0' I ' <? 10' R0' .0-A10' >10BD'1=1' I ' A<><.10' 0&- ' <+1- \' 0'#'1-' <' -&?0' B&>1' <' - 1' A' ' C&1C@1' I ' <' &? ' 'A1' &'<@>1⁶ Q ' -&?0' <@ D&-&' A1' " '1?' I ' C ' @< #'1-' A1' -&?0' I ' A1' - 1' A' ' &'<@>1' I ' C ' @<' H?'1 1' I ' 1@1+<A&-' A1' K 1' Aa' C&1C@1⁹ H&>' 10 1' .0-A1>1- ' BD< .1\' 1-' C@?0&? 0' >< 0' A1⁸ +<- ' B10' D1? 10⁹ +1?@@<- \' &+1' @1' .WB1' A1' " '1?' B1- 1' '1?L' >10BD'1=0' >1 1' D&-1' 5B A?1' 1 -1A1⁹ " < &-0' A1' -=1' = <-BD1' +&@1- 1' 5B <@ 1H?10' A10' ?!' 5B &10' 0?'0A110' & A1'.-1\' =1' \' 5B <00'.-1\' -&\' . \' ='M0' T10 <00<+&' ' -&\' D<-B1@@1 ' 1 & 1 ' 5B < A1'-' A1' - 1' C '+1' 01<@ '1?L' B&>1' -&?0' 1-&-0' #&-10' @&'<@L' 5B 0?='B1<- \' C0' D&= ' 5B C@a' A1' -&?0' 5B A1' - 1' A' ' &'<@>1⁹ ' &? 1' B1&' A1' - 1' <?= ' 1R' &'<@1' R 1'-1' 0B'1-B1' #&-1' . 11' 5B = <-BD1' +&@?= 1' 5B C' <+ 0' 5B <001-' A1' 1@< \' ?!' P' 10' 0?0A' \' 1-' Ca>' C@1>1- ⁹ 1-' 1'A1' A1' #&-1' . +0-<-B1' A1' - 1' &'<@>1' 5B #&-1' 5B A?1' 1L1⁸ B'&-' A1' -&\' A' \' @1 0' 5B 1-' 1@1+1>1- ' A1' @10 < '8A1' -&?0' I ' A1' -=1' C&1C@1' 1-' 1>C0' <+1-' ⁹ B&-='<- \' C@A-1⁸ >1- ' A1@ #&-1' <+'01>1>' 01?' 5B A'0B 1B'&-' A1' @10' #&8' - <#@10' C'1 0' 1-' "'1?' !'@,<>' B1+10 f' T 1' <-= ' 0⁹ @'0<-A 1' B1+10H ' "1, K a⁹ -&0' R0BD0' ?-B@10' 0>&-

⁹ F D1 1<R' D1' &>>&-0' &=' D1' < @'<>1- ' '@ ' D<+1' 0D1K1A' &' &? ' &+1 1'.-' & A' D1', '-.⁹ D&K' '-' D1' < @'<>1- ' D&@A1-' <' F 10 >'-0 1 ⁹ D1' ! ' 0 ' " < ' &=' -/' 0 !' = &#1 ⁹ '-' D1' L ' 1< ' &=' D'0' 1'.-⁹ D&><0' " ?a1' &=' E@&?B10 1 ⁹ <-A' 'BD< A' < @' &=' ?-A1@⁹ <' & 0' &' D1', '-.' <-A' D'0' 1<@>⁹ `<-A' D'0' 1&C@1P' # ' =<@01' ><j .'-< '&-' <-A' B&>C<00'-.⁹ B<?01A' <' &>>'00'&-' &' #1' ><A1' # ' < ? 1⁹ A' 1=' &' D1>01@+10' <-A' & D1 ' 1 0&-0' < ' D1' ' " 1-&>'-< '&-⁹ =& ' &' D<+1' D1' ?@1' &=' D1', '-.' <-A' D1' 1<@>⁹ <0' K1@@' K' D'-' D1', '-./0' &?01' <0' ?< D&?=⁹)' '-' D1', '-. 0' .-& '10⁹ #1 &-A' D1' 1<⁹ <0' ' ' '0' B&- <'-1A' '-' D1' 0<'A' &>>'00'&-⁹ D1' 1-& ' KD1 1&=' A& D' =&@@&K >' 7 4 ' ' # ' D1' E <B1' &=' E&A', '-.' &=' -.@<-A' '<-A' &=' ! <-B1⁹ <-A' & A' &=' 1@<-A⁹ &' 0 @' D1>' D<' 0D<@@' 011' & ' D1<' D101' 1 1 0⁹ E 11 >. ' F 1' D<+1' B1 <'-@ ' B&-B1'+1A' # ' D1' . '1+&?0' &>C@<'-' &=' D1' @<a A0' <-A' &>>&-0' 5 -' &=' &? ' 1<@>⁹ '-' D'0' C 101-' < @'<>1-' <001>#@1A⁹ D<' C ' &=' 0⁹ 1-0' <-A' 1j +1-?10' &=' &? ' 0<'A' 1<@>⁹ # ' 0'-.?@<' <-A' >0?==' A1-' &?-01@ <-A' 1+'@ E&+1 -<-B1⁹ <0' 1@@ &=' 0&>1' @< 1' &? ' E 1<' E==' B< 0⁹ <0' &=' A'+1 0' & D1 ' 1 0&-0' #<-.' <#&? ' &? ' 1 0&-' #1' 0&' >?BD' K' DA <K-⁹ K<0 1A⁹ 1@& -1A⁹ 1-⁹ . <- 1A⁹ <='1-1A⁹ A10 & 1A⁹ <-A' 1+'@ A'0C1-A1A⁹ D<' F 1' < 1' 0&' >?BD' '>C&+1 '0D1A⁹ +&'A⁹ <-A' -&?. D' &=' 1<0? 1' <-A' E&&A0⁹ <-A' D1' ?#0 <-B1' &=' &? ' &K-' 0&' >?BD' A'>'-'0D1A' <-%' A10 & 1A⁹ D<' D1' 0 < 1' &=' 0' <-A' &=' &? ' &?01' >< ' -& ' D&-&? <#@ ' #1' 0?0@ <#@1A' <0' C1 <'-1 D⁹ -& ' D1' F < 0⁹ KD'BD' A>@ ' <#&?-A' <-A' 1-+' &-' ?' 1<@>⁹ ><'- <'-1A' -& ' .&+1 -1A' K' D@ &= ' . 1<' <>A' &?' <.'&?0' CC 100'&-0' <-A' '>C& <#@1' D< .10' &=' &? ' 0<'A' 1&C@1X' <-A' <@0&' D<' D1' .&&A' <'+0⁹ < ? 10⁹ <-A' ?0 & >0' &=' &? ' 0<'A' 1<@>⁹ KD'BD' F 1' < 1' <0 1 -1A' <-A' #&?-A' &' D&@A' <-A' &#01 +1⁹ #1' -& ⁹ - ' D<+1' -&' #11-' A?@ ' D&@A1-' -& ' 1L1B? 1A⁹ -& ' =?@@ ?0 'B1' -& ' '.D ' A&-1' &' &? ' 0<'A' 1&C@1⁹ KD1 1# ' ><- ' "'0D1 '0&-0' <-A' & D1 ' . 1<' '0BD'1=0' <-A' "<><.10' #1' D<CC1-1A⁹ <0' K1@@' &' 0' <0' &' -? ' 0<'A' 1&C@1' <-A' &' <@@' &? ' 1<@>;' -A' F 1' &' D1' &-&? ' &=' E&AX' <-A' =& ' D1' F 1<@' =' 0' <-A' &=' &<' 1<@>⁹ <-A' =& ' D1' ^?'1 -100' <-A' 1@'1=' &=' 0' <-A' &=' ?' 0<'A' 1&C@1' KD&' D<+1' #11-' '-' A'+1 0' <--1 0' . 1< @ ' BD< .1A' #1j =& 1' D'0' '>1⁹ K'@@'-.⁹ K' D' D1' E <B1' &=' E&A⁹ <.<'-0 ' 0?BD' '0BDR1=' &' C &+'A1' <' .&&A' <-A' A?1'3 1>1A ⁹ D<+1' &=' &? ' = 11' F '@@⁹ <-A' <=' D1' 1H?10 ' &=' D1' & A0' <-A' &>>&-0' <=& 10<'A⁹ & A<'-1A⁹ ><A1⁹ <-A' <00'.-1A' &? ' E 1<' ='⁹BU;0@ D<' '0' &' 0< ⁹ &? ' D<-B1@@& ⁹ 1<0? 1 ⁹ <-A' ,11C1 ' &=' &? ' '+ ' 1<@⁹ 0?BD' <0' F 1' D&@A' .&&A⁹⁹0?==' B'1-⁹ <-A' @<K=?@ =& ' D1' &-&? ' <-A' &=' ' &=' 0' <-A' &=' &? ' 0<'A' 1<@>' -A' & 1&+1 ' &=' &? ' ? D& ' ' & <@⁹ B1 <'-', -&K@1A.1⁹ .&&A' E 11' <-A' = 11' F '@@⁹ <-A' # ' D1' A+'B1' <-A' 001-' &=' D1' 1@< 10⁹ & A0⁹ <-A' &>>&-0' <=& 10<'A⁹ '-' D1' =?@@' < @'<>1-⁹ '-' 'A' &=' .&&A' E&+1 -<-B1' &=' &? ' 1<@>' <-A' A?1' L1B? '&-' &=' #? ' 0<'A' <K0⁹ <-A' '-' 1@'1=' &=' D1' 0 < 1' &=' 0' <-A' &=' &? ' 1' @1' '-' '>1' &' B&>1⁹ ?C&-' D1' =?@@ ?0 ' D<' K1' D<+1' &=' .&&A' A+'01>1-' F ' ' <-A' " '0B 1 '&-' &=' D1' &-&? <#@1' !< D1 0' '-' E&A' F '@@'<>' BD#'0D&C' &=' <- 1 #? ⁹ @1L<-A1 ' BDj #'0D&C' &=' & a⁹ &? ' A1<' -B@10' A>?-A' " ?a1' &=

!-.'".' !' .11&22&.-

R 8' !' +/'3"&-!/' .&!2' !'"/&!' V ."/')' .!2'(&-2! /' .' ".#!!/&-*' .'2!'.0' !' !-.'". ' !' .11&22&.-' '+!-* ' 2'.-' !' 0!'6.++' '!'.-+@' !'V."/2' F'C#' 0' ! '--.'/!#&1.'"!#& -/.' 1'#.11&22&.-!1' '0-#' 2&#'H'90!+!2' .11&22&.-'!'!2 0& ?' C#' 2'.-' !' 0!'6.++' !'" !' .11&22&.-' B."1!'" "-2+ &.-2' ##."/&-*+@' !'" !'V."/' U .11.-2('!' !'V."/2' F'C#' 2'&' ! "! '&-' !'%'A! '"!! "2&-*' +' !'2 &/' .11&22&.-0' .' ' !'2 &/' .11&22&.-' -/' !' 2 &/' 0!?' C#' 2' &-' !' " 02+ &;-'.' ' !' 0!' !'" !' .11&22&.-' !!' ' '" 6&#' ' ' '.' &$' .+01!' -/' .!' R 8' !"!

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& a D&><0 "?a1 &= E&?B10 1 D1 &-&? <#@1 !< D1 0 '-E&A F '@@'<>' '0D&C &= L1 1 <-A 'BD&@<0 ##& '&= F<@ D<> &? K1@@ #1@&+1A<-A=<' D=?@ 'BD< A < @ &= ?-A1@@ &D- & A &= &#D<> 'BD< A 10B &C <-A &D- "1+1 1?L D1>' F 1 D<+1' & A<'-1A <-A <00'.-1A <-A A1C? 1A <-A A&' & A<'-' <00'.-' <-A A1C? 1 &'#1'&='&? '. 1<' <-A B&- '-?<@ &?-B'@ # ' < KD&@1 1< ' -1L '=&@j @&K'-.' <= 1 ' D1 "< 1 D1 1&= &' 0? +1 '<-A 1L<>'-1 K' D &? ' 0<'A E 1< ' ==B1 0 <0 K1@@ D1 0 < 1 <-A E&+1 -<-B1 &='&? ' &?01 <-A &='<@@ &? ' &? 0 @<B10 <-A ==B10 <0 D1 0 < 1 <-A E&+1><' &= <@@ &? ' 1<@>@<-A<@@ &? ' ==B1 0 <-A '-'0 1 0 &='KD< 0&1+1 ' 0 < 1 "1. 11 & ' &-A' '&-' D1 '#1 <0 K1@@ K' D'-' &? ' &?01 < ' K' D&? @<-A &' '-H?' 1' <DA <a1 -=& j >< '&-'# '<@@ D1' F < 0' KD'BD' &' D1>' #10 ' 0D<@@ 011>@ &='<@@ D1 1- 0 1+1-?10 <-A &=' 0 D< ' &' 0 C1 <'-' <-A #1' A?1 <-A &?.D ' &' C1 <'-' <-A #1' A?1 <0 K1@@ +' D'-' &? ' 1<@>' <0 K' D&? '-' <- ' ><-1 ' F < '& ' &-A' '&-@<-A &='<@@ ><'>1 ' E'= 0 E <- 0 '1-< '&-0 <-A >'=' >< '&-0 ><A1 # ' 0' &= <-A0 1-1>1- 0 1- 0 --?' '10 &=' 0 1+1-?10 F < A0 < '<.10 0BD1< 0 !& =1' ? 10 ! <-BD'010 '#1 '10 &'A<-B10 &= BD#'0D&C 'Ba0 '0D&C 'Ba0 ##'10 0 -A '& '10 !1 >0 &= &?010 <-A &00100'&-0 &= @'1-0 <-A &= <@@ & D1 ' &00100'&-0 ?>0 &= &-1 @E&&A0 <-A D< 1@0 <-A &= <@@ & D1 ' D'-.0 <-A &' KD< ' 1 0&-0 <-A =& ' KD< ' <?01 <-A D&K' <-A '-' KD< ' <--1 @<-A -<>1@ ' &= D&01 1 0&-0 D1' KD'BD' D<+1' <a1-' D1>' K' D&? ' "101 <-A <@0&' &= <@@ ><--1 ' 1+1-?10 <-A &=' 0 <0 K1@@ &=' &? ' <'A 1<@>@ <0 &= <-A0 1'-& '10 ' '10 &K-0 <0 @10 & 10010 <-A <@@ ><--1 ' &? ' & D1 ' &00100'&-0 <0 K1@@ &-' D'0 'A1' D1' 1<' <0 #1j &-A <-A &=' D1' &=' 0 <-A >&@?>1- 0 =&? ' &-1 ' <-A ?@@'&-0 <-A &=' D1' <a'-.' &= '0&-1 0 &K-0 <-A @<B10 D'C0 < <Ba0 E&&A0 <-A <-0&>0 &= F < ' # ' <-A' <-A' # ' 1<@ <-A' &= 1-1='B10 <-A' & D1 ' &00100'&-0 &=' < A'-<@0 1#1@0 <-A <@@ & D1 ' @'1-0 <-A <@0&' &=' B< '-.' &= &-1 '&? ' &=' ?' 1<@>' # ' D1' &@@1= & 0 &=' D1' &C1 &B? < & 0 &=' D1' < A'j -<@0 ?>#< A0 <-A' & D1 ' 1 0&-0 <0 K1@@ @'1-0 <0 "1-'\1-0 <-A' &=' D1' >&@?>1- 0 <-A' &=' 0 B&>'-.' <-A' ' .' &=' D1' ?0 &>0 <-A' ?#0'A'10 &=' F &&@ 1< D1 @<-A' F &&@=1@0 <-A' &='0><@@ ?0 &>0 <-A' & D1 '0 ?#<A'10 &= @& D0 F ' =10 <-A' & D1 ' 1 BD<-A'\10 <-A' &=' "'0>10 <-A' ^?'-\'>10 <-A' &='<@@ & D1 ' ?#0'A'10 <-A' D< .10 . <- 1A' # ' D1' @1 . '<-A' &>>&-0 <-A <@0&' &=' D1' 1B1'C 0 &=' 0 <-A' < >1- 0 &=' D1' <8 -<C1 '&='&? ' D<-B1 @<='A' &='<@@ & D1 ' &? ' 1B1'C 0 = &>' D1' '>1' &='&? ' &C&-<'&-' '@@ -&K <-A' &=' !110 F<.10 <-A' 1K< A0 &=' ==B1 0 <-A' '-'0 1 0 . 1< 1 ' <-A' @100 <@0&' &=' --?' '10 <-A' & D1 ' 1K< A0 <-A' E'= 0 . <- 1A' <-A' ><A1 &' <- ' 1 0&-0 # ' 0' <-A' # ' &? ' !< D1 ' <-A' E <-A=1 D1 @ '-' !11 & ' =& ' 1 >' &='1=@ & ' '-' <- '& D1 ' <--1 @<-A' '=' E 11 & ' < >1- ' #1' & D1>' D1 1&= ><A1@ <-A' # ' KD&>%@ <-A' '-' KD< ' <--1 @<-A' <@0&' D&K' >?BD' D1 'D<+1' 1@1<01A' & '.'+1-' &' ='B1 0 & ' & D1 ' &' D<+1' D1' ' < >1- 0@ <-A' &' KD< ' 1 0&-0@ D&K' <-A' '-' KD< ' <--1 @<-A' &=' <-A0@ 1j -1>1- 0@ 1- 0@ 1+1-?10@ <-A' !& =1' ? 10' #< .<'-1A' <-A' 0&@A' &' D1' 1 ?A'B1' <-A' "<><.1' &=' 0' <-A' &='&? ' &K-@ <-A' # 'KD&>@ <-A' &' KD&>@ D&K' <-A' '-' KD< ' <--1 @<-A' &=' D1' <@1' & ' < .<'-' &=' <@@'10' <-A' < 1- 0 =& ' 0'-.?@<' &='@ <0 K1@@ '-' D1' '>1' &='&? ' 0<'A' E <- < D1 ' <0 '-' &? ' '>1@ <-A' D&K' <-A' # ' KD< ' 1 0&-0@ <-A' <@0&' &='<@ D1' 1K1@0 <-A' E&&A0 KD'BD' K1 1' &='&? ' 0<'A' E <-A=1 D1 '< ' D1' '>1' &='D'0 "?1' "1 K a@ D&><0 "?1' A1' E@&?B10 =@ @10 D&-<##@10 C'1 0 1-' "'1 ' F '@@'<>' +10H@ A1' F -B10 1@ D&><0 +10H@ A1' LB10 1@ I ' 'BD&@ ##1' A1' F<@ D<>@ -&\' BD'1 0 I '=&'<=1B 'BD< A' &-' "< ?-A1@@ &D<-' ' 1' A1' &#D<>@ 'BD< A' 10B &C' I ' &D-"1 1?L@ 'B1 L'<+&-0 & A1'.-1\' <00'.-1\' I ' A1C? 1\' & A1'.-&-0 < 0'.-&-0 I ' A1C? &-0' A10 1' A1' -=1' .3-'51 B&-'-?1@ B&-01'@ C'?-'<-' 1-'1 'C0BD1'-' <C20@<' A< 1' A B10 10'<' 0? +1'1 ' I '1L<>'-1 ' &+1a' -&\' A' 1' . >\' =' R0 0'#'1-' @10 <' I '.& <'@@1' A1' -=1' D&0 1@ I ' A1' &? \'-&\' &? \' @'1?L' I ' C@<B10@ B&>1' @10 <' I '.&+-<'@@1' A1' &?' -=1' &'<@>1' I ' A1' &?\' -&0 ==' I ' I ' '-'0 10' A1' H?1B&-H@ 10 <' A1. 11' &?' B&-A'@ B'&-' H'@0 0&'1-@ 0'#'1-' A1'-\' -=1' D&0 1@ B&>1' A1D& 0@ I ' A1-H?1 1' ='B A1' C 11-A 1' '-=# ><B'&-' C' &? 10' @10 +&'10 H' >1? \'*&!' 01>#@1 <' A1' &? \' @10' 1- 10' 1+<@?10 I ' C=' \' H<' -&?0 <CC '1-1-' I ' 0&-' A?1\' I ' =1?001-' <CC 1-' ' I ' 1 1' A?10 0'#'1-' A1'-\' -=1' &'<@>1' B&>1' A1D& 0 1-' H?1B&-H@ >< 1' &?' B&-A'B'&-' H'@ 0&' @ I ' A1' &? \' '-< 'A1' A&?-0 .0< 10'<@'1-<A&-0 I '1&-=' ><A&-0 C' -&?0 = ? \' A1' R 10' 1-1>1-@\' 1- \' <--?' 110 C=' \' 1+1-?\' .< A10 ><-<.10 10BD1 10 =& =1' ? 10 =' <-BD'010 @'# 110@ +&'A<-B10 A10 B1+10BD110 +10BD110 ##<B'10 I ' '& '10@ !1 >10 A1'>10&-0 I ' C&00100'&-10 A10 @'1-0 I ' A1' &? \' <?R0 C&00100'&-0 0#>10 A1' A1-'1 0 F1-0 I ' BD< 1?L' I ' A<? 10 BD&010 HB&-H10 I ' <0 H?1?L' C &-10 I ' C' H?1@@1' B<?01' I ' B&>1-' I ' 1-' H?1@@1' ><51@ 5B >10@ >1-'A1' B1?L' C0&-10 H' @&-' C '0 <-\' A101 @ I ' <?L'-' A10 1+1-?\' I ' C=' \' H?1B&-H10 0'#'1-' A1' -=1' A' ' &'<@>1' B&>1' A1' R 10' ='10' ' 110 '@@10 D<0 1@L' =& R10B10 I ' H?1B&-H10 -&R' <?R0 C&00100'&-0 0'#'1-' A I 1<' @<' >11 ' B&>1' A1@<@ I ' A1' C=' \' I ' 1>&@? -1-\' A1' -&0 >&-&'10 I ' #?@@'&-0@ $' A1' @<' C '01' A10 C '0&-1 0 +'@@10 I ' @'1?L' -'1=0 B< <a0 #'1-0 I ' <?-B1&H0 A1' .?1 1' C' R 1' I ' C' >11 @ I ' A1' #1-@='B10 I ' <? 0 C&00100'&-0' A1' < A' <#B' 1#1@L' I ' &? \' <? 10' <@'1-0@ I ' < L'-' A10 <CC 10 A?' >&-&'1' D& 0 A1' -=1' &'<@>1' C' @10 &@@1 &? 0 A1' <C1@ C1? < &? 0 A1' < A'-<@L' ?>#< A10 I ' <?,0 C0&-10 HB&-H10 0'#'1-' <@'1-0 B&>1' A1-\ -0@ I ' A10 1>&@? -1-\' I ' C=' \' C+1-<-\' I ' 0&? A<-\' A1' B?0 ?>10 51 ?# 'A10 A10 @1 -10 H?' ' I ' C1<@L' @<-? R 5B A1' @10 C1 ' 10 B?0j ?>10 5B <? 10 0?#0'A10 A1' A <C0 +'-10 5B &? \' <?R0 I D<-A'010@ A10 A'0-'10 5B H?'-\'0>10 5B &? \' < 10 0?#0'A10 5B BD< .10 . 110 C' @1' @1 .'1' 5B @<' &1@ 1 ' <?L'-'A1' @10 1011' 10 C=' \' I ' C<'1>1-\' A1@ D>'<C1 ' A1' -=1' D<?-B1@@1 '1@ 5B A1' H?1B&-H10 -&0 <?R0 B1' 10 A1' 1>C0 A1' -=1' B& &-1>1-' <-H@ 1-' B1<@ 51 A1' =110 .<.10 5B 1K< A10 A10 =' 0 5B '-'0 10 . 1'-A 10 5B > '-A 10@ 5B <?L'-' A10 <--?' 11 ' 5B <? 0 1K< A10 5B A&?-0 .0-10 5B =1a\' <0 <0B?-0 C0&-10 C' -&?0 5B C-&\' C'1 ' 5B <'1@ 1-' =11' &?' < >1' A1' +'1' &?' 1-' <0B?-1' <? 1' >< 1@ 5B 0" . 11' &?' C<'1>1-' @1? ' 1-' 0&' ' =1' ' 5B C' H?1?L' 5B 1-' H?1@1' >< 1' 5B B&>#'1-' '@0' &-' 1@1001\' &?' A&--1\' <0' &==' 0 5B <-0 C' <+&' '@1? ' C<'1>1-\' 5B <0' H?1?L' ?10' B&>1-' 5B 1-' H?1@1' >< 1@ 5B A1' R 10' 1-1>1-\' 1-\' 1+1-?10 5B =& =1' 10' #< .<'-1\' 5B +1-A?\' < C ?A'B1' 5B A<><.1' A1' -&?0 5B A1' -=1' B& &-1' 5B C' H?1?L' 5B <0' H?1?L' 5B B&>1 ' 5B 1-' H?1@1' -? I @' 5B A1'+1>' &?' #< .<'.-1' A1' <@@'10 C< 1- \' C' 0'-.?@1 ' C=' ' '#'1-'1-' 1>C0 A1' -=1' A' ' <'1@ B&>1' 1-' -=1' 1>C0 51 B&>1-' I ' C' H?1 10 C0&-10;' 1 ' 1-01>1-' A1' & \' @10' &'<@L' 5B #'1-0 ' =1? 1-' <' -=1' A' ' '1@ < 1>C0 A1' 0&-

8 8

>& '<- ' I ' H?1?L' I ' A1' H?1@1' C '0' &?' +<@?1' I ' &?' '@0' 0&- ' A1 1-? R' B&-@1- ' I ' 1-' H?1@1' > < R@ I ' A1' &? 10' BD1+<-B10' <0B?-1>1- ' =1' \' <' - 1' &1C0' C' H?1B&-H10' C0&-10' I ' A1' &? \' @10' CA10' I ' A<>.10' H' -&?0' <+&-0' 1?1' I ' 0?0 1-?\' C' 'B1@@10' I ' C ' H?1?L' C0&-10' I ' B&>1 ' I ' 1-' H+ 1@1' << 10' I ' A1' BD< 10' A1' CA&-' .1 <@10' I ' 10C1A<@L' 1 ' < L'- ' A1' @10' 0&>10' I ' C<'1>1- \' I ' >< 1' A1' ^ A10888C10 4' 0'#-' A1' - 1' &' D&0 1@ B&>1' C ' @<' 0<@+<B'&-' I ' A1=1-01' A1' -&\' &'<@>1' R 10' =' H10' +'@@10' BD<0 1@L' =& R10010' I ' <?R0' @'1?L' A111<' =<' >'1 ' I ' A1@<' =1' \' I ' 1B1?L' C' HB&-H10' C0 -10' 0'#-' &@A'1 0' B&>1' <? 10' I ' C ' H?1B&-H@ +&'1' I ' BC>1- ' I ' 1-' H?1@1' >< 1' I ' B&>D'1-' '@0' &- ' A&H1\' C ' <+&' ' @&? ' C<'1>1- \@ I ' A1' B& B1@1>1- \' A1' -&\' A &' ? 10' I ' C=' \' I ' C ' H?1?L' B&>1- ' 1-' H?1@1' >< 1@ I ' A1' >1'- 1-&? 0' I ' 1>C8' -&? 0' A1' H?1 1@0' I ' A?0 10' A1-H?10 10' I ' A =' 0' I ' >'-'0 10' =<' R' C' # &B<.1' I ' A1' @&? ' # &.&? 0' I ' A1' B1?L' H ' &- ' C '<' @1' #BA.<.1' I ' B&- 1-' I ' 1-' H?1@1' ><51;' ' A1' &? \' @10' A1=<? 10' I ' >10C '0' -0' =1' \' 0'#'1-' 1-' - 1' A'=' D&0 1@' I ' -&\' <?R ' & \' , <B10' I ' @'1?L' 0C'0A' \' B&>1' 1-' &? \' <?R0' @'1?L' A1'-0' C=1' &'<@>1' I ' C' H?1B&-H10' C0&-0' C&- ' @10' C=' \' A1' -&?0' I ' A1' - 1' & &-1' - ' 10 1' 1>C1' 1\' I ' <>1-?01\' &?' @<' B&1' @1 ' A10 &? #1' &C' A1@<'1' ' < 1' A<><.1' <' -&?0' <+1-?;' A&-<- \' I ' B&' 1 <- \' C' B10 1<' A1' =1' <? & ' 1' I ' C' <A+ 0' I ' <001-' A1 0?0A' R' <' -&\' &\' &-01'@@1 0' I ' 0 0' A1' 1?L' I ' <' -&\' . \' ==' 0' <+0-8' A' \@ C@ & 1' C&'< ' B ?A& ' 1' .1 'A1' I ' 10C1B'<@1' A1 ? 1 ' - 1' &' D&0 1@@ I ' &? \' @10' &=='B10' A'B1@" I ' &? \' -&\' <? 10' &? ' @<B10' I ' @'1?L' <' <- ' A1' =&' \' B& -1' @&? ' C@1 <' @@10' 1B& A10' I ' <? 10' >?'A>1- \' I ' 1+'A1-B10' '1 L' B >1' @ ? ' 01>#@1 <@ I ' @&? \' @10' A1=1? ' .< 10' I ' 1LB10010' &+1\' 1@ A' ' D&0 1@ I ' <?L'- ' &? \' <?R0' A =<? 10' 5B >10C''<&-0' &+1\' 1-' @10' <? 10' &? 0' @<B10']A1?L' ==' I ' 5' '-'0 10' 0?0A' \@ 5B 1 ' ? \' @10' <? 10' < 'B@10' 5B C&'- \' A100?\-&>1\' 5B BD10B?-' A'11@@10@ 5B < L'- ' &? \' <? 10' A1=<? 10 ' >1 =1'&-0' 1Lj B10010' =1?LB'-10' A10B1' 10' 1L & B'&-0' &CC@00'&-0' A<><.10' I ' . 1+<-B10' =1' \' C-' C -A'11' A<><.1' 5R' A10B 1001' A1' -&?0' 5 ' A1' - 1' & &-1' B @10 < ' A1' 1' A' ' &'<@>1' 1-' .1 <@ &?' 1-' 10C1B'<@ -'1- ' 1L= f 01\' -1' 0C1B'='1\' C<>&- @ <>1-A1B' B& '.1 ' 1C< U' 1A 1001 ' 1=&? >1 ' I ' >1 1' 1-' #&-' 5B A?1' 10 < ' 5B 10 <#@'001>1- @ 1 ' <?L'- ' A1' &'1 ' 5 ' 10B I) + 1' ? 10' >< 10' A1 ' C@< 10' 5B H?1 1@10' A1' &?\' -&\' @'1.10' H" +& &- ' 0?' ' 5B 01' C@1'-A 1' <#-' C ' -&?0' B&>1' C ' @&? ' >10>10' A1 <- ' -&\' &\' &-0A@@1 0' 5B ==' # A1' &? \' >< 0' A1' A? 1001@' &CC -0' '- ?j '10' & 10' 5B >10C '0'&-0@ H?1?L' -1' C? &- ' #&-1>1- ' 10 1' <>1-A1R' -1' R>'-1\' C' =< B&? 0' A1' =< B&1' @1 ' A1' @< 1' <+<- ' ?011@ 5B A1' 1- ' A&- ' '5B =1' &' #& 1' 5B A?1' 1>1A1' 5B 1B& '=' 0'#'1"' C ' -&?0' B&>1' C ' -&\' @'1.10' 0?0A' \' ' 5B <' @&? 10' @10' BD&010' < & A' \' 5B &10B?-' A1' 1?L' C@1'-1>1- ' A'0B? 1 ' 5B =' -<@>1- ' >'-1 ' 5B A1' 1- ' =1' 1' C@1'-' 1L1B?A -@ 0&@&-B' B1' H' =&? ' 01>#@1 <' >1? \' C ' @1' &-&? ' 5B' C=' ' A1' -&?0' 5B A1' - 1' 1 <' 5B 1A - 18' . <B'&-' A1' A &' \' 95B C=' \' A1' - 1' A' ' & &-1' 5B >18' @'&? ' .& &<-B1' A1' @<' C<'L' 5I' @1'0' 8A1' 1' I ' 1@1+18' >1- ' A1' -=1' A' ' C&1C@1' 1?@@<- \' <?L" H' 0" A' 0' 1' &?' +< '<-B1' A&CC'-'&-' 0&? A1' &?' <+A. 1' 1- 1' -&0' A' \' &-01'@@1 0' 5B ==' ' H' @1' ?..1>1- ' 5B BC'-'&-' A1' =< " 1< D@ <-A' KD< @ <-A' &=' KD< ' 'B1' & ' <@?1@ <-A' KD<' #1B<>1' &=' D1>@ <-A' D&K' <-A' '-' KD<' <--1 @ <-A' &=' <@@ D1+'0<-B10' '-' <- ' K'01' ><A1' &' &?' 01' # ' <- ' ><--1 ' 1 0&-0@ <-A' &=' <@@ &00' <-A' "<>.10' KD'BD' F 1' D<+1' D<A' <-A' 0?0 <'-1A' # ' D1' 0<>1@ <-A' # ' KD<' 1 0&-0@ D&K' <-A' '-' KD<' <--1 @ <-A' &=' D< 1 0' &=' < A&-0' .1-1 <@ <-A' 10C1B'<@@ <-A' <@0&' &=' D1' ?>0' <-A' < >1- 0' <-A' <--1 ' &=' D1' LC1-B10' <0' K1@@ &=' &?' 0<'A' &?01' <0' =&' D1' <@+< '&-' <-A' "1=1-B1' &=' &?' 1<@>0@ <-A0@ 1'.-& @10@ &K-0@ <0 @10@ !& 10010@ <-A' & D1' @<B10@ &-' D'0' 'A1' D1' 1<' <-A' #1 &-A@ A&-1' <-A' 1B1'+1A' # ' <- ' 1 0&-0@ <0' K1@@ &@A'1 0' <0' & D1 @ <-A' # ' <- ' ><--1 ' F < @ <-A' D&K' <-A' '-' KD<' <--1 @ <-A' D#K' >?BD' D1 ' D<+1' .'+1-' & D<+1' D1' ' < >1- 0@ <-A' &=' D1' &-B1<@>1- 0' &=' &?' '.D 0' <-A' &=' 0@ <-A' # '+,D&>@ D&K@ <-A' '-' D< ' <--1 @ <-A' &=' <'-=1'-&? 0' <-A' <a1 0' &=' ^?< 1@0@ >#<B1 0' &=' -H?10 ' <-A' &=' ==' B1 0' <-A' '-'0 1 0' ><=&' # ' &j B<.1' <-A' &=' D1' ' &..1 0@ <-A' &=' D1>' D<' D<+1' <a1-' D1' 0<'A' &B<.1@ <-A' D&K' <-A' '-' KD<' <--1 @ <-A' &=' <@@ D1' "1=<?@ 0' <-A' ==1-B10' D<' #1' A&-1' <0' K1@@ '-' &? ' 0<'A' &?01' <-A' & ' & D1 ' ? 0@ @<B10@ <-A' ==' B10' <0' <=& 10<'A@ <0' '-' <@@ & D1 ' @<B10' K' D'-@ &? ' 1<@>' # ' <- ' ><--1 ' 1 0&-0@ KD1 1# ' D1' &=' 0' &=' 0' <-A '&=' &? ' &K-' D<+1' #11-' '>C<' 1A' <-A' A'>'j -'0D1A@ & ' D1' &>>&-' <K' A'0 ? #1A' & ' A1@< 1A@ ' & D1 ' "<>.1' &' 0'D<CC1-1A@ E'+'-.'<-A' B&>>' '-.' # ' D101' 101-0@ &=' &? ' ? D& ' @ <-A' # ' D1' A+'B1' # 001-' <=& 10<'A@ &' &? ' >A' &?-01@@& 0' <-A' &' 'L' &=' D1>@ <-A' &' &? ' 0<'A' . 1<' ='B1 0@'=?@@ &K1 ' <-A' ? D& ' .1-1 <@ <-A' 0C1B'<@@ &' 1H'1 ' &? ' 0<'A' &?01' <-A' <@@ D1' ==' B10' &=' D1' 0<>1@ <-A' <@@ &# ' & D1 ' &? 0@ @<B10@ <-A' ==' B10' <0' &= 1-' D1>' C@1<01@ <-A' &' A&' B&>1' #1=& 1' D1>@ KD1 1' <-A' KD1-' D1>' C@1<01 D@ D1' &@@0@ 1B& A0@ <-A' & D1 ' ?-'8' >>' 0' <-A' ='+'A>' B10@ 0?BD' <0' D1>' @'a1 D@ <-A' <=' A'1' "1= '?@ 0@ F<0 10@ <-A' LB10010' =&?-A' '-' D1' 0<'A' &?01@ <-A' <@0&' <@@ & D1 ' "1=<?@ 0' <-A' '0C ' '&-0' =&?-A' '-' D1' & D1 ' &? 0@ @<B10@ &==' B10@ ==' B1 0' <-A' '-'0 1 0' <=& 10<'A@ <-A' >' <'@ D1' 1 D1 ' 'B@10' <-A' &'->' <#&+1' -<>1A@ <-A' 1+1 ' &=' D1>@ <-A' <@0&' <@@ D1' & D1 ' "1j =<?@ 0@ '0C '<&-0@ LB10010@ !<@0'='10@ "1B1' 0@ L & j '&-0@ CC 100'&-0@ "<>.10' <-A' E '1+<-B10@ A&-1' '-' 1 ?A'B1@ "<>.1' <-A' "'>'-AA&-' &=' 0' <-A' &=' &?' &K-@ <-A' D1' 0<1'&=' &?' 0<'A' 1<@>@ '-' .1-1 <@ ' 0C1B'<@@ A#&+1' -& ' 0C1B'='1A' -& ' 1LC 1001A@ &' <>1-A@ B& 1=@ ? 4 ' 1A 100@ 1='K>@ <@A' C?' '-' A?1' <-A' .&&A' 0<1' <-A' <#@'0D>1- @ <-A' <@0&' &' D1<' <-A' 1B1'+1' A@ ><--1 ' 8 =' &>C@ &' 0' <-A' ^?< 1@0' &=' &?' '1.10@ KD'BD' K'@@ ?1' <-A' B&>C@<'-' D1>' <0' K1@@ =& ' 0' <0' =& ' D1>01@+10@ #1=& 1' &?' '0<'A' &?-01@=& 0' <-A' ==' B1 0@ &=' <@@ ><--1 ' &=' ? 1001 @ CC 100'&-0@ -8 ? '10@ F &-.0@ <-A' '0C '0'&-0' KD'BD' >< 0' -& ' #1' K1@@ <>1-A1A' -& ' A1 1 >'-1A' # ' D1' &? 01' &=' D1' &>j >&-' <K' &=' D1' <-A' #1=& 1' 01A@ <-A' D1 1&=' &' .'+1' <' ' > &1' .&&A' A' A?1' 1>1A ' <-A' 1B&+1 @ <0' K1@@ =& ' 0' <0' =& ' &?' 0<'A' @'1.1' C1&C@1@ <-A' <@@ D1' '=- - .0' <=& 10'='A'8<-A' 1+1 ' &='8 D1>'= A@ ' &' &&?00' <-A' ='-<@@ ' &' A1 1 >'-1@ <-A' D1 1&=' &' ><a1' =?@@ L1B? '&-' <BB& A'-.' <0' @&' D1>' #10 ' 0D<=' 011>@ =& ' D1' &-&& ' <-A' &=' ' &=' 0' <-A' &=' &? ' 0 < 1@ <-A' 1'- 1. < '&-' &=' D1' '.D 0' <-A' &=' 0' &=' &? ' 0<'A' &K-@ <-A' #1 1 ' E#+1> >B1' &=' D1' 1<B1' <-A' <K0' &=' &? ' <-A@ <-A' 1@'1=' &=' &? ' 0<'A' 1&C@1;' F '@@'-.' <@0&' D<' '=" '+1 8' '@ '& ' < '<-B1' =' C'-'&-' '01' & ' D<CC1-' #1 K11-' &? ' 0<'A' &?-01@@& 0' <-A' ==' B1 0@ D<' D1' ?A.>1-' <-A

' A10C1-010

C'-'&-ˈ&=ˈ D1ˈ. 1< 1 ʾ < ʾD<+1ˈ!& B1ˈ<DAˈD&@A'C@<B1₲ &> ><-A'-.ˈ <-Aˈ BD< .'-.ˈ <@@ 1@< 10₰ "?a10₰ < @0₰ < &-0₰ 1K< A₰ 1<0? 1 ₰ <-Aˈ &>C &@@1 ₰ <-Aˈ<@@ & D1 ʾ ='B1 0' &=ˈ &? ʾ &?01₰ ?0 'B10' &=ˈ D1ˈ&-1ˈ 1-BDˈ <-Aˈ &=ˈ D1ˈ & D1 ₰ <-Aˈ <@@ &? ʾ & D1 ʾ ?0 'B10₰ < &-0₰ <-Aˈ D<>#1 @<'-0'&=ˈ D1ˈ LBD1H?1 ₰ D1 '==0₰ 0BD1< & 0₰ < & 0₰ <'@'==0₰ <-Aˈ <@@ &? ʾ & D1 ʾ ==ˈB1 0₰ ʾ-ˈ0 1 0₰ <-Aˈ '1.1ˈ 1&C@1₰ D<ˈ D1 ʾ #1ˈ < 1-A'-.₰ &#1A'1- ₰ B&?-01@@'-.₰ <-Aˈ<'A'-.₰ <0' &=1-ˈ <-Aˈ # ʾ D1ˈ <--1 ʾ <0' &? ʾ 0<'Aˈ &?-01@@& 0' <-Aˈ ==ˈB1 0' 0D<@@ Aˈ D1>ˈ &' K'₰ &-ˈ&? ʾ 1D<@=ʾ -ˈF ʾ -100' KD1 1&=ˈF 1ˈD<+1ˈA&-1ˈ &ˈ#1ˈ><A1ˈ D101'&? ʾ 1 1 0' < 1-0ˈ ʾ< 1Aˈ?-A1 '&? ʾ E 1<ʾ 1<@₰ <ʾ F10 >'-0 1₰ D1ˈ ʾ-1 11- Dˈ ʾ< ʾ &=ˈ &+1>#1₰ D1ˈ 1- Dˈ 1< ʾ&=ˈ&? ʾ A.D /

` &ˈ D<ʾ D1ˈ0<'Aˈ &>>'00'&-ˈ<-Aˈ D1ˈ0<ʾ < ? 1 P' &?BD'-.ˈ D1ˈ <'D1ˈ &>>'00'&-₰ 011>1 Dˈ &ˈ D1ˈ 0<'Aˈ &>>&-0' &ˈ#1'C 1 ?A'B'<@ &ˈ D1ˈ,'-.ˈ<-Aˈ &'D'0' &K-₰ <-Aˈ 0? C< '&-ˈ &=ˈ ` D1ˈ 1.<@F ʾ <-Aˈ & <@ K1 ₲ <-Aˈ D<ʾ D1ˈ0<'Aˈ " ?a1ˈ &=ˈE@&?B10 1 ʾ <-Aˈ < @ &=ˈ ?-A1@@ A'Aˈ01-Aˈ<ˈ. 1< ʾ <-ˈ<-Aˈ 11 '&=ˈ D1ˈ 1<@>ʾ'-ˈ 100<.1ˈ &ˈ&? ʾ & Aˈ D1ˈ,'-.₰ KD&ˈ &=ˈ D1ˈ ʾC< ʾR<'Aˈ /)ˈ D<ʾ '=ˈD1ˈK&?@Aˈ-& ʾ. <-ʾ<-Aˈ<001-ʾ &ˈ D1'0<'Aˈ & ?-'00'&<ˈ <-Aˈ < ? 1₰ D1ˈ0D&?@Aˈ#1'-ˈ. 1<ʾ 1 '@ &=ˈD'0' '=1₲ <-Aˈ 0&ˈ <0' K1@@ D1ˈ 0<'Aˈ &>>'00'&-ˈ <0' D1ˈ 0<'Aˈ < ? 1ˈ &?BD'-.ˈ D1ˈ0<'Aˈ &>>'00'&-₰ K1 1ˈ><A1ˈ# ʾB&-0 <'-ʾ <-Aˈ B&>C?@0'&-₰ <-Aˈ<.<'-0ʾ D1ˈ . 11>1-ʾ&=ˈ D1ˈ,'-.ˈ <-Aˈ D'0' F '@@₲ F D1 1=& 1ˈ D1ˈ 0<'Aˈ &>>&-0' C < ʾ &? ʾ 0<'Aˈ &+1 1'.-ˈ & Aˈ D1ˈ,'-.₰ D<ʾ D1ˈ 0<'Aˈ &>>'08' '&-₰ <-Aˈ < ? 1'₲ `UBD'-.ˈ D1ˈ 0<>1ˈ &>>'00'&-₰ KaDˈ 9<ʾ D1'ʾ"1C1-A< i₰D1ˈ 1C1 A1Aˈ <-Aˈ ? 1 @ ʾ<=''?=1A₰ <0' <ʾ D'-.ˈ A&-1ˈ <ʾ & &?0@ ʾ<-Aˈ <.<'-0ʾ D'0' ` 1.<@

!ʾ"!#& !/ʾ .11&_2& -ˈ -/ʾ _0 !ʾ "! ʾ +!/

&K-ˈ<-Aˈ "ʾ.-ˈ ʾ ʾ F D1 1?C&-ˈ &?ʾ & 1 ʾ.-ˈ & Aˈ D1ˈ,'-.₰ &=ˈ D1ˈ 001-ʾ&=ˈ <@@ D1ˈ & A0' C'ʾ?<@ <-Aˈ D1ˈ &^& 0'&=ˈ D1ˈ @1 . ₰ <ʾ D1ˈ 1H?10ʾ &=ˈ D1ˈ0<'Aˈ &>>&-0₰ D1 1ˈD< Dˈ 1C1<@1Aˈ D1ˈ0<'Aˈ < ? 1ˈ'-ˈ D'0' 'B@1₰ <-Aˈ D1ˈ0<'Aˈ &>>'00'&-ˈ<-Aˈ<@@ D1ˈ <'-0'<-Aˈ "1C1-A<- 0'&=ˈ D1 1-1₰ `? 1 @ ʾ &ˈ#1-AD? 1A0X =& ʾ 1+1 ₰ =& ʾ D1ˈ <?010'<=& 10<'Aˈ -A'>& 1&+1 ₰ ` D< 0X ʾ D1ˈ,'-.₰ &=ˈ D1ˈ 001-ʾ&=ˈ<@@ D1ˈ0<'Aˈ & A0' <-Aˈ &>j >&-0' D< Dˈ & A<'-1Aˈ <-Aˈ 0 <#@'0D1A ʾ D<ʾ -&ˈ 0?BDˈ &>>'00'&-ˈ -1'D1ʾ0?BDˈ @'a1₰ #1ˈ =&>ˈ D1-B1=& Dˈ C? BD<01A₰ C? 0?1A₰ &ʾ><A1₲ <-Aˈ D1ˈ D<ʾC? BD<01 D₰ C? 0?1 D₰ &ʾC &B? 1 Dˈ &ˈ#1ˈ><A1ˈ /)ˈ <-ʾ0?BDˈ &>j >'00'&-₰ &ʾ<-ʾ@'a1ˈ D< ʾ>1ˈB&>ʾ-.₰ C '/ ʾ&ʾ<C1 @ ʾ ʾ?01ˈ ? '0A' A&-'&ʾ'" ʾ# ʾ+' ?1'&=ˈ<-ʾ0?BDˈ &>8' >'0 '&-₰ <-Aˈ &=ˈ D1ˈ0<>1ˈ #1ˈ A?@ ʾB&-+'Iʾ'-ˈ D1ˈ !< @'<₰ -1-₰D1ˈ0D<@@ #1ˈ<A ?A.1Aˈ=& ʾ< <ʾ & ₰ <-Aˈ D< ʾ&=ˈD'.Dˈ 1<0&-ˈA&-1ˈ<.<'-0ʾ D1ˈ,'-.ˈ<-Aˈ D'0' &K-₲ <-Aˈ 0)ˈ D1ˈ,'-.ˈ 0D<@@ D<+1ˈ D1ˈ!& =1' ? 1ˈ&=ˈ D'0' <-A0₰ 1-1j >1-0₰ &00100'&-0₰ <-Aˈ <@@ & D1 ʾ 1 1Aˈ <>1-0₰ &ˈ D'>ˈ <-Aˈ &ˈD'0' 1ˈ 0ˈ<0ˈK1@@ D&@A1-ˈ&=ˈ D'>01@=ˈ< ʾ&=ˈ& D1

. 1'-A 1ˈ C '1ˈ 1'ʾ=& B1ˈ ʾ '1.<1ˈ@'1-'₲ B& <<-A<-ˈ Iʾ BD< .1<-ˈ<ˈ &? ˈ @< ˈ"?10' &-0' < &-0' 1-10₰ BD<=ʾ 10& 1ʾ &- &@@&?@ʾ Iʾ &?ˈ<? 0' ==ʾ 0ˈA1ˈ-=1ˈ &0 1₰ ?0 'B10'A1₰?-ʾ <-aˈIʾA1@<? 1ˈIʾ<?R0'-&ˈ ?0j 'B10' HB&-H10₰ < &-0' Iʾ D<>#1 @1 -0' A1ˈ @10BD1H1ʾ ʾ B&-ˈ 0BD1 &? 0' <ʾ ʾ <'@@'=0' Iʾ &?ˈ<? 10' -&ˈ ʾ-'0 10' Iʾ '1.10ˈH?1B&-H10₰ Hˈ <ˈ -&ˈA'ˈ &-01'==1 0' Iʾ ==ʾ 0' 1Hˈ @<ˈ >< 1ˈ <+[-A'1ˈ 0&'1-ʾ 1-1-A<-ˈ &#1'<-ˈB&-01' <-ˈIʾ =A<-ˈ0" 0&+1-ʾ Iʾ Cˈ>0 1ˈB&>1ˈ-&ˈA'ˈ &-01'@@1 0' Iʾ ==ʾI ʾ@&? ʾ =1 &-ʾ <00<+&'ʾ A1Cˈ -&? ʾ -ˈ 10>&'.-<-B1ˈ A1ˈ H?1@1ˈ BD&01ˈ -&?0' <+&-0' =D'ʾ =<ˈ 1ˈ B10 10' -&ˈ 10' C< 1-10ʾ "&-ˈ0&?ˈ--=1ˈ. Aˈ 1<@<ˈF10 >'@1ˈA 0'Iʾ -&1D0>1ˈ &?ʾA1ˈ &+1-==''" <-ˈA1ˈ--=1ˈ H.-1ˈ==&>1 ^?1@10' B&>'00'&-ˈIʾ10 <=&ʾ &?BD<-ʾ>10>1ˈ@<ˈ1 >'08₰ 0'&-ˈ01>##@<₰0' A'ˈ &10'10 1ˈ CP?A'B'1₰L'ˈ <-ˈ & ʾIʾ 0< & &-1ˈIʾ 0? C<B'&-ˈ A1ˈ i<ˈ 1.<@'1ˈIʾ &'<@ C&'< 1₲ 1ʾH' @10' A'ˈ" ?1ˈ A1ˈ =&?B10 =ʾIʾ &-1ˈ"< @-A1@@ 1-+C'1 1-ʾ?-1ˈ.0-1ˈC0&-1ˈC'1ʾA1ˈ@<ˈR 1ˈ1ʾ>100<.1ˈ <ˈ --=1ˈA'ʾ ʾ@1ˈ & ₰ ʾA1ˈ=&?ʾC< ʾ@?ʾA'0&'ʾ ʾ0" ʾ -1'+&A & ʾ. F1ʾIʾ<001@a1ʾ<0'A'ˈ1A <'00'&-ˈ ʾB0 ? ?ʾ '@ =1?0ʾ1-ˈ.==ʾC'@ A1ˈ 0<ˈ '1₰ Iʾ '00'-ʾ 0'#'1-ˈ@<ˈ A I ʾ B&>'00'&-ˈB&>1ˈ@1ˈA'ʾ 10<?ˈ &?BD<-ʾ>10>1ˈ@<ˈB&>'08₰ 0'C-ˈ =1? 1-ʾ =<ˈ\ Cˈ B&- 1'-ʾ Iʾ B&>C?@0'&-ˈ Iʾ 1D8' B&- 1'@<ˈ. 11'A?ˈ & ʾIʾ0<+&@1- 1₲ A&-ʾ@10'A'ˈ &10' C '1 1-ʾ<ˈ & ʾHˈ@10'A'ˈ & 0 '&-ˈ Iʾ10 <?ʾ C?1#<-ʾ >10>1ˈ@<ˈ 1A>'00'&-ˈ ,'+?1-ʾ&+1ˈ &?ˈ@10'A1C1?A<-ˈ A'B1@@10' 1C1@@1 0' Iʾ A1ˈ &?ʾ<A-?==1\₰ B&>1ˈBD&01ˈ <ˈ &' &?01>1>ˈ Iʾ1-B&- 1ˈ 0<ˈ 1.<@'1ˈ 0<ˈ B& &-1ˈIʾ 0<ˈ @.>11'ˌ ? ʾH?& ʾ -=1ˈ _ˈ@1ˈ & ʾA1ˈ@<001-ʾA1ˈ &? ˈ@10' 0' 10C' ʾ?A0' Iʾ =1>C& 1@0' I O@10' B? 1? 0' A1ˈ @B .'1ˈ<ˈ@<ˈ 1H?C0 1ˈA10'A'ˈ &10'<ˈ<A' 1C1@@1ˈ @1ˈ A'ʾ 10<?ʾ1-ˈ B10ʾ< 'B@1ˈIʾ>10>1ˈ@<ˈ 1A>'0j 0'&-ˈ Iʾ &?ˈ@10' C1'-10' Iʾ A1CU'A<- 10' ='BA@10₰ Iʾ A1ˈ &?ʾ <A-?@@1ˈ C' &?ˈ& 0' C ʾ @10' B<?010' ?0A'@ˈ ʾ &? 1ˈB1&ˈ @1ˈ & ʾA1ˈ@<001-ʾA1ˈ &?ˈ@10'A'ˈ 0' Iʾ 10₰ <A' & A1'-1ˈIʾ 10<#@" Hˈ -?@@ '1₰ 1A>'00'&-ˈ -<? =1ˈ 01>##@1<#@1ˈ <>>10' -1ˈ 0&'ʾC BD<B1ˈ' C0?1ˈ -1ˈ =1'1ˈ1-ʾ 1>C0' <A+1-'₲ Iʾ B1@@?ʾHˈ C? BD<01ˈ C0?1ˈ &?ˈ C1? 1ˈ A1 1ˈ =<'1ˈ&?ˈ C? 0?1ˈ<0B?-1ˈA1@1ˈ 1A>'0j 0'&-ˈ T>ˈ 1>#@1<#@1ˈ1-ʾ >'H ʾ<A+1-aˈ 1-ˈ C '+1ˈ& ʾ1-ʾ <C1 ₲ &?ˈ ?01ˈ ? '0A'B1'&-ˈ &?ˈ C1<'ʾ C' ?1ˈ @<0B?-1ˈ '1@1ˈ 1A>'0 '&-₰ Iʾ A1ˈ B1&ˈ 0&'ʾA?1>1-ʾB&-+'=@' >@ C@18' >1-₰0&'ʾ<A ?..1ˈ C ʾ <'&?ʾ Iʾ B1&ˈ A1ˈ D<? 1ˈ <'0&-ˈ =1'1ˈ1-B&- 1ˈ @1ˈ & ʾ5'0<ˈ & &-1₲ 1ʾA1ˈ B1&ˈ @1ˈ & ʾ1'ʾ@<ˈ=& =1'ʾ? 1ˈA1ˈ 1ˌ R 10' 1-1>1-ˈ Iʾ C&0j 0100'&-ˈ Iʾ &?ˈ<? 10' -'D1ʾ1>1-ˈ<ˈ@?ʾ Iʾ 010' D1'0' +' #'1-ˈ 1-?ˈ\'A1ˈ=&@ʾ>10>10' B&>1ˈA<- 10₲ ʾ !1ˈ."/!&-!ˈ!2ˈ Cˈ!2 ;++jˈ Sˈ# !2#0-ˈ Sˈ#.1 22!ˈ Cˈ .2!'+ʾ1."ˈ /0'6.@'.-ˈ/!ˈ+0@'/! .2&!"# .0'/!2O&Z "!-/"!ˈ2.-ˈ .1 *!ˈ+&!*!ʾ.-ˈ#!+O@ Sˈ+!ʾ!ˈ+!ˈ . ! +!ˈ 5ˈ# &ʾ # !ˈ!-#.-"!ˈ+!ˈ6.@' !&"!ˈ /!ˈ*0!""!ˈ/!&-jˈ2.-ˈ ".& +1!ˈ Cˈ /!ˈ #!.ˈ 2.&ˈ / !1!-ʾ !&-ʾ Cˈ /H **!jˈ !-ˈ&<!1!-ˈ2.&ˈ /H0**!jˈ Rˈ" & .0"ˈ /!ˈ 0!ˈ" &)ˈ 2.-ˈ!-#.-"!ˈ+ˈ ."-.-!ˈCˈ ."C#!ˈ /!ˈ+0@'Cˈ2!Z "&"Z S#.-SZ .0jˈ 2!jˈ 3"!Z !&&Tˈ .22!22&.-Z Cˈ +&; !!Z Cˈ .0jˈ 03Z!-!"& !1!-jˈSO!0% &ˈ /ˈ.0' 2#0-ˈ 0"!ˈ /ˈ ˈ2.ˈ.!2ˈ.0' ˈ.&ˈ+!ˈH.0"ˈ /!ˈ" &2.-ˈ !"!jˈ2&;&!-ˈ!-ˈ !!ˈ &+!ˈ#.1!ˈY&-ˈ!ˈ !!ˈ2@1 +!ˈ ˈ6.@'Cˈ2!Z !&"Z2 .&!-ˈ !-0jˈ / 0"!Z #.1!ˈ /!ˈ +0@' 1! -!Z ˈ .0jˈ H.0"2ˈ Cˈ 02 &#! !ˈ .22!22&.-ˈ Sˈ #0-ˈ 0"!ˈ /ˈ ˈ2. ˈ.! 2

.1 +221*< !ˈ 7&-*(Z W8! ʾ .ʷ &Z ! .2& &.-ʾ .ʷ !ˈ 0"k "!-/!'ʷ .ʾ &!*!ˈ .k 1 *!ˈ.ʷ ˈ " &2!ˈ !ˈ3!.k +!ˈ * &-2ˈ --ˈ .2&+!+@ˈ /!#+ "!/ʾ "! 2.-

C'-'&-ˈ&=ˈ D1ˈ. 1< 1 ʾ < ʾD<+1ˈ!& B1ˈ<DAˈD&@A'C@<B1₲ &>><-A'-.ˈ <-Aˈ BD< .'-.ˈ <@@ 1@< 10₰ "?a10₰ < @0₰ < &-0₰ 1K< A₰ 1<0? 1 ₰ <-Aˈ &>C &@@1 ₰ <-Aˈ<@@ & D1 ʾ ='B1 0' &=ˈ &? ʾ &?01₰ ?0 'B10'&=ˈ D1ˈ&-1ˈ 1-BDˈ <-Aˈ &=ˈ D1ˈ & D1 ₰ <-Aˈ <@@ &? ʾ & D1 ʾ ?0 'B10₰ < &-0₰ <-Aˈ D<>#1 @<'-0'&=ˈ D1ˈ LBD1H?1 ₰ D1 '==0₰ 0BD1< & 0₰ < & 0₰ <'@'==0₰ <-Aˈ <@@ &? ʾ & D1 ʾ ==ˈB1 0₰ ʾ-ˈ0 1 0₰ <-Aˈ '1.1ˈ 1&C@1₰ D<ʾ D1ʾ#1ˈ< 1-A'-.₰ &#1A'1- ₰ B&?-01@@'-.₰ <-Aˈ<'A'-.₰ <0' &=1-ˈ <-Aˈ # ʾ D1ˈ <--1 ʾ <0' &? ʾ 0<'Aˈ &?-01@@& 0' <-Aˈ ==ˈB1 0' 0D<@@ Aˈ D1>ˈ &' K'₰ &-ˈ&? ʾ 1D<@=ʾ -ˈF ʾ -100' KD1 1&=ˈF 1ˈD<+1ˈA&-1ˈ &ˈ#1ˈ><A1ˈ D101'&? ʾ 1 1 0' < 1-0ˈ ʾ< 1Aˈ?-A1 '&? ʾ E 1<ʾ 1<@₰ <ʾ F10 >'-0 1₰ D1ˈ ʾ-1 11- Dˈ ʾ< ʾ &=ˈ &+1>#1₰ D1ˈ 1- Dˈ 1< ʾ&=ˈ&? ʾ A.D /

` &ˈ D<ʾ D1ˈ0<'Aˈ &>>'00'&-ˈ<-Aˈ D1ˈ0<ʾ < ? 1 P' &?BD'-.ˈ D1ˈ <'D1ˈ &>>'00'&-₰ 011>1 Dˈ &ˈ D1ˈ 0<'Aˈ &>>&-0' &ˈ#1'C 1 ?A'B'<@ &ˈ D1ˈ,'-.ˈ<-Aˈ &'D'0' &K-₰ <-Aˈ 0? C< '&-ˈ &=ˈ ` D1ˈ 1.<@F ʾ <-Aˈ & <@ K1 ₲ <-Aˈ D<ʾ D1ˈ0<'Aˈ " ?a1ˈ &=ˈE@&?B10 1 ʾ <-Aˈ < @ &=ˈ ?-A1@@ A'Aˈ01-Aˈ<ˈ. 1< ʾ <-ˈ<-Aˈ 11 '&=ˈ D1ˈ 1<@>ʾ'-ˈ 100<.1ˈ &ˈ&? ʾ & Aˈ D1ˈ,'-.₰ KD&ˈ &=ˈ D1ˈ ʾC< ʾR<'Aˈ /)ˈ D<ʾ '=ˈD1ˈK&?@Aˈ-& ʾ. <-ʾ<-Aˈ<001-ʾ &ˈ D1'0<'Aˈ & ?-'00'&<ˈ <-Aˈ < ? 1₰ D1ˈ0D&?@Aˈ#1'-ˈ. 1<ʾ 1 '@ &=ˈD'0' '=1₲ <-Aˈ 0&ˈ <0' K1@@ D1ˈ 0<'Aˈ &>>'00'&-ˈ <0' D1ˈ 0<'Aˈ < ? 1ˈ &?BD'-.ˈ D1ˈ0<'Aˈ &>>'00'&-₰ K1 1ˈ><A1ˈ# ʾB&-0 <'-ʾ <-Aˈ B&>C?@0'&-₰ <-Aˈ<.<'-0ʾ D1ˈ . 11>1-ʾ&=ˈ D1ˈ,'-.ˈ <-Aˈ D'0' F '@@₲ F D1 1=& 1ˈ D1ˈ 0<'Aˈ &>>&-0' C < ʾ &? ʾ 0<'Aˈ &+1 1'.-ˈ & Aˈ D1ˈ,'-.₰ D<ʾ D1ˈ 0<'Aˈ &>>'08' '&-₰ <-Aˈ < ? 1'₲ `UBD'-.ˈ D1ˈ 0<>1ˈ &>>'00'&-₰ KaDˈ 9<ʾ D1'ʾ"1C1-A< i₰D1ˈ 1C1 A1Aˈ <-Aˈ ? 1 @ ʾ<=''?=1A₰ <0' <ʾ D'-.ˈ A&-1ˈ <ʾ & &?0@ ʾ<-Aˈ <.<'-0ʾ D'0' ` 1.<@

&K-ˈ<-Aˈ "ʾ.-ˈ ʾ ʾ F D1 1?C&-ˈ &?ʾ & 1 ʾ.-ˈ & Aˈ D1ˈ,'-.₰ &=ˈ D1ˈ 001-ʾ&=ˈ<@@ D1ˈ & A0' C'ʾ?<@ <-Aˈ D1ˈ &^& 0'&=ˈ D1ˈ @1 . ₰ <ʾ D1ˈ 1H?10ʾ &=ˈ D1ˈ0<'Aˈ &>>&-0₰ D1 1ˈD< Dˈ 1C1<@1Aˈ D1ˈ0<'Aˈ < ? 1ˈ'-ˈ D'0' 'B@1₰ <-Aˈ D1ˈ0<'Aˈ &>>'00'&-ˈ<-Aˈ<@@ D1ˈ <'-0'<-Aˈ "1C1-A<- 0'&=ˈ D1 1-1₰ `? 1 @ ʾ &ˈ#1-AD? 1A0X =& ʾ 1+1 ₰ =& ʾ D1ˈ <?010'<=& 10<'Aˈ -A'>& 1&+1 ₰ ` D< 0X ʾ D1ˈ,'-.₰ &=ˈ D1ˈ 001-ʾ&=ˈ<@@ D1ˈ0<'Aˈ & A0' <-Aˈ &>j >&-0' D< Dˈ & A<'-1Aˈ <-Aˈ 0 <#@'0D1A ʾ D<ʾ -&ˈ 0?BDˈ &>>'00'&-ˈ -1'D1ʾ0?BDˈ @'a1₰ #1ˈ =&>ˈ D1-B1=& Dˈ C? BD<01A₰ C? 0?1A₰ &ʾ><A1₲ <-Aˈ D1ˈ D<ʾC? BD<01 D₰ C? 0?1 D₰ &ʾC &B? 1 Dˈ &ˈ#1ˈ><A1ˈ /)ˈ <-ʾ0?BDˈ &>j >'00'&-₰ &ʾ<-ʾ@'a1ˈ D< ʾ>1ˈB&>ʾ-.₰ C '/ ʾ&ʾ<C1 @ ʾ ʾ?01ˈ ? '0A' A&-'&ʾ'" ʾ# ʾ+' ?1'&=ˈ<-ʾ0?BDˈ &>8' >'0 '&-₰ <-Aˈ &=ˈ D1ˈ0<>1ˈ #1ˈ A?@ ʾB&-+'Iʾ'-ˈ D1ˈ !< @'<₰ -1-₰D1ˈ0D<@@ #1ˈ<A ?A.1Aˈ=& ʾ< <ʾ & ₰ <-Aˈ D< ʾ&=ˈD'.Dˈ 1<0&-ˈA&-1ˈ<.<'-0ʾ D1ˈ,'-.ˈ<-Aˈ D'0' &K-₲ <-Aˈ 0)ˈ D1ˈ,'-.ˈ 0D<@@ D<+1ˈ D1ˈ!& =1' ? 1ˈ&=ˈ D'0' <-A0₰ 1-1j >1-0₰ &00100'&-0₰ <-Aˈ <@@ & D1 ʾ 1 1Aˈ <>1-0₰ &ˈ D'>ˈ <-Aˈ &ˈD'0' 1ˈ 0ˈ<0ˈK1@@ D&@A1-ˈ&=ˈ D'>01@=ˈ< ʾ&=ˈ& D1

ʾ V &#+&!'#.11@22&.& ⁺ -/'!2 0 !' ʾ '@ < ʾ6!* +@!' "ᵖ ' @6!* +@!ʾ &2 2 %' ʾ ʾM ʾ" * ʾ "** ⁼)' -0ʾ &Z7."/ʾ r $ʾ-" " %)'$ʾ &Z ʾ! ʾ5ʾ Z D1ʾ$ 1

Q ' H' B10 ' 10 < ? ' 01' 1L 1-A1' I ' 1'.-1' 1?' 0'#'1-' <Ơ B1?L' H' 0&- ' <A ?..1\' &?' < 1'- \' C ' <0B?-' A10Ơ H?< 1' C&'- \' A10Ơ A' \' <'0&-Ơ 1=' B10 ' C@1>1- ℊ B&>1' A1' &?\' B1?]' H" &= ' A ?..1\' &?' < 1'- " 1-' C@1>1- ' 1-' 1>CƠ <A+1= ' ' A10Ơ <0B?= Ơ A10Ơ H?< 1' C&'- \' A1' <'0&-Ơ 0?0A' \' ' -10 ' C<Ơ @1- 1-B'&-' A?' & ' -1' A1' @10Ơ = ' -1' <001- ' A10Ơ &10Ơ <+<- A' \' ' 0" <0B?-' A1@1' H' =& =1B1' 1-' ><51' ?0A=1' 0&' ' 1-=1&=!1\' 1-' <0B?- ' R 1' 1=' ' &?' C&0010j 0'&-' <' <? ' &1CƠ H' B1&' 0&' ' B&>C 'Ơ 1-' 1@@1' =& =<' ? 1

1>' @1' & ' A1' @<001- ' ?0A' ' <A' & A1'.-1' I ' 10 <#@'1' H' 0" <0B?-' A1' H?1@' 10 < ' ?' B&-A'B'&-' H'ℊ 0&' ' C 0?1' CB? 1' &?' B&-01'@@1' A1' 1C1@@1 ' B<001 ' 1'01 ' &?' <A8' -?@@1 ' <0B?-Ơ A10Ơ ?..1>1- \' 1-A?\' A1,Ơ <0B?-Ơ `C0&-10' <A ?..1\' 1-' @1' A' ' C@1>1- ℊ&?' <0B?-0 P' 10 < ?\' &?' & A1-<-B10' ='A \' 1-' >10>1' @1' C@1>1- ' &?' <0B?-1' CB1@@1' A'B1@@1Ơ 1-' <0B?-1' ><51ℊ I ' B1&' A?1>1- ' C 11' 1-' C@1>1- ℊ H'ℊ 0&' ' <A ?..1' I ' 1' ' L1B?B'&-' B&>1' <' &' <?' & ' I ' <' &'<@>1 ' ' H?1@1 ' & A1-<-B1' I ' 10 < ?' #'1-' I ' @&'<@>1- ' 1-' ' I ' .< A1 ' @10Ơ = ' A?' &'<@>1' 0'#=1=' 10C' ' ?1@Ơ B&>1' 1>C& 1=Ơ 0&?-' ? 1\' I ' f >1- \' A1+<-' @1' & ' B&>1' C'1 ' 1-' @1' &@@1' A1' C@1>1-

1>' &? 1' B1&' @1' & ' C ' @<' . 1'-A 1' 01? 1 1' 1-' 1>CƠ <A+1=@' ' <A' & A1'-1' I ' 10 <#@'\ℊ H' e1' ,1>1-' A1 ' @10Ơ \' = ' 11 ' > ' A1' 1B& A1' 1-' &@@1' A1' C@1>1-' I ' H'ℊ 0&' ' 1- &@@1\' 1-' @<' D<-B1=='1ℊ 0" H' @10Ơ ?BB10Ơ 0&? Ơ A1' & \' @10Ơ A' \' 1@< 1' ' @<' =<'0<-B1' A1' @1? ' =&'<@ 11' C ' @1- ' 1- C& <@ 110Ơ <+<- ' H'@Ơ 1'1- ' @'+01' A'B1@@10Ơ D& Ơ A1T @<' D<-B1D'1' =<B1- ' >10>1' 1' ,1>1- ' 1-' &?' 1>CƠ <+1-' ' ' 1-01 <1- ' H' &?\' @10Ơ D1' Ơ A10Ơ A' \' = ' 1>)& 1@Ơ 1-' &?' 1>CƠ <+1-' ' <@ ='A0<-B1' A1' @1?' D&><.1' &-' =&'<@ 11' <+3-' H'@Ơ A1- ' @'51' A1' @1?' R 10Ơ D& Ơ A1' @<' D<-B1=='1' =1B1- ' <? '1@ ,1>1-

1>' @1' & ' <' @<' 1H?10 1' A10Ơ A' \' 10' A1' @<001- ' <+<- A' ' C ' @<' . 1'-A 1' 01? 11' A1' @? ' I ' 0&-' &'<@>1' 1-' 1>CƠ < 1-' ' <A' & AA-1' I ' 10 <#@'Ơ H' @10Ơ '00?10Ơ ><@L' & 1' 1-.1-A 1\' `A?' B& CƠ A1' B1?L' H' &-' <A ?..1\' I ' < 1'>\' 1C' @1' A'=' C@1>1- ℊ -1' @10Ơ '00?10Ơ ><@1' A&' @1? ' B& CƠ <' 1-.1-A 1 10Ơ P' <>>10Ơ -1'+1'.-1-' <Ơ C@1>1- \' -1' <Ơ B1-0A 'A-' & ' -1' A1' 01\' D1' 0ℊ -1'<>1-' A1' B&-8' 01'ℊ A?' & ' -1' A1' 01\' D1' 0;' 0<+<-' &? =&' \' H' @10Ơ '00?10Ơ =1-? 0<@10Ơ A10Ơ 8A' \' =& ?..1\' I ' &? ' '00?1' H?1?]' &-' <? 10Ơ 10 <-.10Ơ C'1 Ơ -1' 0&'1-' 1-A<><.1\' C' B10 ' 10 < ?

1>' @1' & ' <A' & A1-1' I ' 10 <#@'\' H' &? \' @10Ơ <-8 -?' 11Ơ =110Ơ B& &A'10Ơ I ' <?R0' BD< .10Ơ H &-H10Ơ =''' \8'&?' .0'> 1\' C' B1?L' &?' <0B?#' A1' B1?L' H' 0&-' <A ?..1\' <' &Ơ 1-' >10>1' @1' C@1>1-' C?'0Ơ @1' & ' A1' @10Ơ <'j 0&-Ơ CC1 1" 0&'1-' +&'A1\' I ' <A-?@@1\' I ' 1-?\' C ' -?@@

1>' & AA-1' 10 ' I ' 10 <#@" H' -=1' A' ' ?' @1' & ' A@' @10Ơ 01-1>1-\' A&?-Ơ I ' B&@@<B'&-Ơ A1' &?\' @1 ' #1-1j ='B10Ơ A1' H?1?L' @10Ơ <+&10&-Ơ =1? 1-' <Ơ C0&-10' < 1a]\' 1-' @1' A' ' C@1>1- Ơ A1' BD10B?-' &'A<-B1' <+1-?1' C?'0Ơ @10Ơ <'0&-Ơ A10Ơ A' \' C -10' CC1 1\' I ' 1&> -B1\' 6 =& 0C '0Ơ A1' B1?L' #1-1='B10Ơ A1' H?1?L' @10Ơ C&00100&? Ơ &?' -B?>#1- \' &-' < '='B<A&-' A1' - 1' A' ' ?' @1' & ' @10Ơ H?1?L' C&00100&? Ơ -=1' A' ' ℓ @1' & ' + 1' H'@Ơ 1- &'1-' @1? ' A' \' #1-1='B 0' '0<?+1\' <?L'-' H' B1?L' H" 0&-' 1'-\' C' +&'1' A1' C>? <A&-' 1-' '1?L' #1-1j ='B10Ơ H'@Ơ <+&-' 1-' < '='B<B'&-Ơ 0'@Ơ +&'@@1-' C? 0?'

#' ? ƒ&>'

-A' D<' D'Ơ < ? 1' 0D<@@ 1L 1-A' <-A' D&@A' C@<B1' <Ơ K1@@' &' D1>' KD'BD' #1' ?A.1A' & ' < <'- 1A' =& ') ' D101' '@' ' &'- 0' &=' D1' 0<'A' 1<0&-Ơ '-' D'Ơ C 101-' < @'<>1-ℊ <Ơ &=' D1>' KD'BD' 0D<@@ #1' ?A.1A' & ' < <'- 1A' '-' D1' < @'<>1-' '-' '>1' &' B&>1' &=' <-' &=' D1' ''' ' &'- 0' &=' 1<0&-Ơ <=& 10<'A' -A' ' ' 'Ơ -& ' D1' '-A'&=' D1', 'D.ℊ -& ' &=' D1' & AOℊ -& ' D1' 001-' &=' D1' &>>&-Ơ <=& 10<'Aℊ D<' '=' <-' 0?BDℊ KD'BD' =& =1' 1 D' '-' D1' <--1' <=& 10<'Aℊ #1' '-=1&==1A' '-' <-' <-A@ 1-1>1-ℊ & ' &00100'&-' &' & D1 0/ ?01ℊ D<' D<' 0D<@@ #1' B&>C '01A' '-' D1' 0<>1' !& =1' ? 1

ℊ D1' , '-.ℊ # ' D1' 001-' <=& 10<'Aℊ D<' D' & A<'-1A' <-A' 10 <#@'0D1A' D<' '=' <-ℊ &=' KD<' 0<1' S &' &-A' '&-' D<' D1' #1ℊ A&')' C &B? 1' & ' B&?-01ℊ &' 1C1<@@9<#<1ℊ 1+1 01ℊ & ' <A-?ℊ <-' ' &=' D1' ?A.>1-Ơ .'+1-' <.<'-0' <-' ')' <? 10Ơ C ' A'-<CB10Ơ ><A1' '-' D1'0<>1' <@'<>1-' & ' <= ' < B1@ &=' D1' 0<>1' '-' <-' K'01ℊ <-A' D<' A?@ ' C &+1A' '-' D1' <@'<>1-ℊ D<' D1' 0D<@@ #1' ?A.1A' <-A' D<+1' L1B? '&-' <Ơ <' <' & ' &' D1', '-.' <-A' &' D1' 1<@>' &' KD'BD' A'-<-B10Ơ <-A' <?10Ơ K1@@ <-A' @<K=?@@ ' &' #1' D&@A1-' <-A' a1C ℊ D1' & AO &=' D1' 1<@>ℊ <Ơ K1@@ C' '?<@ <Ơ 1>C& <@ℊ #1' 0K& -ℊ <-A' D<+1' ><A1' < DO'3#1=& 1' D1', '-.ℊ <Ơ ' ' <CC1< 1 D' '-' D1' &@@ &=' D1' <@'<>1-

ℊ & 1&+1 ' &?' &+1 A.-' & @ D1', '-.ℊ =& ' D1' >& 1' ? 1 ' '-' '>1' B&>'-.ℊ D< D' & A<'-1A' <-A' 10 <#@'0D1A' D<' D1' <D' &=' D1' 0<'A' & AO' 0D<@@ #1' C?' &=' 1B& A' '-' D1' <@'<>1-' &@@ℊ <-A' D<' ' ' #1' '>C@'1A' '-' D1' D<-B1 ℊ 0&' D<' D1' ?BB100& Ơ &=' <@@ D1'C 1@< 10ℊ ?C&-' D1' `=& =1' ? 1'OP' &=' D1' ' !1<@ ' =& ' D1' ' 1>C& <@ '10' #1=& 1' D<' D1 ' D<+1' '+1 '&=' D1' 0<'= 1' &?' &=' D1' D<-B1 ℊ 0D<@@ ><a1' D1' 0<>1' <D' '-' <@@ '>10' &' B&>1' -A' < &' D<' <@@ D1' 1' Ơ &=' D1' 0<'A' & AO' 1>C& <@'-' '>1' &' B&>1ℊ <' D1' -+<a'-.' &=' D1' ' &><.1' & ' !1<@ ℊ #1=& 1' D<' D1 ' D<+1' &00100'&-' &=' D1' ' <-AO' &?' &=' D1' D<-j B1 ℊ 0D<@@ ><a1' 0?BD' <-' < D

ℊ D1', '-.ℊ <' D1' 1H?10 ' &=' D1' 0<'A' &>j >&-0ℊ # ' D1' 001-' <=& 10<'Aℊ =& ' D1' >& 1' ? 1 ' &=' D'>' <-A' E3 ' D'0' 1<@>' `C=' -.@<-Aℊ <-A' <@0&' &=' D'Ơ 1&C@1P' '-' '>1' &' B&>1ℊ D< D' & A<'-1A' <-A' 0 <#@'0D1A' D<' D1' 00?1' <@10Ơ `&=' 0?BD' 1 0&-Ơ =& 1 ?A.1A' -&K' #1.& 1-' 0D<@@ -& hP' B&>1' &' D1= @=1>1-Ơ -& ' &' D1' &?-B'@Ơ &=' D1', '-.' -& ' &=' D'0' 1' 0ℊ -& ' 0D<@@ -& ' #1' &=' D1', '-./0' &'>B'ℊ -& ' &=' D'0' 1' 0;' <+'-.' <@K< 0' D<' D1' 00?10Ơ !1>C@10Ơ &=' D1' 0KA' 1 0&-Ơ =& 1 ?A.1Aℊ <-A' D1' ' 00?10ℊ KD'BD' D<+1' & D1 ' 0 <-.1' !< D1 09ℊ 0D<@@ -& ' #1' '-A<><.81A' # ' D'0' < ? 1

ℊ D1' -.' D< D' A<'-1A' <-A' 0 <#@'0D1A' D<' <@@ D1' --?' '10ℊ !110ℊ & &A'10ℊ <-A' <@@ & D1 ' D< .10' ><A1' & ' . <- 1A' # ' D1>' & ' <- ' &=' D1>' D<' #1' ?A.1A' <' & Ơ '-' D1' <>1' < @'<>1-ℊ <=1 ' D1' " < ' &=' D1' 1<0&-Ơ A&-1ℊ 0D<@@ #1' +&'Aℊ <A-?@@1Aℊ <-A' D&@A1-' =& ' -&-1

ℊ ''Ơ & A<'-1A' <-A' 0 <#@'0D1Aℊ D<' D1', '-.' 0D<@@ D<+1' D1' 101-' >1-0ℊ E'= 0ℊ <-A' &@@<' &-Ơ &=' <@@ D1' 1-1='B10ℊ KD&01' A+&K -Ơ K1 1' &' D1' 1 0&-Ơ < <'- 1A' '-' D1' 0<'A' < @'<>1-ℊ &=' 1+1 ' &'A<-B1' =& @1-' <=1' D1' 1<0&-Ơ &=' D1' 0<'A' 1 0&-Ơ A&-1' <-A' #1.?-Ơ 1LB1C ' D1' 1-1='B10ℊ &=' KD'BD' D1' K-1 Ơ &' -B?>#1>Ơ D<+1' <'='B<'&-Ơ &=' &?' 0<'A' &+1 1'.-' & A' D1', '-.ℊ KD'BD' K-1 Ơ =&1', '-.' K'@@ D<' D1' 0D<@@ U & ' D1' ' 0<'A' 1-1='B10' -A' 0<+'-.' `<@K< 09hP' D<' D1 ℊ KD'BD' #1' '-' # ' K<'&=' 1>?<'&-' `K' D P' 0?BD' 1-1='B10Ơ D<' D1 ' D<+1' D1 1&=' <'='B<'&-' '=' D1 ' K'@@ C? 0?1

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H1/'+&1& !/' .' !'M&-*(2 !+/!2' .-

ℊ ? ' &+1 1'. -' & A' D1' , '- .' D< D' & A<'-1A' <-A' 0 <#@'0D1Aℊ=& ' D1' . 1< ' D< ' '<-A' ==1 '&-' D<'D1' D< D' `' - P' D1' &?- '&=' D10 1 ℊ<-A' &' D1' `E1- '@10'0P' &=' D1' 0<>1ℊ <-A' =& <0> ?BD' <0' D1' , '- .' D' > 01@=' #1=& 1' D<' D1' A'A' <a1' D1' '.D' "' . -' '&=' , '- .ℊ <-A' D'0' &ℊ -&'?<#@1' !< D1 ' #1=& 1' D' >ℊ <-A' & D1 ' D'0' &##@1' &j .1-' & 0ℊ D<+1' #11-' < @0' &=' D1' 0<'A' &?- '&=' D10 1 ℊ <-A' =& ' D1' . 1<' &-&? ' &=' D'0' 1@A10 ' &-ℊ '=' E&A' 01-A' D' >' <- ℊ <-A' &=' D'0' & D1 ' 1' G KD'BD' 0D<@@ D<+1' D1' 0<>1' 1'. -& ' D1 1<= 1 ℊ # ' D1' 001- ' <-A' BB& A' &=' <@@ D1' & A0' C' ' ?<@ <-A' 1>C& <@ℊ <-A' <' D1' < 1 ' &=' D1' 0<'A' &> >&-0ℊ D< D' & A<'-1A' 0)' <-A' 0 <#@'0D1Aℊ=& ' D' >' <-A' D'0 A 0ℊ D<' D1' 0<'A' &?- '&=' D10 1 ' 0D<@@ #1' D1' '-B'C<@' '&=' D10 1 ℊ ℕ)' = &>' D1-B1=& D' -<>1A' <-A' D&@A1-' D1' '-B'C<@' '&=' D10j 1 ℊ K' D' <@@ D1' '#1 '10' <-A' ! <-BD'010' D1 1&=' D<A' <-A' ?01Aℊ <-A' '-' D1' 0<>1' <--1 ' <0' ' ' D< D' #11-' #1=& 1ℊ KD1-' D1' K<0' -<>1A' < @' &=' D10 1 ℊ =& ' 1+1 ' -A' & 1&+1 ' D1' , '- .ℊ &='D'0' B1 <'-' B'1-B1ℊ <-A' # ' D1' 001- ' <-A' BB& A' <=& 10<'Aℊ <-A' =& ' D1' -B 1<01' <-A' &-&? ' &=' D1' < 1' &=' K0 -' '-B10ℊ KD'BD' 0D<@@ #1' D1 1ℊ <-A' =& ' D1' <01ℊ &-B& Aℊ <-A' <-H?'@@' ' &=' D'0' @'1.1' 1&C@1' &=' D1' 0<'A' '-B'C<@' ℊ <-A' &=' D1' &?- '10' &=' !@'- ' <-A' D &C0D' 1ℊ <-A' &=' D1' 1'.-&@' '10ℊ KD'BD' #1' &'-'-.' &' D1'0<>1ℊ D< D' . <- 1Aℊ & j A<'-1A' <-A' 0 <#@'0D1A ' D<' D1' <0 @1' &=' &-0ℊ K' D' D1' 1'. -& ' &=' &>='1@A' <-A' <@1ℊ &' D1'0<'A' <0 @1' #1@&-. > .ℊ D1' <0 @1' &=' ` D'a1%P' K' D' D1' 1'. -& ' &=' D' a10@<-A' &' D1'0 ?A' <0 @1' #1@&-.'-.ℊ D1' <0 @1' &=' ` 0K<@A0 11 9/P' K' D' D1' &K -' K1@ℊ K<@@1A' K' D' &-1ℊ <-A' D1' ?-A 1Aℊ <-A' 1@1+1-' &K-0' &' D1'0<'A' <0 @1' #1@&-.'-.ℊ D1' <0 @1' &=' 0<#1@@ℊ K' D' D1' 1'.-& ' &' D1'0<>1' #1@&-.'-.' ' ` &'0P' D1' <0 @1' &=' "<@@'@< ℊ K' D' D1' CC? 1-<-B10' '-' D1' &?- ' &=' D &C0D' 1ℊ <-A' D1' 1+1 0'&-' &=' D1' A.-& ' &=' ` @1?1@/P' K' D' <@@' D1' ' CC? 1-<-B10ℊ KD'BD' AK< A' < @' &=' ? @<-A' D&@A1 D' =& ' 1 >' &='D'0' '=1ℊ <@@' KD'BD' &K-0ℊ <0 @10ℊ <-A' 1'.-& '10' <=& 10<'A' K1 1' &' 'BD< A' @< 1' < @' &=' ?-A1@@ℊ <-A' KD'BD' # ' =& B1' &=' D1' ?A. >1- ' .'+1-' <.<'-0' D1' 0<'A' < @' '-' D1' 0<'A' < @'<>1- ℊ #1' =& =1' ' &' &? ' &+1 1'.-' & A' D1' , '-.ℊ 0D<@@ #1' = &>' D1-B1j =& D' <--1L1Aℊ ?-' 1Aℊ <-A' -B& C& < 1' &' D1' 0<'A' '-j B'C<@' ' &=' D10 1 ℊ <-A' 0D<@@ KD&@@ ' <#'A1'<-A' 1><'-' &' D1'0<>1' '-B'C<@' ℊ <0' < B1@ℊ <-A' < 1>#1 ' &=' D1' 0<>1' =& ' 1+1 ℊ K' D&? ' #1'-.' .'+1-ℊ 0&@Aℊ <@'1-1Aℊ 01j +1 1Aℊ& 'A1C< 1A' = &>' D1' 3)' '-AC<@' ℊ &'<- ' 1 j 0&-' # ' <- 'K< ' D1 1<= 1 ' -A' D<' -&' E'=' -& ' E <-' < ' <- ' '>1' D1 1<= 1 ' #1' ><A1' &=' D1' 0<'A' '-B'C<@' ℊ -& ' &=' D1' <0 @10ℊ 1'.-& '10ℊ <-A' &K-0' <=& 10<'Aℊ &' -&' 1 0&-ℊ #? ' <@@' &-@ ' &' D1' , '-./0' 1@A10 ' &-ℊ KD'BD' 0D<@@ #1' '-B1' D1 1ℊ '=' ' C@1<01' D1' , '-.' &' ><a1' D' >G <-A' D<' D1' 0<'A' 1@A10 ' &-ℊ KD'BD' 0D<@@ D<+1' D1' 0<'A' '-B'C<@' ℊ 0D<@@ D<+1' <@0&' D1' 0<'A' <0 @10ℊ 1'.-& '10ℊ <-A' &K-0' <0' ?-' 1A' <-A' <--1L1A' &' D1' 0<>1' '-j B'C<@' ℊ K' D&? ' #1'-.' 01+1 1A' & ' A1C< 1A' = &>' D1' 0<>1' '-' '>1' &' B&>1@' &' D<' D1' 0<'A' 10'<- 0ℊ <-A@' 1-<- 0ℊ <-A' <@@ D1' -D<#' <- 0' K' D'-' D1' 0<'A' <0 @10ℊ 1'.-& '10ℊ <-A' &K-0ℊ 0D<@@ D<+1' ?01' <-A' 1- & ' <@@ D1' ' <-B'1- ' <K0ℊ '.D 0ℊ <-A' ?0 &>0ℊ D1 1' &=' &@A' '>1' 1<0&-<#@ ' D<A' <-A' ?01A@ <+1A' <-A' 101 +1A' <@K< 0' &' &? ' &+1 A.-' & A' D1' , '-.' D'0' 1.<@@ ℊ '#1 ℊ <-A' ! <-BD'01ℊ <-A' D1' '.D 0' &=' D'0' &K-' &+'A1A' 3)' <@K< 0' D<' D1' 0<'A' '-B'C<@' ' <-A' D1' 1'.-& '10' <=& 10<'Aℊ 0D<@@ D<+1' <-A' 1- & ' D1' 0<>1' <K0ℊ '#1 '10ℊ <-A' ?0 &>0ℊ 0<.10ℊ '.D 0ℊ <-A' ! <-BD'010ℊ &='&@A' '>1' '-' D1' 0<>1' 1<0&-<#@ ' D<A' <-A' ?01Aℊ <0' C@<'-@ ' <-A' KD&@@ ' <0' ' ' K<0' D<A' <-A' ?01Aℊ

' ' 0 1&C@1' " 'G '' ' 0 . <?- 1A' " ' G ' 6
' #' 0 $' ℕ' $
ISI; ! ' 0<-A' " 'G ' ' h :
%% S# ℕ' <@0& " 'G '

1>' -=1' ?' @1' & ' C ' @<' .0- ' BD'1 11' I ' <==1BB'&-' H'@' <A' <' @1' &?- 11' A1' 10 1' I ' <' @10' .1- \' A'B1 ' I ' C' <- ' H' @1' &" >10>10' A1+<- ' H'@ C '0 ' @<' D<? 1' A' .8' -' 11' A?' & ' I ' 0&-' D&- <#@1' C'1 ' A1+<- ' @? ' I ' <? 10' 010' -&#@10' C .1- ' &? 0' &- ' 10 1' &- 10' A?' A' ' &?- 11' A1' 10 1ℊ I ' C ' @1' . 1'-A 1' D&-&' A1' 0&-' 1'0-1' ='@\' 0" " '1?' @1' A&' . -1' I ' A10' <? 10' 010' DA 0' H<, &- ' >10>1' @1' '1' 1-' <=20ℊ A1ℊ <001- ' I ' <BB& A1' A1' &?\' @10' ?!' 10C' ' ?1@0' I ' 1>C& 1@0ℊ <' @<' C '1 1' A10' A' \' &10' <A' & A1' .-1\' ./- 1\' I ' 10 <#@'\' C ' @? ' I ' 010' #< 0ℊ H' @1' A' ' &- 11' A1' 10 1' 0&=' '-B'C<@ 11' A1' 10 1' I ' A10& 1'1-<+<- ' -& > 1\' I ' 1-?\' @<' '-B'C<@ 11' A1' 10 1' &+10H ' &? \' @10' D# 110' I ' = <-BD'010' 1- ' 1?1\' I ' ?01\ℊ I ' 1-' >10>1' @1' > 1' B& > 1' '@ <A' 10 1' CA1+<- ' H<- ' '@ 10 &' ' -& > 1\' &- 11' A1' 10 1' <' &?\' &? 0' ' &? 1' B1&' - 1' _ ' @1' & ' A1' 0<' R 1'-1' 0B'1-B1' I ' A1' @<001- ' I ' <BB& A' <+<- A' \ℊ I ' C/' @1-B 10B1' I ' D&-& ' `A1' @10 < P' A10' '-B10' H' , &?- ' '@@&1H10ℊ I ' C ' 1<01' B&-B& A' I ' -H?'@@' 1' A1' 010' @'1.10' A?' A' ' '-B'C<@ 1' I ' A10' &- 110' A1' ! @ - ' I ' <@&C' I ' A10' = '10' H" 0&>' <A.'0<- \' < B1@@10' <A' ./- 1\' & A1'-1\' I ' 10 <#@'\' H' @1' D<0 1@' &-0' &+1' @<' _ '1' A1' &>=1@A' I ' <@1' <' A' ' D<0 1@' 1.< A<- \ℊ @1' D< 1' A1' D' aℊ &+1' @<' = '1' A1' D' ' a10@&-A1' <' A' ' D< 1' 1.< A<- \ℊ @1' D< 1' A1' 0K<@' A10 1ℊ &+1' @<' +'@@1' #'1-' > ? 1' A1' C1 1' I ' @1' ?-A 1A1' I ' ?-0\1' +'@@10' <' A' ' D<0 1' 1.< A<- \ℊ @1' D<0 1@' 0<#1@@1' &+1' @<' = ' 1 ' <' B1@@1' 1.< A<- ℊ I ' @1' D<0 1' A1' " <@ @1 ' & 1' @10' <CC? 1-<-B10' 1-' @1' `A' 'Oℊ &- 11' A1' <@&C' I ' @<' 1+1 0'&-' A1' @<' = '1' A1' @&-1' &+1' &? ' @&? ' <CC? 1-<-B10' H?1@1' AK< A' &- 1'/A1' & 1@<-A' '1-' <' R > 1' A1' 0<' +'1ℊ &?\' @10' H?1?L' D<0 1@L' = '10' I ' '@@10' 0?0A' \' =1? 1-' <' 'BD< A' -<A.<' 0' &- 1' " < ?-A1@@ℊ I ' @10' H?1?L' C' =& B1' A1' ?. .1>1- ' 1-A?\' A1, 0' @1' A' ' &- 1' 1-' @1' A' ' C@1>1- ' 0&- ' <' -=1' = ' @1' & ' =& =<' \ℊ 0&'1D ' A10& 1' 1-<+<- ' <--1L1\' ?-'1\' I ' 1-B& C& 1\'<'@<' A' 1' '-B'C<@ 1' A1' 10 1ℊ I ' A1>&1 .1-' I ' 1>< -.-1-' 1- '1 >1-' <' >10>1' @<' '-B'C<@ 11' B&>1' CB1@@1' I ' >1># 1' A'B1@@1' <' &?\' &? 0ℊ 0<-\' 10 1' A&-1\' +1-A?\' <@'1-1\' A'001, 1\' &?' A1C '\' A1' @<' A' 1' '-B'C<@ 11' <' -?@@ ' C' <0B?-1' +&'1' 1-' 1>C0' <A+1-' ' ' H' -?@@1' A&?-' -1' .D' 1' 1-' <0B?-' 1>C0' <A+1-' ' -1' , <' =<' 1' A1ℊ A' 1' '-B'C<@ 11' -1' A1' @10' D<0 1@L' = '10' I ' '@@10' 0?0A' 10' <' -?@@? ℊ =& 0' 0&?@1>1- ' <@1'0-1' =' \' A?' & 'H', <' '-B1' '@@&1H10' 0 ' C@1 <' <?' & ' <@= ' 1C 1 ' H' B1@@? ' 1'0-1' =' \' H' < <' @<' A' 1' '-B'C<@ 11' <, <' 1-01>1- ' &? \' @10' A' \' D<0 1@L' = '10' I ' '@@10' B&>1' ?-'\' I ' <--1L1\' <' >10>1' @<' '-B'C<@ 11ℊ 0<-\' 10 1' A'0@' 01, 1\' &?' A1C '\' A'B1@@1' 1-' <0B?-' 1>C0' <A+1-' ;' 00'-' H' @10' 10B1<?- \' 1 1-<- \' I ' &?\' @10' 1-D' <- \' A1'-\' @10' A' \' D<0 1@L' = '1'0' I ' '@@10ℊ 1'1-' ?01-' I ' 1-&'1-' &? \' @1? ' <?-B'1-0' @&'10ℊ A &' ?=10' I ' B?0 ?>10' '@@1 H10' A<?-B'1-' 1>C0' 10&-<#@1>1-' 1?1\' I ' ?01\;' <?+1\' I ' 101 +1\' <?' & ' 0<' 1.<@'1' @'=1 11' I ' = <-BD'01' I ' @10' A &' 0' A1'0<' & &-1 ' ? +1?' <?L" &? =&'\' H' @<' A' 1' '-j B'C<@ 11' I ' @10' = '10' 0?0A' \' 1'1-' I ' 1-&'1-' >10>10' @10' @&'10' @'# 110' I ' B?0 ?>1\' ?0<.10' A &' \' I ' = <-BD'010' <?-B'1-1>1-' 1-' B1@@10' 10&-<#@1>1-' 1?1\' 5B ?01\' <?L" C@1'-1>1-' 5B 1-'1 >1-' B&>1' 10 &' ' 1?1' 5B ?01

A1+<- ' @1' B&>1^B1>1- ' A1' >10>1' @1' C@U>1' G @1' -&?-' A1' &- 11' A1' 10 1' BD<-.1 ' 1-' &?-' A1' '-A8' C<@ 11' A1' 10 1' 4 ' @<--1L'&-' I ' ?-'&'@ A10' A' \' D<08' 1'L' = '10' I ' @@10' <' B1@@1' -'1-B&- 110 1<- \

1>' <' @<' 1H?10 1' A10' &10' I ' A1' @<001- ' A10' _ 0' 10C' ' ?1@0' I ' 1>C& <@0' 0?0A' \' A A1-1\' I ' 10 <#@'" H' @10' D<0 1@' I ' @1' '0B&?- 1' A1' F B10 1' H?1@10' D&>< 0' -<A.<' 0' &- 1' A1' F < R' 1-&' ' 1-' =11@' I ' @10' H?1?L' C' =& B1' A1@' ?..1>1- ' 1-A?<' 1-B&- 1' @1' A' ' &- 1' 1-' @1' A' ' C'1>1-R' 01- ' A01\' 1-' @<' ><'-1' A?' & ' B&>1' =& &\@' &+10a' &?>10' D?-A 1A10' 1- 10' 0<@'-10' I ' #? 8' @1 '10' A1' 1K1' 0<@11' 0'#'1-' 1-' F B10 1' I ' 1-' @1' F BD1' B&>1' >@@&? @ I ' &? \' <?R ' C=' \' I ' BD& 10' < ' A' m' D<0j 1@' I ' '0B&?- 11' <CC? 1-<- \' I ' 1.< A<- \' 1-' <0B?-1' > I ' &?' B&@&? @ <?L" C@A-1>1- ' I ' 1D '1 >1- ' B&>1' @1' A' ' &- 1' 1<' < &' ' A1+<- ' @<' A' 1' =& I a? 1@ 0& 1- ' A1>&1 .1- ' I ' =1><- -.-1- ' <' --=1' _ ' @1' & ' I ' </01\' D1' 0' <' & \' &- 0@ 0<''\' 10 1' A&<1\' &?' .W- 1m' <' -?=@? ' &?' 10 1' A'001C1\' A1' 0<' B& &-1' 1 '<0B?-' 1>C0' <A+1 @'

1>' 1-' >10>1' @1' >< 1' ' &? \' @10' D?-A 1A10' &?>10' &? 10' @'# 110' I ' = <-BD'010 ' H?1?L' D&'D<0' -<A.<' 0' " ?1' A<' E@&?B10 1' 1-&' ' I ' <+&' ' 1-' A' &- 11' A1' 001L' A1@' A>>' I ' . > 1' - 1' ' @1' & ' I ' A1@' & ' AKm A' 0&-' '1@@' @1 ' H?1?L' =1? 1- ' A<?-B'1-' 1>C0' <&-1L1\' I ' < ' a1&- 11' A1' 001L' BT--1' CB1@@1' A B1@@1' I ' H?1?L' & 1' C' @1' =& ='A ?B1' A1' @1' A' ' " ?1' 0&- ' 1-' @<' >< -' AD' & ' B&>1' =&' I ' \@' 0&'1-' A1>&1 j .1- ' C' 1>< -.-1- ' <' - 1' A' ' ' @1' & ' C' <' 010' D1' 0@ 1 &'- \' <--1L1m' I ' ? -'\' <' @1' A' ' '0B&?- 11' A1' Q00RL' B&>1' CB1@@1' Aa1@@1' <' &? \' &? 0@ 0<>\' 10 1' A&-1\' &?' .3- 16' <' -?@@? ' &?' 10 1' A'001@ 1\' ?' A1C '\' A1' >10>1' 1' '0B&<- 11' 1-' <0B?-' >'C0' <A+1-@

1>' @10' _/0' ' =1? 1- ' <'2C1@@<- \' 1-' @1' A' ' C@1>1- ' 10 <00<+&' ' AK< A' " ?1' " <?>< @1@' D&>< 0' " ?1' A1' ? =@' &D-' " ?&' " 1LB10 1@' &D-' < a 0' A1' " & 0@' &D-' &- ' A1' <=@' D&>< 0' &- ' A1' E@&?B10 '0' I ' F 5&' @'<>' &< ' A1' F '@ 10' C '1 1 ' <?' & ' 1B' <- \' I ' >&-8' 0 <- \' B&>1- ' A-0' 0' H' 0&- ' &-+@ \' I ' < 1'- \@' > <00<+&' ' @1 " ?B' A1' E@&?B10 R' I ' @10' &- 10' " < --8' A1'@' I ' F < =@ <001>#@1\' <' < -.1 '=& B'#@1>1- ' I ' 1-' .3- ' -&>'# 1' <' =1 1' A1' . 1 1' U' ' =B< 1 0' 1- 1' @1' & ' I ' 1?L@' H' @10' @'1.10' A?' & ' -1' C &'1- ' <CC &BD1 ' <?' & ' 1-' 0&B&? ' A1' @? 0' I ' 1-0 ' +>A 1- ' 1-' '1e' =& B'#@1' ><'51' <' 0&-' <@&'0' A1' F 1 '-' < <'1\' A1' .?1 1@' 0" H' @1' & ' -1' @10' C &' ' <@& 0' 10'0 1 ' 0<-\' R0.3- ' C' @' A1' 0&-' B& C0' I ' A10 ?1A&-' A1' 0&-' C&1C@1@' A<'0' 1-0" C' B&D1 A&-' I ' B&>C?@0'&-' @10' A' \' " ?1' I ' &- 10' ='B1- ' @1' T ' >&-1 ' ' >' A1>1- ' <' F 10 ' ' @1-A1>< -' A1' @<' ? '='B<A -' A1' -=1' " <>1' <-' A1' 0&-' 1.-1' ?-8' \'0>1@' H?1@1' C@1>1- ' '00'D ' B&>1-B1\' @10' \' " ?1' I ' &- 10' 1 ' '1@' =& B'#@1' ><'51' =' 1- ' B&- '-?1 ' <' @<' @ - G' I ' 1-' B1@' A&-1 1- ' C@1?01 0' A'+0010' ?..1>1- \' 0'#-' A1' '-& ' A1' #'D>10' B&>1' <? B1>1- ' 0? ' A' 010' @'1.10' A?' &'@ I ' A&-1 1- ' ?..1>1- \' A1' =& =1' ? 1' A1' R 10' I ' 1D \' #'1' 0' I ' A'< 1?L' A&< ' I '0&- ' B&-+' \' A1' F ' ' 1 &-G 1 ' <?L" C ' , 1'-0' H?10 '&-0' H' =1? 1- ' A1><-A1\' C' @1' &" &?BD<- \' &-' 10 < ' I ' 1.<@'1' A1' 1'-0' 010' ?0 'B10' <A&-H10' <' & -.D<>' >10>1' <-9 I ' C ' @1? ' 10C&-0' A'B1@@10' A&-1\' <' &" 0' >10>10' @10' H?10 '&-0' >1 >10' @10' ?0 'B10' =1? 1- ' =& ?..1\' A1' @1? ' +'10' I ' ?..1>1- ' 1-A?\' A1 0' 1?L' A1' =& =1' ? 1' A1' @1?

#1=& 1' D1' #1.'--'-.' &=' D1' 0<>1' < @'<>1- G D1' <>1' &=' D1' &?- ' &=' D10 1 ' BD<-.1A' '- &' D1' <>1' &=' D1' '-AC<@' ' &=' D10 1 @' <-A' D1' --1L'&-' <-A' -'&-' &=' D1' 0<'A' <0 @10@' A.-& '10@' <-A' &K-0' &' D1' 0<>1' -& K' D0 <-A'-.

@' ' D1' 1H?10 ' &=' D1' &>>&-0@' <-A' # ' D1' 001-' &=' D1' & A0' C' ' ?<@' <-A' 1>C& <@' <=& 10<'A' ' '0' & A<'-1A' <-A' 0 <#@'0D1A ' D<' D1' <0 @1' <-A' D1j '==K'Ba' &=' ` F ' -BD10 1 U ' KD'BD' D&><0' @< 1' < @' &=' F < K'Ba' A'A' D&@A' '-' ! 11@' <-A' KD'BD' D ' =& B1' &=' D1' ?A.>1- ' .'+1-' <.<?'0 ' D1' 0<'A' < @' '-' D1' 0<'A' < 8' @' > -1- ' #1 01'\1A' '- &' D1' , '- ./0' <-A0' <0'=& =1' @ K' D' ` &K-0/P' 0-A' ?-A 1A0@' 1- 0' <-A' ` <@ D&?010@/P' <0' K1@@' '-' F & B10 1 ' <-A' '-' D1' F 'BD@' <0' 1@01KD1 1@' <-A' <@@' D1 ' C &=' 0' <-A' D'-.0' &' D1' 0<'A' <0 @1' <-A' D18' '='K'Ba' C1 <'-'-.' <-A' #1@&-.'-.' '-' <- K'01' & ' &@&? @ <0' =?@@ ' <-A' KD&@@ ' <0' D1' 0<'A' < @' #1=& 1' D1' 0<'A' ! & j =1' ? 1@' D<A@' 0D< ' #1' <#'A'-.' <-A' 1-0<'''-.' &' &? ' &+1 1'.-' & A' D1' , '-.@' <-A' &' D'0' 1' 0' =& ' 1+1 @' K D&? ' #1'-.' . +1-' & ' . <- 1A' &' <- @' & ' &' D1' 01+1 1A' = &-' D'0' &K-' '<-' '>1' D1 1<= 1

@= @' -' D1' 0<-K' <--1 @' D< ' <@@' D1' ?-A 1A0@' &? -10@' &? 0@' '#1 '10@' <-A' ! <-BD'010@' KD'BD' D&j ><0' @< 1' " ?a1' 8&=' E@&?B10 1 ' A' A' D&@A' '-' D1' &?- ' ' 001L' &=' D1' E'=' <-A' E <-R' &=' D1' , '-.@' <-A' &=' , '-.' AK< A' D'0' E <-A=1 D1 @' KD'BD' K1 1' &=' &@A' '>1' <-j -1L1A' <-A' & -1A' &' D1' D1 '==K'Ba' &=' 001L@' <0' < j B1@' &=' D1' 0<>1@' <-A' KD'BD' -&K' # ' ! & ='< ? 1' &=' =@'1' 0<'A' " ?a1@' #1' '-' D1' , '-./0' <-A0' <0'=& =< ' D<@@' #1' <#'T=1.' <-A' 1==@<'-D'.' &' D1' , '-.' <-A' &' = '0' A 0@' &'-1A@' <--1L1A@' <-A' ?-' 1A' &' D1' D1 '==K'Ba' &=' 001L@' <0' C< B1@' &=' D1' 0<>1' =& ' 1 @' K' D&? ' #1'-.' .'+1-' ' . <- 1A' &' <- @' & ' &' #1' 01+1 1A' & ' A1C< 1A' = &>' D1' 0<>1' D1 ' K'Ba' <' <- ' D-1' D1 1<= 1

!' D1' & A0@' KD'BD' K1 1' CC1@@<- 0' '-' D1' 0<'A' < 'D?-1- @' D<' '0' &' < @' AK< A' " ?a1' &=' ?>< @1@' D&><0' " ?a1' &=' ?= @' &D-' " ?a1' &=' L1 1 @' &D-' >H?=0' &=' " & 01 @' &D-' < @' &=' <@'0#? @' D&><0' < @' &=' E@&?B10 1 @' A' F '@@'<>' < @' &=' F '@ 0D' 1@' C < 1A' &' D1' , '-.@' 1B'= -.' <-A' 0D1K'-.@' D&K'B1 <'-' & A0@' KD'BD' #1' B&-+'= 1A' <-A' < <'- 1A@' D<' '0' &' 0< @' D1' " ?a1' &=' E@&?B10 1 ' <-A' =&1' < @0' &=' ?-A1@' <-A' F < K'Ba@' <001>#@1A' <' 1 '-.1 @' =& B'#@ ' <-A' '-' . 1<' ?>#1 @' `' -' D1' <--1' &=0P' F < @' ><A1' < '1 0' #1 K'L' D1' , '-.' <-A' D1>@' D<' =&1' , '-./0' @'1.1' 1&C@1' >'.D' -&' <CC &<BD' &' D1@' , '-.' &' 0?BB&? ' D' >@' <-A' 0&' <>1' '-' 0?BD' =& B'#@1' <--1' &' D'0' <@<B1' &=' F 1 8' >'> 1@' < < 1A' '-' <--1' &=' F < @' D<' D1' , '-.' >'.D' -&' D1-' 10'0 ' D1>' K' D&?' . 1<' 1 '@' &=' D'0' &A ' <-A' " 10 =? &-' &=' D'0' 1&C@1¢ 0&' D<' # ' &1 j B'&-' <-A' &>C?@0'&-' =&1' 0<'A' " ?a1' <-A' < @0' ><A1' D1' , '-.' &' 0?>>&-' <' < @' <>1-' <' F 10 >'-0 1 ' =&1' & j &K' <= 1 ' =&1' ? '='B< '&-' &=' &? ' <A @' D1' L' ' 1< ' &=' D'0' 1' .-@' KD'BD' < @' <>1-' 0&' #1.?-@' =&1' 0<'A' " ?a1' <-A' < @0' '-' 0?BD' =& B'#@1' <--1' B&- '-?1A' &' D1' -A@' <-A' '-' D1' 0<>1' A'A' .'+1' >< -'A'+1 0' ?A.>1- 0@' <0' F1@@' &=' " 1< D' &=' <-' <0' & D1 K'01@' ?C&-' A'+1 0' &=' D1' , '-./0' @'1.1' 1&C@1@' <-A' A'A' .'+1' ?A.>1- ' &=' ! & j =1' ? 10' &=' <-A0@' 1-1>1- 0@' E&&A0@' <-A' D< 1@0@' KD1 1&=' D1 ' #1' B&-+'=@ &=' '.D' 1<0&-9 <-A' <@0&'=& ' B1 <'-' ^?10 '&-0@' KD'BD' K1 1' A1><-A1A' # ' =&1' , '-.' &?BD' -.' D'0' 0 < 1' <-A' 1<@ @' &=' B1 <'-' &=' D'0' ?0@' 'B10' D1-' <' & '-.D<>@' D1' 0<>1' 1< @' <-A' =& ' D1' ' -0K1 0' &=' D1' 0<>1' .'+1-' &' D1' , '-.' ?C&-' D1' 0<>1' ^?10 '&-0@' D1' 0<>1' ?0 'B10' K1 1' =& ?A.1A' &=' D1' ' '+10@' <-A' ?A.>1-' .'+1-' <.<'-0' D1>' &=' ! & =1' ? 1' &=

C(' ("")' ?' L 6

@' O$ ' (' & - 1 ' %'Q D $ ' *' '$$

/' & ><a1' " 'G '

W 2 !' -/' !"& 7&#E' . V ."#!2+!"' C#' '12 ! /' &-' !' M&-*

0D1 '=K'Ba ' BB0&=' '<1L' +10 1A' '-' D1' ' - .@

W = &-&.-?. ' #!" &- 0/*!?' &-' W 6& 2 ' 1&"&1+=@-.' D1' ? ? 1' I' .1 1&22&.-' .' 6&#') " . ' ! /" "&/' !' #!!/&-*:&- !' 3 "+& 1!-' ** 'B@ 2' C1A1A0

D1' ' <-A0ǵ 1-1>1- 0ǵ E&&A0ǵ <-A' D< 1@0ć /)' D1' 0<'A' "?a1' <-A' < @0' ><A1' A'+(0' < ? 10' <-A' A'j -<-B10' '-' D1'0<'A' < @'<>1- '<' D1' ' F '@@;' F D1 1?C&-' D1' 0<'A' CC1@@<- 0ǵ B&-0'A1 '-.' D1' ?>>&-0' &=' D1' 0<'A' < @'<>1- ' &'#1' ><A1'1LC 100@ '<.<'-0 ' D1' '.D ' &=' D1', '-./0' &K-ǵ <-A' B&- < ' &' D1' '#1 '<-A' ! <-BD'01' &=' D'0' 1 0&-' <-A' & <ǵ 0 < 1ǵ K'@@'-.' &8 <BH?' ' D1>' &' D1', '-.' <0' D' ' =1' D=?ǵ @'1.1' 1&C@1ǵ C < 1A' D'>' D<' D1' 0<'A' < ''<@= 1-' #1' <A-?@@1A' <-A' B@1< @ ' D&@A1-' =& ' -&-1ć <-A' D<' <@ǵ D1' ?A.>1- 0ǵ A'-<-B10ǵ <-A' < ? 10ǵ ><A1' <-A' .'+1-' '-' D1' 0<'A' < @'<>1- ǵ <-A' <@ǵ D'-.0' A1C1-A'-.' ?C&-' D1' 0<>1ǵ 0D<@ǵ #1'<A-?@@1A' `<-A' 1+&a1A9/P' <-A' D&@A1-' =& ' -&-1ǵ <0' <' D'-.' A&-1' K' D&?' ? D& ' ǵ <-A' <.<'-0' D1' F '@ǵ <-A' '#1 ' &=' D1' , '-.ǵ <-A' D1' '.D ' &=' D'0' &K-ć <-A' D<' D1' <-A0ǵ /<'1 <1- 0ǵ !110ǵ <-A' A &K0&-0ǵ <-A' <@ǵ & D1 ' &0010<&-0' 01'\1A' # ' &=&? ' &=' D1' 0<'A' ?A.>1- 0ǵ 0D<@ǵ #1' 10 & 1A' <-A' AA'+1 1A' &' D1>' KD'BD' K1 1' 0&' ?A.1Aǵ &' D1>' <-A' &' D1' ' 1' 0' -A' <@0&' D1' 0<'A' &>>&-0' C < 1A' &' D1' , '-.ǵ <0' D1' 0<'A' CC1@@<- 0' C < 1A' <CA' 0<'Aǵ D<' D1' ' - 1-' K<0' &' D<+1' C < 1A' @'a1K'01ć -A' D1 1?C&-' D1' & A0' C' ' ?<ǵ <-A' 1>C& <ǵǵ <-A' D1' ` &B? 1 0/P' &=' D1' @1 . '01+1 <@@ ' 1L<>'-1Aǵ <00 > 1A' 1LC 100@ ǵ D<' D1' 0<'A' < @'<>1- ǵ <-A' <@ǵ D1' < ? 10ǵ ?A.>1- 0ǵ A'-<-B10ǵ <-A' <@ǵ & D1 ' D'-.0' D1 1&=' ><A1' <-A' =&@@&K1Aǵ 0D<@ǵ #1' +&'A' <-A' <A-?@@1A' <-A' &=' -&' !& B1' -& ' <@?1ǵ <-A' 10 ' ? &-' ><A1' <0' <=& 1' '0' 0<'Aǵ -A' <@0&' <0' K1@ǵ D1' &-@0' C' ' ?<ǵ A' 1>C& <ǵǵ <AA' D1' ` &B? 1 0' &=' D1' @1 . '01+1 <@@ ' 1L<>'-1A' &=' D1' 0<'A' ^?10 '&-0ǵ <-A' &=' D1' -0K1 0'&=' D1' ?0 'B10' <=& 10<'Aǵ D1' 1-& ' KD1 1&=' =&@@&K1 D' '-' D'0' < -'1

90!2&.-2' 0' .' !L' 0/*!2' -' '6&#' ' "!2 ! &-*' !' 0 !' +.'6&#' ' -/' !' b.1-022&.0' !-'1 /!'

W' 1>& <-A?>ǵ D<' D1' LL+ 'A< '&=' D1' &- D' &=' ?.?0ǵ D1' L' ' 1<' &=' D1' 1'.-' &=' '-.' 'BD< A' D1' 1 &-Aǵ <' D1' <0 @1' &=' & '-.D<>ǵ #1=& 1' &?' 0<'A' &+1 1'.-' & A' D1', >.ǵ &#1 ' 10'@'<-ǵ D'1=' ?0j 'B1ǵ &#1 ' 1@a-<Cǵ D'1=' ?0 'B1' &=' D1' &>>&-' 1-BD' `V)Vǵ &D-'=@&@ 1ǵ &.1 ' ! A D1<' 1ǵ <-A' F '@@'<>' ? .D1ǵ , -'.D 0ǵ !1@@&K0' &=' D1' <'A' &#1 ' 1@a-<Cǵ <-A' &D-' &a &-ǵ &-1' &=' D1' , D@.0' 1 1<-0' <' D1' <Kǵ#1'-.' C1 0&-<@@ ' 1H?' 1Aǵ'-' 101-B1'&=' D1' & A0' <-A' & D1 ' F' -1001ć ?-A1 ' F ' 1-' # '&?' 0<'A' &+1j 1'.-' & A' D1', '-.ǵ' `'-/P' D1' !<' D' <-A' '1.1<-B1' # ' KD'BD' D1 '#1'=' >@ '#&?-A1-' ' D1' 0<'A', '-.ǵ D<' D1 ' 0D<@@ ?@ ' <-0K1 ' &' B1 <'-' ^?10 '&-0' ?-A1 ' K ' 1-ǵ <-A' #1=& 1' D1>' 1B' 1Aǵ <-A' ?C&-' D1' 0<>1' # ' D1' ' "'0B 1 '&-0' &'0< ' D1' <K G

'/!". ."@ .' !' &-*)2L' B"!".* &'!'"

! ' 0ǵ 'K<0' '-H?' 1A' &=' D1>' F D1 D1 '` D1'0<>10P' -1K' <?1'<-A' A>< B1ǵ <-A' &>>'00'&-' ><A1' /)' '-' D1' @<0' <@'<>1- 'D&F1-' <' F10>'-0 1ǵ #1' D? =?@' &' D1', '-./0' & <@ 1 &.< '+1'R `F D1 1?- &' <@@ &=' &-1' '-A' <-0K1 1A9OP' D<' D1 '#1' D? =?@ǵ <-A' 0C1B'<@@ '#1B<?01' D1 ' K1 1'<.<'-0' D1' , '-./0' F '@@

. 7' !' 3".#0"!"2' C#'7!"!' 0-&2 ;+!'

1>ǵ 'K<0' '-H?' 1A' &=' D1>ǵ &K' D1 '&?.D ' &' #1' C?-'0D1Aǵ KD'BD' C &B? 1A' D1' 0<'A' < ? 1ǵ A'-<-B1ǵ <-A' &>>'00'&-' &' #1' ><A1R` F D1 1?- &ǵ K' D' &-1' 0j 01-ǵ D1 '<-0K1 1A9OP' D<' D1 'A101 +1' &' #1' C?-'0D1A' # ' <C' <@ <'-ǵ D<' '0' &' 0<ǵ &=' "1< Dǵ ?-@100' D1' .ǵ'-' D'0' < ǵ &='D'0' E <B1ǵ F'@@ C< A&-' D1>

1>ǵ 'K<0' '-H?' 1A' &K' D1 '&?.D ' &' #1' C?ǵ <D1Aǵ K F BD' 1LB' 1A' D1' 0<'A', '@ ' &' B&-01-' &' D1' ><a'-.' &=' D1'0<'A' < ? 1ǵ A'-<-B1ǵ <-A' &>>'00'&-R` FD1 1?- &ǵ &=' &-1' '-Aǵ D1 '0<'A9OP' D<' ?-@100' D1' , '-.' K&?@A' .'+1' D1>' D'0' < A&-ǵ D1 ' &?.D ' &' #1' C?-'0D1A' # ' <C' <@ <'-

' %' ' 2$D %#' 1 * %#' '3". " ' D '! '5 @$ $" 'L$ %' 'E 1' $ % ' -$ ' ' ?< %'- % '!$'0 '9" $ ' '" $"* '1 2 '6 0 +

RO 10' 1- \' #'1-0' I ' BD< 1?L'ć I ' @10' A' \' " ?1' I ' &- 10' =' 1-' A'1010' 10 < ? \' I ' & A1-<-B10' 1-' @1' A' ' C@1>1-' '< @&? +&@?- 11;' ? ' H?& ' @10' A' \' <CC1@@<- \' B&-0'A1 ' <- \' @1 ' 0&>&-0' A?' A' ' C@1>1-' 10 1' =1@ ' 1LC001>1-' -B&'@='@1' @<' A &' ' A1' @<' B& &-1' A ' & '=1' '=1' ''# 11' .0' =3<8' BD 01'A1'0<' C0&-1' I ' &'<@ 10 < ǵ @1? ' 1 A@<- \'<BH?' 1 ' <A' & ' B&>1' 010' @&'< L' @'.10' @? ' C '1 1 ' 'H ' @1' A' ' C@18' > <' ' 0&'@' <A-?@@1\' . ' 1-?\' C ' -A@' &? ' &? 1>1-' 9.B' H' &? \' @10' ?..1>1- \' & A1-<- 10' .R' 10 < ? \' =<' \' .B' 1-A?\' 1-' @1' A' ' C@1>1-' .B' &?\' @10' A1C1-A1-B10' A'8' B1@@10' 0&'1-' <A-?@@1\' 1+&a1\' 1C1@@1\' . ' 1-?\' C ' -?@ǵ B&>1' BD&01' =<' ' 0<-\' <?A& ' 11' .B' 1-B - 1' @<' +&@1- 11' .B' @'=1 11' A?' & ' .B' @<' A & ' ' A1' 0 ' & A-1ć .B' H' @10' R 1 ' =110' <+&10&-0' .B' <? 10' C&0010A&-0' B&-H10' 01'01\' C' BA@ ;' # !' A' \' ? 1>1<B\ǵ 01=1-B' 10 ' - \' .B' @' 1a' <0' B ?L' H" =1? >' ' 1-0" H?..1\' '<' @1? ' D> 0' ' <-0 " @10' A' \' &10' C '1 1-' <?' & ' B&>1' @10' A' \' <CC1@@<- \' <+&'1-' C '1\' I ' A'0&'1-' H' @1? ' 1- 1-' =1?0 ' A<+&' ' C '1\' 01>#@<#@1>1-;' ' 0' B1&' @10' !' 10C@ ' ?1@10' .B' 1>C& 1@10' .B' @10' C1? 1A 0' A1' @<' @1 .'1' 01, <@>1-' 1L<>'-1\' <001A 1 B-' 1LC001>1-' H' @1' A' ' C@1>1-ǵ .B' &? \' @10' 10 < ? \' ?..1>1-' \' & A'-<'>10' B &?\' <? 10' BD&010' A=' =1a\' .B' 0?#0' 01B? \ǵ <>1-' 1<001\' ' <A-A@1\' P' A1' -?@' =& B1' I' +<D ć .B' 10 ' ?B'&-' =1@ ' 1&-'1' A&0?a' 10 ' A' ' ' <?L" &'#-' @10' _ 0' 10C' ' ?1@0' .B' =1>C& 1@0' .B' @10' CB? 0? 0' A1'@<' @1 .'1' B&>1'@10' A' \' 1 '=1? 1-' 01, <@@ >1-' 1L<>'-1\' A1' @10' A' \' H?10 '&-0' .B' A1' @10' 10C&-j 010' A10' ?0 'B10' 0?'0A110ǵ @1' 1-&' (' H?1@10' 01-0?' G 10ǵ HA' +'B10'>&' H?'- &' A'1' 1-0=1' ?.?0 eǵ --&' 1.D" 1.'0' '1@ 0 A" ?-A1B?-&ǵ <C?A' < -'>' &8' - ' B& <>' AB&' &' 1.1ǵ B ?0' & '@'<-' <C' <@ ?0 ' =1' '@&0' 1<@a-<C' H'' <=' ? ' 'A18B>' <-B&' " < ' 1.'0' A ' I ' &D10' &@' B ' ' !?@ D& C' .B' F ' 0' ? .D' '@' 10' &B'" A " &#A' &<@=1-<C' <B' & 10' &=B1 &-' M+'1-0' AB ' A-" 1.'0' <A'@1.B>ǵ '-' 1-B'<' A-&C' ' <@'& ' 10 '?>' 0?#0B 'C & ' C0&-<@'R' 1L'0 1-10' C' A1>' A->'-=>' 1.1>' 1H?'0' " '-'='A1'.B@1.'<= B'<' H?'#'1'A1>' A-&' -=&' 1." =' >'R' 0?-' <0 '=@" HA' <A' M <0' H?10 '&-10' '-=1 '?0' A10'.-< 10' ' B& <>' 1'0' 1B< < <0' =@A1@'R' 10C&-8' A1 1-' B' 0?C' 1'0' 01A &' A'0B 1A#1 " 0?< -' @1.1>' A' 1-;' -' C '<' H?1 1#<' <#' 1'0ǵ <-' ' <' -&+<' < ?8@ >< .1' 1=1<<1'&' < Hǵ 8 &-?00'&@ =D<' B 1A <' '-' ?@ '>&' C@'<>1-&' <C?A' F 10 ' ' B1@1@K< &@ A1 &.<-' 1.<,1' B C &.< '+1' A' ' A-" --' 1.'0;' A' H?<>' H?'A1>' H?10 &-1>' ?-<-'>'R' 10C&-A1 &-ǵ HA' A1 &.<-ǵ C01 ->' 1&' HA' =5<-' B&>0' +&@?-<1>' 1.'0

1>ǵ H?1 1#<' <#' 1'0' H?<'@R' 'C" H?" <?>' & A'8' -<B#1>' B' B&>'00'&-1>' C2AB<' ='1 " C1? < ?-' 0?-' C?-'8' 1-A';' A' '0 <>' H?10 '&-1 D' ?-<-'>'R' 10C&-A1 ?-ǵ HA' C1A<' 1<Ca<' 0A ' >& '0' C?-' " >1 1-ǵ'-'0" 1L' '-' 1<' + ' ' +&@ I ' 1'0' . <>' '-A?@.1 1

1>' H-1 1#<=' <#' 1'0' H?<@'R' 0?-' ' ' C?-'1-A" H?" 1.1>' CA1>' 1LB' < ?-' <A' B&-01-B'1-A' 0 < ? " & A'8' -<1#'0' .B' B&>'00'&-'0' D? ?0>&A" =<B1#'ć A' H?<>' H?'j A1>' H?10 '&-1>' ?-<-'>'R' 10C&-A1 ?-ǵ HA' -'0" 1L' '0' . <>'=1 ' '0?-' C1-<' B<C' <@" &' C?-'1-A'

D< ' '=' D1' 0<>1' ?A. >1- ' K1 1' -&K' &' #1' .'+1-ℊ D1' 0<>1' ?0 'B1Ơ <-A' 1 1<- ' <=& 10<'A' K&?@A' -& ' .'+1' D1' 0<>1ℊ #1B<?01' ' ' 011>1A' &' D1>' D<' D1' 0<>1' ?A. >1- ' 'Ơ 1+&B<#@1' <Ơ 1 &-1&?Ơ '-' 1+1 ' < ℊ

-' F '==@100' KD1 1&=' D1' ?0 'B1Ơ <-A' 1 1<- ' <=& 1j 0<'A' &' ` D'Ơ 101- ℙ D<+1' 01 ' D>' 1<@0' D101' 1-' #1'-.' F ' -10010ℊ D1' 1+1 1-A' !< D1 0ℊ D1' & AƠ @1L<-A1 ' BD#'0D&C' &=' & aℊ &#1 ' BDj #'0D&C' &=' " ?#@'-ℊ &D-' '0D&C' &=' " ? D<>ℊ D&><Ơ '0D#C ` D10 1 ℊ ℙ &D-' '0D&C' &=' <-.& ℊ &#1 ' " ?a1' &=' 1@<-Aℊ 'BD<1@ < ℊ &=' ?==&@aℊ &D-' 'C&-' @1=a=' <-A' &D-' @<a1')' " < 1A' D1' " < ℊ @<B1ℊ &- Dℊ <-A' 1< ' <=& 10<'A J0

@@' D1' 0<'A' -0K1 0' A1 ' B@< 1A'@1.<@G

F D'BD' ^?10 '&-0' <-A' D1' -0K1 0' &=' D1' 0<>1ℊ <Ơ K1@@ #1=& 1' D1', '-.' <-A' D1' & A0ℊ <Ơ #1=& 1' D1' &>j >&-0ℊ F1=1' 1<A' <-A' C1 B1'+1Aℊ <-A' ' ' K<Ơ A1><-A1A' &=' <@@ D1' <10' & ' D1' <@'<>1- ℊ D&K' D1 ' D&?.D ' &=' D1' -0K1 0' <=& 10<'Aℊ <-A' D1 ' 0<'A' D<' D1 ' D&?.D ℊ D<' D1' 0<'A' ?0 'B1Ơ ><A1' <-A' .<+1' D1' ' -0K = ' A?@ ' <-A' @<K=?@@ ℊ <Ơ .&&A' <-A' @<K=?@ @'1.1' 1&C@1' &=' D1', '-.' &?.D ' &' A&G <-A' '-' D1' 0<>1' <-@1 ' ' ' D& '<Ơ&=' a1D&-'@1< -1A'' -' D1' <Kℊ <-A' F '@@'<>' <-a1=& Aℊ <-A' F '@@'<>" 1-BD@1 ℊ D1', '-./Ơ 1 1<- 0ℊ A1><-A1A'# ' D1', '-.'&=' D1' ' A+'B1' '-' D'Ơ 1D<@=ℊ R<'A' D<' D1' -0K1 0' K1 1' .&&A' <-A' @<K=?@G <-A' D<' D1 'K&?@A' D<+1' .'+1-' D1' 0<>1' -0K1 0ℊ '=' D1' 0<'A' ^?10 '&-0' D<A' #11-' A1><-A1A'&=' D1>' -A' > ' & A' F '@@'<>' D'>'-.' D'1'=' ?0 'B1' &=' D1' &>j >&-' 1-BDℊ 0<'A' D<' D1' "1B@< <'&-' &=' 1<0&-' -& ' A1B@< 1Aℊ #1@&-.1 D' &' D1' < @'<>1- G #?' '=' D1' K1 1' <' & Aℊ &' <' 11 ' &=' D1' < @'<>1- ℊ '=' D1' D<A' #11-' A1><-A1Aℊ D1' K&?@A' D<+1' 0<'A' '-' D1' 0<>1' <--1 G <-A' $)'-'@'a1' <--1'0<'A' >' & A' F '@@'<>' 'a1D @@ℊ ?0 'B1' &=' D1' &>>&-' @<B1ℊ <-A' <=1' D1' B&>'-.' &=' > ' & A' F <@1' @&C &-ℊ D'1=' ?0 'B1ℊ

1C1<@ &=' <@@ &B11A'--.Ơ '-' < <>1-' ' 'B @@

D1' 0<'A' '-' @'a1' K'01';' F D1 1=& 1' D1' 0<'A' -0K1 0' #1' ?A.1A' <-A' <==' >1A'=& ' .&&A' <-A' 0?==' B'1-' '-' D1' 0<'A' < @'<>1- ' F D1 1?C&-')' D1', -.' # ' D1' 001-' &=' D1' & AƠ C' ' ?<@ <-A' 1>C& <@@ <-A' D1' &B? <j & Ơ &=' D1' @1 . ℊ'<-A' D1' 0<'A' &>>&-0ℊ <-A' # ' A+'B1' &=' D1' ?0 'B1Ơ <-A' 1 1<- 0' <=& 10<'Aℊ D1 1' #1'-.' ' K<Ơ <K< A1A'<-A' ?A.1Aℊ & A<'-1A' <-A' 0 <@ #@'0D1Aℊ D<' D1' 0<'A' < @'<>1-' D&@A1-' D1' 0<'A' L' ' 1< ℊ 0D0A@ #1' B@1< @ ' <A>A@1A' <-A' =<&=A1-' =& '-&-1ℊ <Ơ <' D'-.' ><A1' K' D&?' ' ? D& ' ℊ <-A' <.<'-0' D1' F '@@' <-A' '#1 '&=' D1', '-.' <-A' D1' '.D ' &=' D'Ơ &K-G <-A' D<' <@@ D1' ?A.>1-0ℊ <? 10@ <-A' A'-<-B1Ơ ><A1' '-' D1' 0<>1ℊ K' D' <@@ D'-.0' A1C1-A'-.'?C&-' D1' 0<>1ℊ 0D<@@ #1' 1+&a1A' <-A' <A-?@@1Aℊ 1+1 01Aℊ <-A' B@1< @ ' 1C1<@1A' <-A' D&@A1-' =& ' -&-1G -A' D<' <@@

D1' < '10' 10 & 1A' &' D1' ' <-A0

<-A0ℊ 1-1>1-0ℊ !110ℊ A+&K0&-0ℊ <-A' <@@' & D1 ' &00100'&-Ơ 01'01A' <Ơ' =& =1'' # ' B&@&?' &=' D1' 0<'A' ?A.j >1-0ℊ 0D<@@ #1' 10 & 1A' <-A' A1@'+1 1A' &' D1>' KD'BD' K1 1? . A' & ' C? ' &? ℊ &' D1' ' 1' 0ℊ <-A' &' D1>' D<' D<+1' '-' & D1 ' <--1 ' <?01' &=' ^'&-' & ' '@1' &=' '.D ' '-' D'Ơ 1D<@=ℊ K' D' <@@ <--1 ' &=' '#1 '10' <-A' ! <-BD'01Ơ <-A' '+'@1.10ℊ <Ơ' =<' =& D' <-A' KD&@@ ' <Ơ D1 'D<A' <'<- ' '@-1ℊ `K' DOℙ' 10 ' ? '&-'&=' E&&AƠ <-A' D< 1@0' ? '&? ' &+1 1'.-' & A' D1', '-.ℊ# ' A+'B1' &=' k'1' 0<'A' & AƠ <-A' &>>&-0ℊ B&-0'A1 '-.' D&K' D1', -.ℊ=& ' 1B&+1 ' <-A' 1@'1=' &='D'Ơ @'1.1' 1&C@1ℊ KD'BD' K1 1' 0&' ?A.1A'& ' C? ' &? ℊ <-A' &' ><a1' D1>' &' D<+1' 10 ' ? '1>' &=' D<' 0<10'<-A' <-A0ℊ 1-1>1-0ℊ !110ℊ A+&K0&=0ℊ <-A' & D1 ' &00100'&-Ơ <=& 10<'Aℊ D< D' D<A' <-A' 0?CC& 1A' . 1<' <-A' 1LB100'+1' &0 Ơ'<-A' L 1-B10G

HA' 0"'@@ A' ?A'1==@ 1001 ' >&A&' 1AA1-A'@@" ? 'B I 'M+@1-Ơ CA ' '@@?A' 1A '0 1' -BA@1-ℊ H?'<' +'A1 ' 1'Ơ HA' ?A'B'?' '@@?A' 1+&B<#'@1' 1i ' <-H >' 1 &-1?>' '-' &'-" 0?" C 1 -' H?&C' >' 10 '>&-'?>' ?0A1' I ' ,+'1-Ơ C ' ' 0'.'@@<' 0?<' 1-'# ' <CC&0?1 ?-' ''Ơ 10 '#' 1,1-A'Ơ C-#' A='Ơ @1a&' BD'1C&' #&CƓ &# &' BD'1C&' "?#@'=ℊ &D1' C ' "?-&'>ℊ D&><' 'B10 1-' C&ℊ & '1' <-.& 1=" C&ℊ &# &' "?B1' '#-ℊ 'B#1' &j >'1' ?=ℊ I ' &D1' C&-' B 'B&' <B' &#1' @<a1' B?Aℊ =1 &' " <=' @&B&' A'1ℊ >1-01' I '<--&' = AB'0

^?1@1Ơ H 10A&-Ơ I ' @1Ơ 10C&-010' A'B1@@10ℊ 0'#-' A1ℊ +<-'@1' & ' I ' 5?!' B&>1' A1+<-' @1Ơ &10' =1? 1-' @?\' I ' 1-1-A '\ℊ I ' A1><-A11' =?'0 ' A1' &? \' @10 < \' A?' C@1ℊ >1-' B&>1C ' ' @1? ' 01>#@&' ' A1' @1Ơ 10C&-010' 0?'0A110G I ' '@0' A'0&'1-' H' @1? ' 01>#@&' ℊ H' @1Ơ A' \' ?0A110' =' 1-' I ' A&-1 1'' ' @1? ' 10C&-010' A?1>1-' I ' @&'<@>1-' B&>1' #&-10' I ' @&a@L' @'.10' A?' & 'A1 0&'1-'=1' 1G' I ' 1-' >10>1' @1' > < &-=' D&><0' A1' a1@ &-' <C '0' A1' @<' @1'1' I ' F <>' '=1-a1=& A' I ' F '@@'<>' 1-1D1A1' f 1<- \' A?' & ℊ A1><-A1A'C '1' &" A1' '1? ' <A+ 0' 1-' 1@@1' C '1ℊ A'0&' ' 10C&-010' =1? >' #1>10' I ' &'< LG' I H'@0' +& &'1-' <+&' ' A&-1\' >10 <10' @1Ơ 10C&-010ℊ 0" @10' A' \' H?10A -' 1?001-' 10 1' A1><-A1\' A1' 1?L ' ' &-=' F '@@'<>' D'>-.' D'1=' ?0A11' A?' B&1' <-a' A?' & ' A'0' 'A1B@< <A&-' A1' 10&-' -'1-' A1B@< 1\' <CC '1-' < C@1>1-G 1' 0'ℊ =1?001' ' &?' C'1' A1' C@1>1-ℊ 0'@ 1?0' 10 1' A1><-A1\ℊ '@' +&?A &' ' <+&' ' A' ' 1-' >10>1' @1' >< 1G' 1' 1-0" I ' 1 ' >10>1' @1' ><51' A'0 ' &-_' F '@@'<>' 'aD?@@ 0A11' A?' B&1' <-a' 1 ' <C20 @<' +1-?1' A1' &-_' F <? 1 ' @&C &-' D'1=' ?0A11ℊ '@' A'0' 1-' >10>1' @1' >< 1;' C&= ' @1Ơ A' 1Ơ 10C&-010' 01-' <A ?..1\' I ' <==1 >1\' C ' #&-10' I ' 0?=='B1<-\' 1-' @1' A' ' C@1>1-' ? 'H? ' C' @1' & ' A1' @<001-' A1Ơ _ 0' 10C' ' ?1@Ơ I ' 1>8ℊ C& 1@Ơ I ' @1G' C1?=1? 0' A1' @<' @1 .'1' I ' A1' @1Ơ A' \' &1Ơ I ' C' <A+ 0' A1' @1Ơ ?0 'B1Ơ I ' M.1<-\' 0?'0A1=1Ơ '@@1&H1Ơ 10=1<-\ℊ <.<=A1\' =?'0 ' I ' <A ?..1\' & A1'-1\' I ' 10 <#=' \ℊ H' @1' A' ' C@1>1-' 1-L' @1' A' ' <-' ?-\'0>1' 0&' ' &? ℊ &? 1>1-' <A-? 1' I ' 1-?\' C' -?@@ B&>1' BD&01' =1' 1' 0>@\'<?=C 1' I ' 1-B&- 1' @<' +&@1-11' I ' ,# 11'A " & ' I ' @1' A &' ' 0<' E& -10ℊ 1' H' &? \' @1Ơ ..1 <1-\' 10 < \' P' >A1-<?-B1Ơ =<' \' 1-' B1 @' &+1' &?\' @1Ơ A1C1-A<-\' A'B1@ 10ℊ 0&'1-' 1+&a1\' <A-?@@1\' 1+001\' I ' &? &? 1>1-' 1C1@@1\' I ' 1-?\' C' -?@@;' 1' H' &?\' @1Ơ R 10' I ' 1D \' =11Ơ I ' <+&10&-Ơ I ' <? 10' C&00100'&-Ơ H?18ℊ B&-HƠ 1'01\' B&>1' =& I ' \ℊ C' B&@&?' A1Ơ A' \' ?..18ℊ >1-\ℊ 0&'1-' 10A ? \' I ' @'C1\' <Ơ B1?L' H" =1? 1-' ?.8ℊ .1\' &?' &?0 1\' I ' <@&?' D1' Ơ I ' <' B1?L' H" &-' 1-' <? 1' ><51' <BB'&=" &?' A @1' A1' A &' ' 1-' B1@@ CA1G &+1a' &?\' ><510' @'# 11Ơ = <?-BD@01Ơ I ' C '+'@1.10ℊ <?00" <+<-' I ' -A1 >1-' B&>1' '@Ơ <+&'1-' 1-' <0B?-' 1>CƠ `'CA1+<-ℊ 0<?-\' <0B??10' '00?1\' &?' C=' \' <+&' ' A'B1@@10' 1-' @1' >10-1' 1>C0/P' `&?\ℙ' 10A ?B'&-' A1Ơ #'1-0' I ' BD< 1?L' <'Ơ -=1' _' @1' & 'C' <A+ 0' A1Ơ A' \' ?!' I ' B&10' B&-0'ℊ A1 <-\' B&>1 ' @1' & 'C? ' 1B&,' ' I ' 1@1+<B'&-' A1' 01Ơ A' \' @'.1Ơ H" =1? 1-' '00'-' <A ?..1\' .Ơ &?0 1\' I ' C? ' @1? ' =<' 1' <+&' ' 10 ' ?B'&-' A1' @1? ' 10 <=\' I ' R 10' I ' 1-\' =11Ơ I ' <+&10&CƠ I ' <?RƠ C&00100'&-Ơ 0?'0A' \ℊ <A' 1?\' I ' 0? ,'' 1\' .a> 10' I ' 1LB100'+10' B& 0<.10' I ' A10C1-010G

K %' %'.$- '.1&
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3 ' !0 j' .0 #-j' S' 1 /+@' ' ;] - ! E!' / !' #]2]' /. -' 0'' "!2. -' -!' !+. -&!' +' - !' 0"2O!' # "!' / !' /!- ' 30"' !0' 022@' .0 .&j' S' #!0% S& # & ' # !"!- ' C' 2.@ +! ' !- ' ."/ ; + - !- ' 7 . - "!' +!' 6 .@' -' / !' 2 ' "!* - !' 0 - L' j&2 - &!' . ' !E' +!Z' e 2' S' 2. - ' ."!' /H0** ! j' C' #. - ' & +j)' - &! 1' &&O +0' ; ! / ! &#!' / !' #!H+!' !& !' ' #!++!' ! 1 Z' 2&+Z' -]' 0"2 - &! - ' ! - ' / "!Z' / !' /. -' !-' #!++!' &!' !- "!' #@' f +!' !2' / !' 2!&- ' .+&-' +!' 4 &2 "!' 2#; -' ' ! - &"' ' -"!' / & ' e ' +!' 6 .@' 2O'' + ' *<&- !' / !' #!2 !' *[#!' C' / .-' ! - 2@' $ I' '2!Z' +&!*!Z' '#!2 !' .& j ' &2' . ' ' / !#+ " L' #&. -' '2. -' ; .0# !' / ! 1 !2 - !' <' 2& +!Z' ?' .O' .!Z' /O' 6 .& +& - !' S& '&!&#/". - ' Z' +! 1 ! - j' ! - ' ! 1 Z' '! - &"' 1 ! ' ! - ' .O' #! - ' &1 !/&1 ! - ' .0' /!2 0"; -#!' ' #. - &"!' / !+' *) - !' /O' / &' 0;2&/!' / !Z' +!&-Z' SO&"Z' C' ! 0%' + -0 j' ! - 2& *(0 - ! j' ' +O@' ', 1 !' / !' 2 ' '&!' S' /. -S!Z' + ' / &! ' *)d#f' C' /. -' 2. &' '. &/!' C' .0 ' .0 "! 1 < ' /-0 ! j ! 1 ' &&& ' '" ! 1 ;"!'" S' #. 1 !' - "!' e ' +!' 6 .@' ' + ' "!L' SO!2 !' / !Z' .!Z' / !' 1 !2 1 !' +!' +! 1 ! - ' ! - j' / !, Z' !O% /&!2!Z' !/#&. -Z' 2&; -' (!2 !S&$/% 2. -!Z' #. 1 !' 0 "!Z' &- ! - &D +0 ! j' - 1 '"! < 2/0 j ' ! ' SO!0% 0'' ;&&!6 !' / 0' ! 1 Z' - !' ".&! - ' ; . - ! 1 ! - ' !2 "!' $ 1 &+ ! j' /0" - ' +!' ! 1 Z' /0' +! 1 ! - ' !& ' ."/ !&- !' # 22&*-Z' ' 0/. "& ! !' C' 22!- ' /0' < ' +! 1 !- ' +. -' 0!' /!' -# 2 "!' 2 - &. - /' 0!' !<&<+ ' /7 2/' 0!' 0 - "+!' WE. - Z' 0!' /!' 0" ' .&- ' 0!' !%#!2 "!' .+1' "E@Z' /!' ." ' 6 . \' .- ' /!' + ' "# !' .&- ' .- ' /!' "!2;&"2' !- $' .- ' /!' ." 0 +& !' ' . 1 Z' - ' /!' b+.0#!2 "' .$' 1 Z' .- ' /!' &V "#!2 - !' C' V&+ & 1' .- ' /!' V& ! /' .0' 2@Z' /!' !0W' . -' 4022@' !- $' b "!- !' . -' 602k 2!++' 6&# "/)' !+1!27@#6' 6 . ; ' !@!' # . -' b .+. C!' &' +! Z' ' *- - j' '' +!Z' .!Z' /0' ". & +1 !' ' /E' +! 1 !- ' .0'" . ; ' /!' ! / % ' / !' !% 1&- !'" "!2 .0 - L!' # + - ! 1 !- ' ,1&- !'' .0 ' +!Z' /& j' ! /#&. -Z' # +!Z' 1 &!"Z' #. - !-0 - ' ! - ' @#!++!2 ' #. - !' +!0'' 1 !0+= ' 2! 1 ;+!" ' 3' +. 0'' ; . - !' / <!' # /&2#"!!& ; & ! - ' #!++!' "/!' ' 0#L' ."& !' /0' /& ' +! 1 !- ' #. 1 !' +02 +/ 1 ' !"' ! ' +!' ".++!' /0' +! 1 !- 0 $!' e ' +!' 6 .@' ' 22!- ' /!' +!Z' /& j' 0!Z' R 8' ! ' @E' 0 1 " ! ' 0'' C' %#!2 "!' # /!+ /& ' //2' #/!' +!- ' /& j' . - $' /!' + ' "# ! ' 0!2 ; &"Z' # b +. 0#!2 "! ' ' +!Z' < j' . -' 4022@' !- $' ZJ' ! - ! ' R ' . -' 6022!++' ', 0!' # 0# ." & !' /!' + ' /& !' . &"' &22&1' ' !0%' #. 1@Z' ! ' +! 1 !- ' /' "!2#!0 j' ' .&! j' $!&- Z' ! /#<-2' ! ' 20'' !!.' !& $' -2' . /!- -#!Z' #!2 0 j' !-20 - j 0 !2 '. &"' S' #. 1 !' !- ' 0 - ' !2 0 ' &&& ' +! 1 !- ' -$!' ' +!' 6 .@' !- 0j' ' V!2 1' -' /!' 2. -' 6!*- !' "!2j&21!' 2. &' #. - !- 0!' S' -0++' 0 ' - !' ." /!L' 7 !'' - !' 02!' + ' 1&2 ' /!' ."/!7 - !'' - !' 0. ' 20'' < < ! ' !&- !' #. 1 "&Z' !- ' 1!21!' +!2 0 ' H 6 ' -&!- #. - "!2 ! - ' +!' /& ' !2 1 ' # !@- !' +02.0"Z' ."/!7 - !"Z' # 0.0"Z' 01 1!' -2! ' + ' .02 !'' /!' &1 - !'' #. 1 !' /!' ' !- ' #. - ! 1 ' - "!' ')+!' 6 .@' ' *)0 - ' /!2#!& ' # ! 1 .<22!L' 1 !- ' /!Z' .!Z' ' # 02!' S' /0!' !%!#0#&. -' - !' !- ' !2' &&& ' !' 0'' S0 .@' - "!' ' 6 .@' ' .!' C' /' ."/!- !' C' !2 /&+&j' 22!- ' 20E/ ' QS +!' /& ' ! 0' &21&L' &&& ' 2. &' !- 0j' C' * "/!j' ' !' /0!1!- ' !%!#0 j' .' !E' +!Z' !@- !Z' /&#!+' !- ' .0j' .&- j' Y&&&!- #. -2 "! - (I' 2#0 - ' "S&!++!' !2 0 ' .0' ."/!& -#!' &/' ' #. - -0"!

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' U1? #

5 [' (*ˢ ˢ ᵍ' , ^ ,

1 ' 1-' B<0' H'@0' A1 > &1 .1- ' C@?'0' &? 1' @10' H?< & 01' &? 0' I ' -&1 0' ?'0AB10' <A&-H@ C< 1 - ' '@0' C ' B='?-' &? ' I ' -&1 ' ?-' A1 -'1 ' I ' C ' @1' 0&?@ &? ' ?-1' > <'@1' I ' C? ' @1' 0&?@ -&1 ' ?-1' > <'@1G 1 ' &? 1' B1&' H' -?@ 1' > < 1' A1' C0& -1' -1' 01' C0? > 1' A1' -? ' > <51' - '1=' -1' #< 1@ ' C' B<#@1' B& A1' -1' <? 1 > 1 - ' =1 > 1 ' <' @10' > < 10 > 1' -1' C'1 0' A1' @10' A' \' 11a1-10' -1' <A 0' -1' A1' @1' -&+1@e;' , 1 1' <? 1 > 1 - ' <CC1@@1' @1' F D< =' <' @<' B&0 ' A?' A' ' C& ' A1' <@1 0@ 0' @<' C1' -1' A1' H?< <- ' A1 -'1 0' <' @1+1 0' A1' @<' -'1=' H' 1-0" 0&' ' &+1' =1 > 11G 1 ' H' @1' A' ' 10& 1 ' H' C ' @1' 1 > C0' ' M <' 1' ' C@1 -' C&<' ' C ' @? ' I ' 010' A1C? 10' A1' @1+1 ' I ' 1B1'+1 ' @10' A1 -'1 0' A1' @10' C1' -10' 0?'0A' \' 1 - B? ?\' 0&? A<- \' I ' 1 - ' =<' 1' C<'1 > 1 - ' 0&@&>' B1&' H' #?@ 0&' . -1' @? ' M <' 1 -' 0&-' A' ' &=@a1' C' +1K1' I ' B&- &@@18 > 1 - ' A1@ &?- &@@&? ' A1' - =1' A' ' ' @1' & ' '@@&1H1

1 > ' B& > 1' C' ?' AK< A' -<A.<' 0' & ' " 1 - .@1 1' '1@' - =1' ' @1' & ' H& 10 ' <-' A1' 0&-' 1. -1' +'- ' I ' H?' - ' C ' B1&' H' A&10' C<00<.10' A10' -'1=0' I ' #< 1?L' 1 -' @10' .W- \' '+1 0' " 1 - .@1R 1' 0" =1? 1 - ' 0&+1 - ' =&' \' A10 F #1\' C' @1' @1+1 ' A10' .& \' > &@ -0' 10 <-a10' 10 <a10' I ' a' A1?L' H' =1? 1 - ' @1+1\' I ' > 0' 1 -' 1 > C0' @1' & ' AK< A' ='@\' <?' & ' 1 - ' I ' A1C?'0' 1 -' '1?L' '+1 0@ C' H?1?L' @10' -'1=0' I ' #< 1?L' 0&- ' A10 &? #1\' H'@0' -1' C&1 - ' C<001 ' B& > 1' '@0' 0&@A1 - @ 0&'1 - ' &?0 1\' I ' -1 1 > 1 - ' <#< ?\' 0<?-\' 10 1' 1@1+1\@ I ' H' # '1=0' M &'1 - ' 0 ' B1&' > <?-A1\' <0' +'0B&?- \' A10' @'1?L' &?' > 10 '1 ' M &' ' A1' 0? +11 ' I ' A1 - H?1 1' I ' A1' =<' 1' 1 - ' 1L1B?B'&-@ 1 ' <?L'- ' H' ?0 'B10' 101 - ' 0 ' B1&' <00' . -1\' < &?\' @10' =&' \' H'@ #?0&' . -1 1' ' ' <=@0' < @<' . 1+&?01' C@A - 1' A.0' .W?- \' I ' A10' &10' =<' ' 1 -' C@1 > 1 - ' A?' A' ' &" AK< A' @<'1@ <-' A1' 0&-' 1. -1' H?< <- ' I ' H?'- @ B& > C@1'-<- \' C' @1? ' C1 'B'&-' H' @1' A' ' 10 < ? ' -10 &' ' C<0@A?1 > 1 - ' 1L1B? ' -1' . < A1\' 0&@&-B' @1'=1=@;' A'B1@'@ 10 &' ' <BB& A1\' I ' 10 <#@'\' H' @1' A' ' 10 < ? ' 1 -' B1&' C&' - ' 0&' ' 1 - ?\' I ' . < A1\' 0&@&-B' @1=1=@;' A'B1 G' < &?0 <- ' <' B1 ' H' 0" -?=@;' A1@1' <- ?0<-B1' 0&' ' <#< ?\' C' A?1' C110' B&- 1 - ?1' ' @1' A' ' 10 < ? @ B1@@? ' H' =1 <' 1@1+1 ' @<' A11' <- ?0<-B1' I ' A1' B1&' 0&' ' < 1' - ' A?1 > 1 - @ B&? .1' @<' C1' -1' A1' 1 - ' < 1\' A1+0Ø @1' &" <' @1+1 ' C' `@10 1 P' 1 -' @10BD1H1 G' I ' <? '1@@1 ' 0& ' 1' . -1' A1' <- ?0<-B1' =<' ' C' @1' 1 - D<-B1 ' A1' '1?L' . & \' > &@ -0' 10 <-a0' 10 <a10' I ' a A1?L' B& > 1' C' -&+1 ' @1+1 G' B& > 1' 1 -' @10' A' \' 10 < ? \' C@?0' C@1' -1 > 1 - ' <CC'1 ' ' & 1' <' @1' 1H?10 ' A10' A110' &10' > &-0 <- \' C' @1? ' C1 'B'&-' H' @10' B?10' C<00<.10' A10' -'1=1' I ' #< 1?L' 1 -' @10' ./?- \' '+1 0' " 1 - .@1 1' I ' <?L' - ' C 110' I ' C<0 ? 10' I ' R 10' 01 > 1\' <A &' .- <- \' <0' A' \' '+1 0' 0&- ' . ' 1 > 1 - ' A10@ &? #1\' 0 &?-A1\' .<0 ?\' I ' A10 ?' \' C' @10' &? .1&?010' 1-D<-B1 ' I ' 10 1' 1' A10' .& \' > &@ -0' 10 <-a0' 10 <a10' I ' a A1?L' <?-B'1 - > 1 - ' =<' \' I ' @1+1\' A1+<- ' @1' 1 > C0' A?' A' ' &'' AK< A' ='@\' <?' & ' 1 - @ A&?- ' .0?- \' A<><.10' I ' CA10' 0&- ' <+1 - ?\' 0&+1 - ' <@ C&1C@1' A?' &'<@ > 1' I ' <+'1-A 1 - ' A1' &? ' 1 -' <? 1' 0" 1 > 1A'1' 1 -' -1' 0&' ' > 0' G BB& A1' 10 ' I ' 10 <#@'\' A1@ <001 - ' '<+<- A' ' H' @10' A' \' 10 < ? \' 0&'1 - ' 1 -' &?\' @&' < 'B@10' 1 - ?\' I ' =1 > 1 > 1 - ' .< A1\' I ' A?1 > 1 - ' 1L1B? \' &+1a' @10' C1 -10

M 10 1 1' '%:' M 'H&&

<-A' '-' B<01' D<' D1' =& 10<'A' D'C0' & ' &< 0' < ' &+1 ' D1' L''' ' " < 0' <-A' '.D 0' <=& 10<'A@ D1-' D1 ' 0D<@@ C< ' =& ' 1+1 ' " < ' <-A' '.D ' <' 1 - - @ <-A' =& ' D1' " < ' <@&-1' <' <@=8C1 - - @ <-A' > & 1&+1 ' ` ' '0' & A<' -1A@P D<' -&' <- - 1 ' &=' 1 0&-' 0D<@@ C 10? > 1' &' '1' <- ' <- - 1 ' &=' D'C' -& ' &<' # ' <#@1@ & A@ -& ' & D1 K'01' &' D1' '> #1 ' -& ' &-10' &=' D1' 0<'A' 1<B&-0' -& ' < <A'01@ -& ' <@0&'&=' D1' 1K' ^ ?< @ & D1 K'01' B<@@1A' D1' F D< =' < ' D1' 'A1' &=' D1' 0<'A' & ' &=' ` D1' &K -' &=P' <@<'0@ ?C&-' <' -' &=' L@ ' 1-B1@ &' #1' @1+'1A' &=' D1' D'C' `& ' &< 9P' KD'BD' 0&' 0D<@@ #1' =&?-A' '1A@ <-A' <@0&' D<' D1' 1<0? 1 @ KD'BD' D1 1' =& ' D1' '> 1' 0D<@@ #1@ 0D<@@ D<+1' =?@@ &K1 ' =& ' D'>' <-A@ =& ' D#' " 1C? '10@ &' @1+ ' <-A' 1B1'+1' D1' &-1 @ &=' D1' <' -0' <=& 10<'A' -B? 1A' <-A' '0' - .@ <-A' D1 1&=' &' > <a1' < > 1 - ' <BB& A' - .' <0' 0D<@@ #1' -11A=?@ '-' D'0' 0<'A' ==' B1@ # ' D1' '1K' <-A' &- &@@ > 1 - ' &=' D1' , ' - . 0' & > C &@@1 ' D1 1

@ F D1 1<0' # ' ' ' AK< A@ @< 1' , '-.' &=' - . j @<-A@ E <-A=1 D1 ' &' &? ' &+1 1' . -' & A' D1' , '-.' D<' -&K' '0@ D1' LL+ ' 1< ' &=' D'0' 1' . -@ ! & <0 > ?BD' <0' B& > j > &-' <00<.10' &=' D'C0' <-A' &< 0' '-' D1' . 1<' '+1 0' &=' - . @<-A@ K1 1' &= 1 - ' > 10' &?#@1A' # ' D1' `@1+ '-. P' &=' F 1< 0' '@@0' <-a0' 0)' <-A' , 'AA@10@' &' D1' . 1<' " <> <. 1' &=' D1' 1&C@1' G ' K<0' <BB& A1A' <-A' 0 <#@'0D1A' D<' <@@ 0?BD' F 1< 0' '@@0' <-=B0' <a10' <-A' , 'AA@10@ KD'BD' K1 1' @1+'1A' <-A' 01 ' ?C' '-' D1' ' > 1' &=' , '-.' Aj K< A@ &-' &' , '-.' 1- @ <-A' 0' -B1' '-' 0?BD' '+1 0@ KD1 1# ' D1' D'C0' <-A' &< 0' #1' `' &?#@1A@0' P' D<' D1 ' B<--&' C<00' <0' D1 ' K1 1' K&-' &' A&@ 0D<@@ #1' &?' <-A' C?@@1A' A&K -' =& ' 1+1 @ K' D&?' #1' -.' ` 1@1+'1AOGP' <-A' D<' F ' 0' D1 1?C&-' 0D<@@ #1' 01 - ' &' D1' D1 '=='0' &=' D1' @<B10' KD1 1' -11A' 0D<@@ #1@ &' 0? +1 ' <-A' '-H?' 1@ <-A' &' > <a1' D1 1&=' L1B?' &-G <-A' <@0& D<' D1' ?0 'B10' 0D<@@ #1' D1 1?C&-' <00' . -1A' < ' <@=' ' > 10' KD1-' -11A' 0D<@@ 1H?' 1' -A' <= 1 ' < ' D1' . '1+&?0' &>C@<' - ' &=' D1' . 1<' 1-' <-A' &=' D1' &> > &-0' > <A1' '-' D1' < @' <j > 1 - ' &=' D1' 0<'A' , '-.' AK< A' D1' E <-A=< D1 @ D1'L@+ ' 1< ' &=' D'0' 1' . -@ B&>C@<'-'-.' # ' D1' ' 1 ' '&-@ D<' D1' 0<'A' < ? 1' '0' -& ' A?@ ' 1L1B? 1A' -& ' a1C ' <= 1 ' D1' ==1=='&=' D1' 0<>1' ' K<0' `& A<'-1AO@' <-A' 0 <#@'0D1A@ D<' D1' 0<'A' < ? 1' '-' D<' &' - ' 0D&?@A' #1' D&@A1 -' <-A' a1C ' <= 1 ' D1' ==1=@;' &=' D1' 0<>1G & -'-.' D1 1?- &' D<' '='<- ' 0?BD' ` ?'0<-B1' #1' > <A1@ ' ' 0D<@@ #1' C?@@1A' A&+>3P' # ' A?1' &B100' B&- <'-1A' '-' D1' 0<'A' ` < ? 1 ' -A' D1' D<' A&1 D' D1' 0<'A' ?'0<-B1' &' #1' 1@1+'1A@/P' <-A' D1 1&=' #1' A?@ ' < > - 1A@ 0D<@@ '-B?' D1' <'-' &=' < ' < a0' &' D1' , '-.@ &' #1' @1+'1A' # ' D1' 0 1<' &=' D1' LBD1H?1 '% <-A' D<' 0?BD' <K' 0D<@@ D&@A' &=' ?' j 0<-B10' # ' D1' '-D<-0' -.' &=' 0?BD' F 1< 0' '@@0' <-a0' k@)' <-A' , 'AA@10@ <0' # ' 0)' -1K' @1+ '-.'G <0' '-' D1' 0<'A' < ? 10' > & 1'=?@@ ' <CC1< 1 D' -A' -&K'<' D1' 1H? < ' &=' D1' 0<'A' &> > &-0@ 0D1K'-.' # ' D1' ' 1 ' '&-@ D<' D1' B& > > &-' <00<.10' &=' D'C0' <-A' &< 0' '-' D1' . 1<' '+1 0' &=' -.@<-A@ <-A' <@0&' 1<A&K0@ <-A' <0 ? 10@ <-A' <#@1' <-A0@ &'-'-.' &' D1' 0<'A' '+1 0@ #1' . 1< @ ' &?#@1A@ A &K-1A@ K<0 1A@ <-A' A10 & 1A' # ' D1' &? <.1&?0' '-D<-0' -.' <-A' 0 <' 1-'-.' &=' F 1< 0' '@@0' <-a0' /)' <-A' , 'AA@10@ &=' &@A' '> 1' > <A1' <-A' @1+'1A' #1=& 1' D1' '> 1' &=' D1' 0<'A' , '-.' AK< A@ &-' &' , '-.' 1- @ KD1 1&=. 1<' " <> <.10' <-A' &0010' D<+1' &= 1-j '> 10' D<CC1-1A' &' D1' 1&C@1' &=' D1' 1<@ > @ <-A' A<'@ ' 0D<@@ D<CC1-@ '=' 1 > 1A ' D1 1&=' #1' -& ' C &+'A1A G ' '0' <BB& A1A' <-A' 0 <#@'0D1A' # ' D1' 001 - ' <=& 10<'A' D<' D1' 0<'A' < ? 10' '-' <@@ D1' ' 'B@10@ 0D<@@ #1' =' > @ ' D@@A1-' <-A' a1C @ <-A' <@0&' A?@ ' 1L1B? 1A@ K' D' D1' <'-09

W W 6 !#& /' . ' ' 5J' /7 ' ' _ ' ' #

J' /7 ' ' #-' 5' * &-2' &- -2&-*' -/' 2 " & ! -&-*' . ' F 1< 0' '@a' -E2# C#Z

6 !#& ! / 0 !2 #.-+&"-&! /

Ú &- -2&-*') E!2') /&2 0" ; ! /') "! - ! 7 ! /') ## ." / ! /' ' ! # ' ` ^" ' '-"** %%$ " ' " ÷ ' ' * " ' ' %^" ' @ ' ' (' *

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. 1 1 á22á. -)' !"2' 2 +#' ; !' .&- ! / ' .' !%!#0 !' !' 0 ! 2 ' -/' .' 20"' ! @' !' V ! "2 ' -/' .' "! / "! 22' ! -#! 2

<-Aʻ <= 1 ʻ D1ʻ ==1=g# &=ʻ D1ʻ 0<>1ʻ ʻ &'-'-.ʻ &ʻ D1ʻ 0<>1ʻ D<ʻ &>>'00'&-0ʻ 0D<gg #1ʻ ><A1ʻ '-ʻ A?1ʻ ! & '=ʻ &ʻ 0&>1ʻ 0?= B'1-ʻ 1 0&-0ʻ &ʻ #1ʻ ?0 'B10ʻ '-ʻ 1+1 ʻ &?-ʻ &=ʻ -.@<-Ag KD1 1ʻ -11Aʻ 0D<gg #1g &ʻ 0? +1 ʻ <-Aʻ <@0& a11C Aʻ18 F < 1 0ʻ <-Aʻ . ʻ '+1 0ʻ D1 1g <-Aʻ D1ʻ "1 ʻ @<?@ 0ʻ &ʻ B& 1=# <-Aʻ <>1-Ag <-Aʻ &ʻ ><a1ʻ A?1ʻ L1B?j '&-ʻ &=ʻ D1ʻ 0<'Aʻ < ? 10ʻ <= 1 ʻ D1ʻ ==1=ʻ &=ʻ D1ʻ 0<>1g <0 K1gg # ʻ DA ʻ ? +1 ʻ-.g A+'B1g <-Aʻ "'0B 1 '&-g <0ʻ # ʻ -H?10 0ʻ D1 1&=ʻ &'#1ʻ 0AB1-ʻ K' D'-ʻ ! <-BD'01ʻ <-Aʻ K' Dj &? ʻ ` ʻ -Aʻ KD1-ʻ-11Aʻ D1 1&=0D<gg#1ʻ ʻ &ʻ D1< ʻ<-Aʻ A1j 1 >'-1ʻ D1ʻ D'-.0ʻ <=& 10<'Aʻ G <-Aʻ >& 1&+1 ʻ &ʻ 0? +1 ʻ D1ʻ F 1< 0ʻ '@@0ʻ <@ a0ʻ <a10ʻ <-Aʻ ,'AA@10ʻ &=ʻ &@A' '>1ʻ ><A1ʻ <-Aʻ @1+'1A9ʻ #1=& 1ʻ D1ʻ '>1ʻ &=ʻ ,'-.ʻ Aj K< Ag &-ʻ &ʻ ,'-.ʻ 1>= G <-Aʻ 0?B=ʻ <0ʻ D1 ʻ 0D<gg ='-Aʻ &&ʻ >?BDʻ '-D<-01Ag &ʻ 0 <'1-1Ag &ʻ B& 1=@;' &ʻ C?gg A&K-ʻ<-Aʻ <>1-Ag '-ʻ D1ʻ <--1ʻ <-Aʻ !& >'<=& 10<'AG <+'-.ʻ <@K< 0ʻ 1<0&-<#@1ʻ ?#0 <-B10ʻ &=ʻ D1ʻ 0<'Aʻ F 1< 0ʻ '@@0ʻ =<-a0ʻ <a10ʻ <-Aʻ ,'AA@10ʻ <=& 10<'Aʻ &=ʻ AAʻ '>1' 0&ʻ ><A1ʻ <-Aʻ @1+'1A;' -Aʻ '=ʻ <-ʻ 0?BDʻ ?'0<-B10ʻ &=ʻ F 1< 0ʻ '@@0ʻ <-a0ʻ <a10ʻ <-Aʻ ,'AA@10g &=ʻ <00<.10ʻ <-Aʻ 11 0ʻ ʻ &=ʻ&@Aʻ '>1ʻ ><A1ʻ <-Aʻ @1+'1Ag #1ʻ ?A.1Aʻ & ʻ<K< A1Aʻ # ʻ D1ʻ 0<'Aʻ @?0AB10ʻ &ʻ #1ʻ B& 1= 1AO 4ʻ <-Aʻ <>1-A1Ag D1ʻ D<ʻ D<Dʻ D1ʻ ! 11D&@Aʻ D1 1&=g 0D<gg ><a1ʻ D1 1&=ʻ L1B? '&-ʻ<ʻD'0ʻ &0 0g K' D'-ʻ <@=ʻ<ʻ 1< ʻ<= 1 ʻ , -&K@1A.1ʻ D1 1&=ʻ &ʻ D >'><A1ʻ C&-ʻ C<'-ʻ&=ʻ<-ʻ ?-j A 1Aʻ < a0ʻ &ʻ D1ʻ C<'Aʻ &ʻ=&1ʻ ,'-.ʻ # ʻ 0 1< 0ʻ &=ʻ=&1ʻ LBD1H?1 G <-Aʻ D1ʻ D<ʻ A&1 Dʻ D1 -ʻ &ʻ #1ʻ 1@1+'1Aʻ & ʻ-D<-01Aʻ & ʻ 0 <'1-1Aʻ <.<'-0ʻ =&1ʻ 0<'Aʻ ?A.>1-g <-Aʻ D1 1&=ʻ A?@ ʻ B&-+'= g 0D<gg ʻ-B? ʻ =&1ʻ <'-ʻ &=ʻ <-ʻ ?-j A 1Aʻ < a0ʻ &ʻ #1ʻ C<'Aʻ &ʻ=&1ʻ ,'-.ʻ # ʻ=&1ʻ 0 1< 0ʻ &=ʻ =&1ʻ LBD1H?1 ʻ <=& 10<'AG <-Aʻ ʻ-ʻB<01ʻ D<ʻ <-ʻ ʻ=1A1=&' D'>01@=ʻ. '1+1Aʻ # ʻ L1B? '&-ʻ& 'ʻ& D1 K'01ʻ'-ʻ D'0ʻ 1D<@=ʻ <.<'-0ʻ ʻ.D ʻ <-Aʻ 1<0&-g D1ʻ 0D<gg C? 0?1ʻ <-Aʻ D<+1ʻ ʻ.D ʻ< 'Aʻ 1>1A

g D1ʻ ,'-.ʻ # ʻ=&1ʻ 001-ʻ &=ʻ D1ʻ 0<'Aʻ & AOʻ <-Aʻ ,-'.D 0g 0&'<00'.-1Aʻ # ʻ D1ʻ 0<'Aʻ ? D& ʻ ʻC=ʻ < j @'<>1-g K'gg <-Aʻ D< Dʻ& A<'-1Aʻ D<ʻ 1+1 ʻ 1 0&-ʻ D<ʻ C &B? 1 Dg &ʻ C? 0?1 # &ʻ 1C1<g &ʻ 1+1 01ʻ <-ʻ &=ʻ D1ʻ 0<'Aʻ < ? 10ʻ &ʻ A'-<-B10ʻ ><A1ʻ # ʻ D1ʻ ,'-.99 # ʻ=&1ʻ 001-ʻ &=ʻ D1ʻ 0<'Aʻ & AOʻ <-Aʻ ,-'.D 0ʻ<00'.-1Aʻ D ʻ &K1ʻ <-Aʻ ? D& ʻ ʻ&=ʻ < @'<>1-g D1ʻ 0D<gg #1ʻ ?A.1Aʻ <-Aʻ D<+1ʻ L1B? '&-ʻ <0ʻ <ʻ &ʻ &ʻ D1ʻ ,'-.ʻ <-Aʻ &ʻ D1ʻ 1<@>g ʻ-ʻ@'a1ʻ <--1ʻ <0ʻ D1 ʻ K BDʻ C? 0?1ʻ &ʻ C &B? 1ʻ &ʻ 1C1<g =&1ʻ < ? 10ʻ <-Aʻ A'-<-B10ʻ ><A1ʻ A? '-.ʻ =&1ʻ '>1ʻ &=ʻ =&1ʻ 0<'Aʻ ,? @'<>1-

20&ʻ &= 1-ʻ <-Aʻ KD1-ʻ 1Aʻ 0D<gg #1g <-Aʻ 0ʻ <ʻ '-.0ʻ /ʻ C?@@1Aʻ A&K-

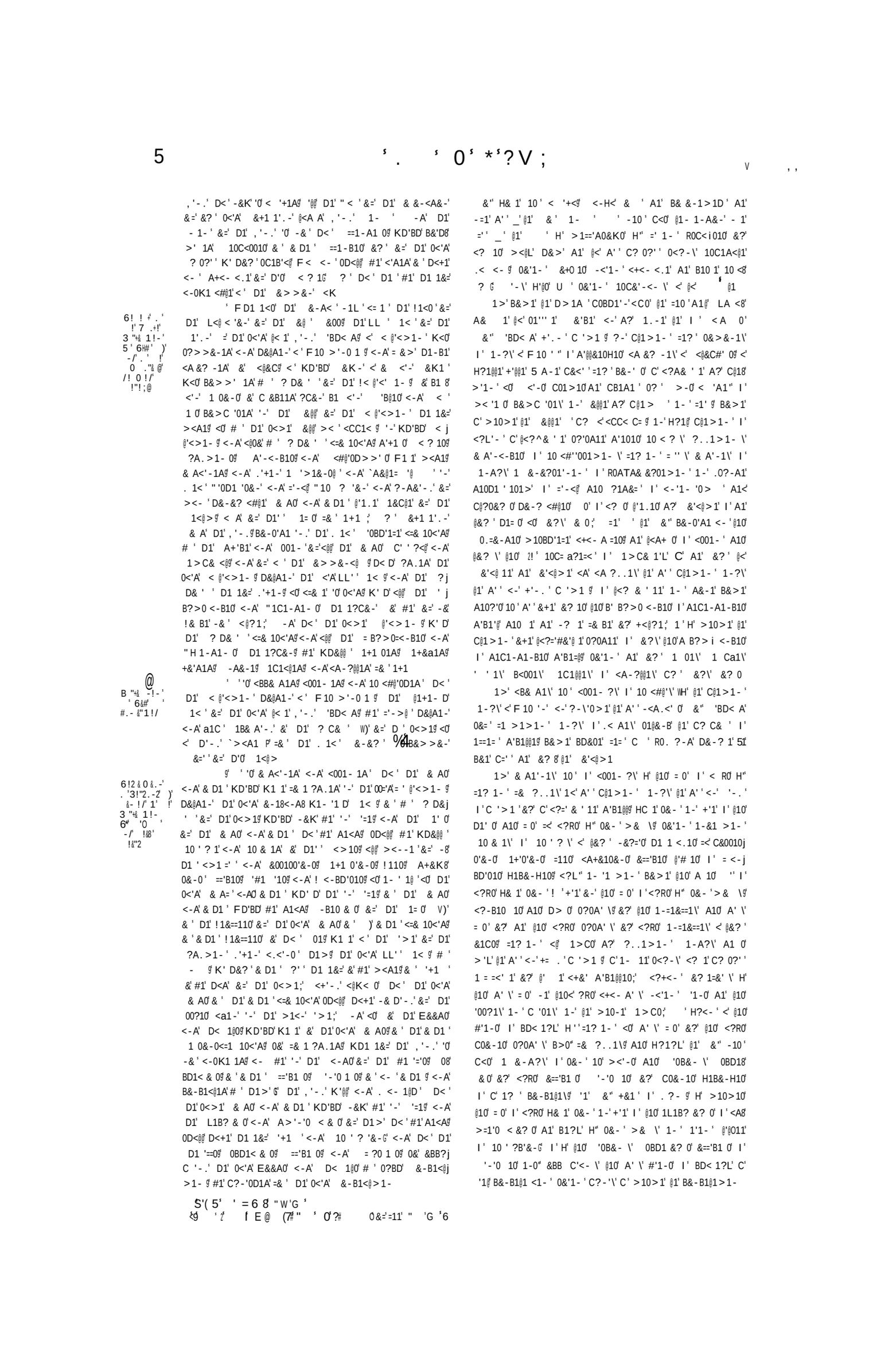
Iʻ 0&@&-Bʻ @1==1Aʻ A'B1@@10G <A &?0 <-ʻ'<ʻ B1 @10ʻ Hʻ B&>'0j 0'&-0ʻ 0&'1-ʻ=&' \ʻ 1-ʻ A?1ʻ=& >1ʻ <0ʻ 0?=='B1<'> \ʻ C0&-10ʻ A10 1ʻ ?0 'B10ʻ 1Dʻ BD?-ʻ &?- 11ʻ "1-.@1R 1ʻ &?ʻ #?8 0&'.<1ʻ, <g A1ʻ 0 +11 1ʻ Iʻ.< A& ʻ 10ʻ1<K10ʻ I .0?- \ʻ '+1 0ʻ '@@&1H10g Iʻ @10ʻ A1 I ? 10ʻ 1C '.1ʻ Iʻ <>1-A1ʻ Iʻ A?1ʻ 1]1B?B'&-ʻ =<'1ʻ A1ʻ @10ʻ A' \ʻ 10 < ? \ʻ 0&@&-Bʻ @1==1A 1ʻ A'B1@@10g 0'#'1-ʻC' @1? ʻ01? +1?ʻ <+'0ʻ Iʻ A'0B 1 '&-ʻB&>1ʻC' 1-HC10 10 ʻ<d 1ʻA1'-0ʻ= <--B 010ʻ Iʻ '.& 0g 0" Iʻ H0-ʻ#?0&'.-1ʻ, <ʻ Iʻ A&'1ʻ Iʻ >'-1ʻ@1ʻ BD&010ʻ 0?'08 A' <'" 1'&? 1'B1&ʻ A1ʻ 0+11 ʻ@10ʻ .& \ʻ >&@ -0ʻ10 <-a10ʻ 10 <a10ʻ Iʻa A1?L'<?-A1->1-ʻ='? \ʻ Iʻ @1+1\' A1+<-ʻ @1ʻ A'ʻ 1>C0ʻ A1ʻ & ʻ =A\' <Uʻ & ʻ 1- g Iʻ B1?L' H'@0ʻ &+ 1-ʻ &C 1-D<-B1\' &?ʻ 10 1'1\g A1ʻ @10ʻ B& '.1ʻ <#< 1ʻ Iʻ <>1-A1ʻ 1-ʻ @<ʻ -< 1ʻ Iʻ =& >1ʻ 0?'0A' 1G < +<-ʻ &? =&' \ʻ 10&-<#@1ʻ 0?#0 <-B1ʻ A1ʻ @10ʻ .& \ʻ -, f-010 <-aO 1 <a1ʻ Iʻa A1?L'0?=1A' \ʻ'00>ʻ<?-A1-8 >1-ʻ=<' \ʻ Iʻ =&+1\;' 1ʻ 0" <0B?-0ʻ '1@0ʻ <-?0<-B10ʻ A10ʻ .& \ʻ >&@ -0ʻ 10 <-a10ʻ 10 <a10ʻ Iʻa A1?L'ʻ A10ʻ C<00<.10ʻ Iʻ10 &' 10ʻ<?-A ->1-ʻ=1' \ʻ Iʻ @1+1\'0&'1-ʻ< ?..1\'&?ʻ <.< A1\'Cʻ @10ʻ A' \ʻ ?0 'B10ʻ A10 1ʻ <##< ?\ʻ Iʻ <>1-A1\g B1@? ʻ H" <Aʻ @1ʻ -1ʻ 1-ʻ A'B1@@10ʻ =1 <ʻ &ʻ ʻ 1L1B?A&-ʻ <ʻ 01ʻ B&?0 <.10ʻ A1'-\ʻ ?-1ʻ A1> ʻ <-ʻ <C0ʻ -&A='B<A&D'<ʻ @? ʻ1-ʻ<==<' 1ʻ0ʻ C1 -1ʻA1ʻ 1-ʻ < 1\'<ʻC0?1 0ʻ<?ʻ & ʻ 10 A 10ʻ1-ʻ@10BD1a1 G 1ʻ&1@? ʻ ʻ@10ʻ =< 1ʻ 1@1+1ʻ&-ʻ 1-D<-B1ʻ&?ʻ 10 <ʻ 1ʻ 1-B&- 1ʻ =1 A'ʻ ?..1>1-ʻ Iʻ A1ʻ B1&ʻ 0&'ʻ A?1>1-ʻ B&-+'Aʻ 1-B&? .1ʻ @<ʻ C1'-1ʻ A1ʻ 1-k' < 1\' <C<'1 0ʻ <ʻ & ʻ Cʻ 10 1 10ʻ 1-ʻ @10BD1H1ʻ 0?'0A' G 1ʻ1-ʻB<0ʻ Hʻ<0B -ʻ 01ʻ 01-ʻ 1 = ʻ. 1+1\ʻ Cʻ 1L1B?A&-ʻ &?ʻ <? 1ʻ+&@1ʻ 1-ʻ 1@@1ʻ C ʻ1ʻ 1-B&- 1ʻ A &ʻ ʻ Iʻ 10&-g C0?1ʻ Bʻ 1ʻ ʻ A &ʻ ʻ Iʻ 1>1A'1

1>ʻ @1ʻ & g Cʻ >10>1ʻ @<001-ʻ A1ʻ & ʻ A' \ʻ=0ʻ ʻ D'+<=1 0ʻ1-0" <00'.-1\ʻ Cʻ @<ʻ A' 1ʻ <?A& ʻ 11ʻ A?ʻ C@1>1-g +&1ʻ Bʻ <Aʻ & AC-1\ʻ Hʻ BD10B?-ʻ Hʻ C0?1ʻ &?ʻ C1? 1ʻ AOʻ 1C1@@1ʻ &?ʻ 1+ 01ʻ <0B?-0ʻ ABOʻ A110ʻ 10 < ? \ʻ&?ʻ & A10ʻ -<-B10ʻ=?10ʻC' 1ʻ & ʻA1ʻ@< 1-ʻA10ʻA' \ʻ=0ʻ)ʻ D'+<8ʻ @1 0ʻ '00'-ʻ <00'.-1\ʻ Cʻ C&<'ʻ Iʻ <?A& ʻ 1ʻ A ʻC@1>1-g Iʻ B1&ʻ A?1>1-ʻC+11ʻ1-ʻC< @1>1-g H'@ 0&'ʻ<A ?..1\ʻ Iʻ 1'ʻ 1L1B?A&-ʻB&>1ʻ '<ʻ &ʻ <?ʻ & ʻ Bʻ <ʻ &'<@=&1ʻ 1-ʻ >10>1ʻ @<ʻ >< 1ʻ B&>1ʻB1?L'Hʻ C0?< ;' &?ʻ C1? & ʻ A1ʻ 1@@1ʻ @10ʻ 10 < ? \ʻ B & A1-<-B10ʻ '<ʻ 10ʻ 1-ʻ 1>CʻA1g Aʻ'ʻC@1j >1-ʻA? <-

B"!! .+/!'" 2 +#' "! 1 .'! V ! "2 '. ' 7 "/' . ' 20# ' < "! 1 á22á. -!&2 ' C#

3 ! - + @' $ ' ! 0+ <'.'" .'"&- -2&;*' V ! "2 ' C#' * ' < a09

]] ! 1 &-*' !' 6 ! ! +' . ' -@' . ' ! 2 ! ' 0 ! 2' / ! #+ "! /' "! 2.-



?C&-' <'-' &' ><a1' !'-1' <-A' <-0&>' <' D1' , '- ./0 F '@@G -A' D'0 < ? 1' & ' A'-<-B1' 0D<@@ #0 . '-' &' D&@A' @<B1@ = &>' D1' ! 1<0 ' &=' <-A@1 > <0' -1L ' &' B&>1

@ ' D1' . '1+&?0 &>C@<'- ' &=' D1' 0<'A' &>j >&-0@ <A1' '-' D1' 0<'A' < @'<>1- @ D K' >< ' &=' D1' , '- ./0 @'1 . 1' 1&C@1@ KD'BD' D<+1' #11-' 01' 1A' <-A' C&0@ 01001A' &=' <-A0' <-A' 1-1>1- 0@ # ' D< ' . D ' <-A' ' @1@ ?- '@ D1' @<0 ' B& > ' - .' &=' &? ' & A' D1' , '- .' '- &' - .@<-A@ D< ' ?C&-' ?. .10 '&-' ><A1' &' D' >@ D1' 0<'A' <-A0' <-A' 1-1>1- 0' D<+1' #11-' . <- 1A' &' A'+1 0' 1 j 0&-0@ <-A' 1 1 0' < 1- 0' D1 1&=' ><A1@ C D< ' # ' &j @&? ' &=' 0?BD' E <- 0' <-A' 1 1 0' < 1- 0@ D1' 1-<- 0' <-A' ?1' K-1 0' &=' D1' 0<'A' 1-1>1- 0' '-' A'+1 0' &?-j '10 #1' A'00 01A' <-A' C? ' &? ' &=' D1' 0<>1@ &' D1' ' . 1< ' " <>< .1@ <-A' <.<'-0 ' D1' &? 01' &=' D1' & ->&-' <K ? ' & A' D1' , '- .' B&-0'A1 '-.' D1' '0HD'1=0' <=& 10<'A@ <-A' K'@@'-.' D1 1?C&-' &' C &+'A1' A?1' 1 &A @ # ' D1' A+'B1' <-A' 001- ' &=' D1' & A0' <-A' &> >&-0' <=& 1j 0<'A@ D< D' & A<'-1A' <-A' 10 <##@'0D1A@ D< ' '-' B<01' <- ' <-A0' & ' 1-1>1- 0' #1' . <- 1A' # ' D1' , '- ./0 < 1- @ + ' D&?' ' @1' =&?-A' # ' -H?10 ' & ' & D1 K'01' KD1 1' D1' , '- ./0' - ' '0' -& ' .'+1-' # ' <K@ D1 ' D< ' #1' C? ' &? ' & ' A'00 '01A' &=' D1' ' ! 11D&@A@ 0D<@@ D<+1' <' 0C1B'<@ 00'01' &=' D1' D<-B1@@& /0' E <- @ K' D&? ' & D1 ' ?' ' &' #1' ><A1' &' D1' , '- .' '- ' D< ' 1D<@=G -A' '=' D1' < '10' & ' 1 0&-<' D<+' -.' D1' , '- ./0' 1 1 0' < 1- 0' A&' C < ' '-' 'A ' <' F ' ' &=' &B1A1-A&' A'<@@' #1' . <- 1A' # ' D1' 0<'A D<-B1 @& @ K' D&? ' ><a' -.' & D1 ' ,0000 &' D1' , '- .' <-A' '-' <01' A'< ' A'1 ' KD'BD'D1' C? ' &? @ & 'A'001'01A@ A&' 1B&+1 ' <.<-0 ' D1' 1 0&-0' D<+' -.' 0?BD' < 1- 0@ D1 ' KD'BD' #1' 0&' C? ' &? ' & ' A'00<01A' 0D<@@ 1B&+1 ' D1' ' 1#@1' " <>< .10 ;' -A' D< ' D'0 A'-<-B1' <-A' < ? 1' D&@A' @<B1' <0' K1@@ `'<= 1 'N P' D1' , '- ./0 '+<@ '- & - .@<-A@ <0' '-' <@@' '>1' &' B&>1

W :- &"1 &.-' . ' !' +!' . ' -/2' 1 /!' 0-/!'" 0 !' 'j' 6&#' ' # !'"

@ F D1 1<0' <>&-.' & D1 ' < ? 10' <-A' A'j -<-B10' ><A1' '-' D1' @1+1- D' 1< ' &=' D1' 0 ?A' @< 1' , '- .' 'BD< A@ 'K<0' & A<'-1A' <-A' 0 <#@'0D1A ' D< ' D1' . 1< ' ==' B1 0' &=' D1' 0<'A' @< 1' , '- .@ # ' D1' A+'B1@ &=' & D1 ' & A0' &=' D1' &?-B'@" 0D&?@A' D<+1' &K1 ' &' 01@@ < B1@ &=' D1' ! & =1' ? 10' &=' D1 >' D< ' + 1 1' =& 1 ?A.1A' '-' D1' < @'<>1- @ D&@A1-' D1' 0<'A' L ' ' 1< @ # ' D1' ' .&&A' " '0B 1 '&-@ <-A' D< ' D1' E '= 0' <-A' E <- 0' &' #1' ><A1' ?C&-' 0?BD' <@10@ 0D&?@A' #1' =' >' <-A' 0 <#@1' ; ? ' 0<'A' & A' D1' , '- .@ # ' D1' A+'B1' <-A' 001- ' &=' D'0' & A0' C' ' ?<@ <-A' 1>C& <@@ <-A' < ' D1' 1j H?10 ' &=' D1' 0<'A' &> >&-0@ B&-0'A1 '-.' D&K' A'+1 0' <@10' D<+1' #11-' ><A1'# ' ! & B1' &=' D1' A'-<-B1' <-A' < ? 1' <=& 10<'A@ D< D' & A<'-1A' <-A' 0 <#@'0D1A@ D< ' D1' E '= 0' <-A'E <- 0' 0A > <A1' # ' + ' ?1' &=' D1' <'1<= 11<'A' &-@ @ 0D<@@ 0 <-A' > ' D1' ' =& B1' <-A' ++ ?1@ -& ? ' D@ 0 <-A'-.' <- ' E '= 0' <-A' E <- 0' ><A1' &' D1' B>' < @ <-A' D<' D1 ' KD'BD' K'@@ 0?1' =& ' <' &-=' >< '&-' &=' D1' ' ? BD<01' ><A1' '-' D'0' 1D<@=' 0D<@@ =' D1 1 &0P' D<+1' <' &-=' >< '&-@ C< '-.' D1' ! '-10' <-A' ! 110' D1 1&=' A?1

W 6 ! ! ' . ' +' "! 2.-2' -.' !-' ;+!/' ; @' !' 0 !' @' 6 / 7 ' 'J' #'

@ F D1 1<0' '-' D1' 0<'A' < @'<>1- ' D&@A1-' D1' 0<'A' &-1' <-A' K1- '1 D' 1< ' &=' D1' 0<'A' @< 1' , '- .' 'BD@ < A@ A'+1 0' <'-0' &=' 1<0&-' K1 1' & A<'-1A' # ' < ? 1@ '-' <0' > ?BD' D< ' D1 1' K<0' -&' <-' KD'BD' A'A' a-&K' D&K' D1' &?.D ' &' #1D<+1' D' > 01@=@ &' A&@ !? 4 ' & ' 0< @ =& ' " &?# 'A=' 0?BD' <' - 0G ' '0' <BB& A1A'<-A-001- 1A' # ' D1' , '- .@ D1' & A0' <-A' &> >&' 1' <=& 10<'A ' D< ' '-' -&' '>1' &' B& -0' <- ' 1<0&-' #1' ?A.1A' D1 K'01' D<-' ' K<0' & A<'-1A' # ' D1' < ? 1' '-' D1' '>1' &=' D'0' &#@1' E <-A='' D1 ' , '- . AK< A' D1' D' A@ KD&>' E&A' <00&'@

W !"% Z' . ' !"'L' ##& "*!/' 7& ' !' -#&!-' B!"1!2

@ F D1 1<0' D1' 0<'A' &> >&-0' # ' D1' ' 1 ' '&-' D<+1' 0D1K1A' '-' D1' 0<>1' < @'<>1- @ DCK' ='@1' D1 '==0' &=' &?- '10' K' D' -' D1' 1<@>' #1' BD< .1A' K' D' D1' <- '1-

0? ' C1'-1' A1' ='? 1' ='-1' I ' <-B1#-' <@' &@?>1' A?' &'G' 1 ' B&>1-B1 <' B10 ' & A'-<-B1' I ' 10 < ? ' A1' 1-' ' @'1?' A1' @1' =10 ' A1' D<-A1@1? 1' C0BDA- ' <+1-'

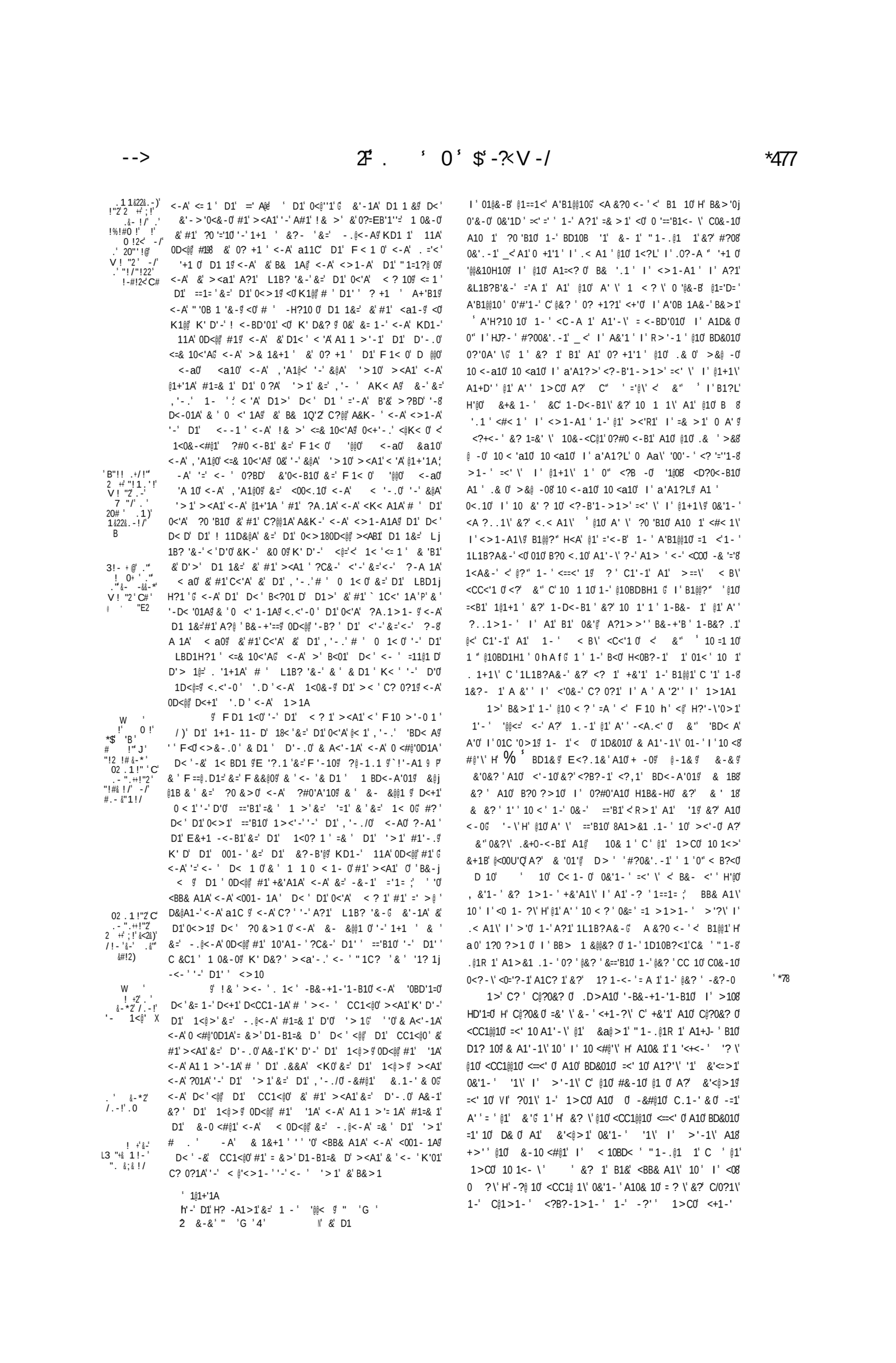
1>' <' @<' 1+&?0 ' B&>C@1'- ' A10' A' \' 1 ' ==" ' ' 1-' A' ' C@1>B- @ B&>1 @ C@?0&? 0' A10' @'1.10' < 1' =' ' ?' @1' &" HC ' 0 1' 01'<< ' I ' C&00100'&-1\' A10' ' 10' I ' 1=' \' C' @&? ' A > ' I ' 'A1' <-H<@ BD 1'-1' +1-?1' - =1' A' ' ?' @1' &" 1-' =' . 1 1@ H' C' 0?. .10 '&-' <' @?" = '' ' @10' A' \' , 10' I ' 1- \' C= ' 10 1' .0?- 1\' <0' A'1010' Ci&-1 ' I ' 10' C< 1- 10' 1- ' =1' R@ '00' - ' H' C' B&@&? ' A10' '1@L' .0F@ 10' I ' 10' C< 1- \' @10' 1-<- \' I ' , &'10' C&0010 &0' ='10' A' \' 1- \' 10' C@?0&/0' 2- 10' 0&- ' A101'01\' I ' &?0 1\' A'B1@@10@ <' @&? ' . &-A' A< > <.1' I ' 1-B&- 1' @1' B&? 0' A1' @<' BJ1' @1 ' ;' =1' =' ' ?' @1' & ' B&-0'A1 <?- ' @1' > '0B=<' = 0 A'' I ' +1?@<< ' 0" B1@ & AK 1 ' A?1' 1 <1A1@ A1' @<A+ 0' I ' <001- ' A10' ' A ' 10' '0A' \' <A' & A1'-\' I ' 10 <@=='<@ ' @<' &?' R 10' &?' \' 0&- ' .D' - 1\' C' C< 1- ' A?' (' <-\' ' @1' &+1' C' 1- ?10 ' &?' <?, >1- ' @<' &?' @1- 11' A?' &" -10 ' C<0' A&-1' C' @<' @1 ' <'1- ' B1?L' H" 0&- ' &?0 1\' &?' A'01'01\' A1' @&' =' <-C' 1- ' 10C1B'<@1' <00'01' A?' .0?- ' A?' D<?-B1@@1 ' 0 ?-\' <?R1' C 0?' 1' = '' 1' <?' &" B @@1' C '1G 1' 0" @10' C0&-10' 1'<- \' @10' C< 1- 1 ' A?' &" C '1- ' 1-' 1'A1@ 0&=' .W?- 1' # '1=' A1' CB1A1-A&' C' @1' A' ' D<?-B1@@1 ' 0<?-\' <?,1' CK0?' ' = ' 1' <?' 2'G 1' 1-' B<0' H' @10' A' \' &?0 1\' &?' A'001'01\' 1B& 1-' A1 '@10' C0B>10' 1'<- \' '1@L' C< 1- 0' H' >10>10' a0' &?0 1\' &?' A'00<01\' 1B& 1-' @&? ' A<><.1' <' 1#@1' ' ' B10 ' & A'-<-B1' I ' 1 < ? ' '1. -1' @'1?' 0'#'1-' C?'0' @< '+< ' A?' &" 1-' -.@1 1' B&>1' 1-' &?' 1>C0' <+1-'

1>' B&>1' 1- 1' <? 0' & A'-<-B10' I ' 0 < ? \' =<' \' <-' ?-\'0>1' @1' A' ' -<A.<' 0' &" 'BD< A' & A1'C1\' 0&' ' I ' 10 <#@@\@ H' @10' .0?-A10' ='B1 0' A?' A' ' -<A.'' 0' '" C' <A+'0' A10' ' ?!' A1' B&-01'@@ 1'1-' C&<' ' A1' +1-A 1' CB1@@1' A1' @10' =& I ' ?'10' A1' B1?L' H" =1? 1-' => H. .1\' 1-' @1' C@1>> ' 1>'\' @1' =' ' <-' ? -\' 1' C' D>' &?1' A'0B 1B'&-@ I ' '@10' A#?-' I ' . &- 1' <==<' 0' 0?' ' 1@ 1- 1@ 0&' ' =1 >1' C' < <#@1' 0 1' A' ' ?' @1' &" ' <A+'0' C' <001- ' A1' @10' ?!' 10C' ' ?1'L' I ' 1>C& 1#' I ' <' @<' 1H?10 ' A10' A' \' &10@ B&-0'A1 <-' B&>1- ' C@?0&? 0' +1- 10' &- ' 10 1' '<' 10' C' =& B1' A1' @10' & A'-<-B1' I ' 10 < ? ' 0?'0A' \@ <A'& A1'-1\' I ' 10 <#@'\' H' @10' A&?-0' I ' . &- 1 '1-0" =<' 10' C' , ?1' A10' 1- 10' 0?'0A' \' <- 0&?@1>1- @ < &'01-' 1-' @&' =& B1' ='1 , ?1@ -&?-' &#0 <- \' <0B?-0' A ?-0' &?. > \' = A \' <-' &- <' @1' H' B1?L' H" +1?@1- ' 0?1 ' C ' BB>=' ><B'&-' 7 'A1' @&' C? B#<B1' =<' ' B1@@1' C '1@H'@0'1- ' 1'1- ' B&-=' ><B'B-' C<'<- \' @10' ='-10' I ' !' 1- ' A 1\

1>' B&>1' 1-' @1' A' ' C@1>1- ' 1-?\' @1' A' ' <-' +'- . ' C '>1 ' @1' A' ' -<A.<' 0' &" 'BD< A@ C@?0&? 0' C1'-10' A1' <'0&-' =1? 1-' & A1'-1\' C' 10 < ? ' C1-0" H' ' -<@ +&' ' <?B?-' D&>1' H<' C&'1' 0<+&' ' B&>1- ' '@ 01' A1 0 ' <+&' @ A1' =1? 1' C'1 ' &?' A' 1' C? ' A&?# 1' A10' '1@L' C1' -10G BB& A1\' <' I ' <001- ?\' C' @1' &' ' I ' @10' =0' I ' &10' 0?'0A' \' H <" >? ' 1>C0' <+1-' ' <?B?-1' <'0&-' 0&' ' <A . .1'<? 1>1- ' H' -1'=1? ' & A'-1\' C' 10 < ? ' 1-' 1>C0' A1' 0&-' -&#@1' <'1@@1' &" AK< A' '1 0' H" " '1?' <00&'@1

1>' B&>1' @10' A' \' &10' C' @&? ' C1 'B'&-' &-' >&-@ 0 1\' 1-' >10>1' B10 ' C@1>1- ' B&>1- ' @10' '0B&- \' A10' &?- <' A1>\' @1' &'<@>1' 0&-' BD< .1\' &+1' @<?-B'1-

0 'N$ ' ' '' < % '' '*6



W
!' 0 !'
5 ' / 7 '
#' '"!#& !/'H
&1 .2&-*'
3!- +&!Z .-'
!' @.."'
;!- 2' C#'
. ' ". -/.9 '
-!*+! &-*'
.'"!/"!22'
""..."2' -/'
&2 "&2&.-'2'

1>' B&>1' C' 10 < ' => ' 1-' 1>C0' A?' &" ' <'1@
- 1' = ' @1' &" H& 10 ' <-' A1' 0&-' 1. -&' &1C '0>1@
& A1'-1\' 0&' ' I ' 10 <#@'\' H' C B1' H' '10' 1 & > ' A1=1' 10'
I ' >10C '0'&-0' H" =1? 1- ' -& &' 1>1- ' ?011\' 1-' @<' ' 11'
A1' &-A 10@ C? ' A1@<@ ' A1' #&-1' .&+0 1>1- ' A1' <' ' A10'
'0B&- \' I ' A10' @A1 ><--10@ -1' C? &- ' 10 1' '-H? 01\'
-1' & 1\' C' .1- \' A1' >10>1' @<' ' 11@ & A1'-1' =?' ' I '
10 <#@'1' H' @10' A' \' <' ' '0B&- \' I ' 1 ><--10' H&D '
@<' .&, -1>1-K' A1' @<' A' 1' ' 1' =1B1- ' 1A 10B1 ' I ' H& 8
'.1 ' @10' A1=1' 10' 1 &? 0' I ' >10C- &-0' 0?0-&>1\' I '
@10' A?1>1- ' C?-' ' A1' 1>C0' 1-' 1>C0' 0? ' <'-1' C1'-1@
B10 <00<+&' ' <' C ' 1' A1=1@ ' '@@' >< B\' <' &" I ' <' @1'
BA1' A1=1@ ' A1?L' '@@' >< B\' I ' <' '1 B1' A1=1' ' ' @<'
= <-BD'01' A1' @<' A' 1' ' 1' 0&' ' C '0' 1-' @<' ><=11' @1' &'G
1 ' 0&' ' B&>1-B1' A1 H?1 1' 0 ' 1<?L' <' @<' 1'- ' 'BD1@
C0BD1'-'<+1'? ' 0 ' '0'@0' -1' =1B1- ' A?10' 1A 10 01>1' \'
B&>1' A10?0' 10 ' A' ' 0C' ' 1-H?'0' A1' @&? ' A1=1? \' C' 1-8
H?10 10' A10' .1- \' A10' =& A-10' &- 110@ 10 <00<', '
,1- ' 001L' ?001L' 1 =' C@-B' I ' 1 @ ' 0'#'1-'<'@<' 0?' 1'
A1' &"B&>1' A<?R0'H" C@1<'A01' 01' +B>A &- ' 1 ' 0" @10'
<' ' ' B&- \' I ' @A1 ><--10' 0&'1- ' C' '1?]' 1-H?10 10'
1-A' 1\' 0&'1- ' =1' \' +<@' ' C' A?1' C110' A1+<- ' @10' ?0 'B10'
@1' &" H" , &- ' <' B1' <00'. -1\' A1D& 0' @<' A11' ' 11' A1+<- '
TH?1?L' '@0' 1'1- ' @&? ' 10C&-B1'0'#'1-'<' &"B& -1<' @<' C '1@
1 ' 0'@0' 01' >1 1- ' 1-' 1-H?10 10' 0&'1D ' B1@@10' 1-H?1 10'
' C '01\' C' .1- \' =& <'D0' B&'-1' A10? ' 10 ' A ' @ 1 ' 0'@0
0&'1- ' < > - \' 0&' ' @<' AQ1' C I '1' 1-B? ?' @1+1' A10' A' \'
<' ' 0B&- \' I ' @A1 ><--10' C ' A1=1< ' A1' @&'?' .&, -18
>1- ' ' 1 ' -'1- ><'-0' @10' C@1'- '=0' 1B& 1- ' @&? ' A<>.10'
<' 1#@1', 0' A' \' <' ' '0B ?- \' I ' @A1 ><--10;' 1 '
C' B<?01' H' @10' '0B&- \' A1' &-A 10' 0&- ' CA10' <' B10 '
#?0&'. -1@ 0&' ' @1' & @10 <#@1' A1' @1' &? ' &?' 0&-' @'1? 18
-> ' ' '-'0 1' ==@ ' @'1?' A10' '0C&- \'<' 1B1'+1 ' @10' @ 1=1'
A#'1-' & '.'-<@0' A1' @<' D< -BA@< 1' B&>1' ?A'A<a'
0&?\' @1' 01<D1' A10' ?0 'B10@ <' =1' 1' 1- ' 1L11?Ba>'1<' @<'
A' 1' ' 1' ;' ' 0&' ' C110' =1' ' C' < <BD1>1- \' I ' C' A10j
1001'0' 8 I ' C' 1L'. 1-A'0" >10A1 ' >' 0&' @ '00'- ' H<@ 0?' 1'
@1' &" 0&' ' '1L'. 1-A' <.< A1' <C0' @1' C ' >1 ' <C'<0' 18'
&? -1@ I ' <' @<' '1 B1' <C'<0' 1 &? -1' <@ 0?' 1' A1' CA1';'
' 0" @10' <' @ '0B&- \' I ' @A1 ><--10' A1- ' R 10' I '
1- 0' A1D& 0' =1' A' 1' ' 1' 0&' ' CB1001' =1' ' A1, 0' 1?L' C'
< <BD1>1- \' I ' A'0 1001'0' 10' -10>10' @10' &?- 11 ' &?'
@10' R 10' I ' 1- \' 0&? ;' ' H' BD10B?-' A10' A' \' <' '
'0B&- \' I ' @A1 -<--10' +'<'A <' A1+<' ' @10' A' \'
?0 'B10' 10C&'. -1' 0' - .?@1 1>1- ' C ' @?" >10>10' 0'#'1-'
<' C'@ A10' <? 0'H" 0&- ' <#01- \' B&>1' A1' @?" >10@'10' G
' B10 ' & A'-<-B1' 0&' ' 1-?\' =1 >1' I ' 10 <#@1' -'1- B&-8'
10 1<- \' = <'BD'010' C '+'@1. 10' &?' B?0 ?>10' H1B&- G'
1 ' HB10 ' & A'-<-B1' 01' 1L 1-A1' <0' <? 0' ' 110' I ' ? .D0'
A?' & <@>1' &?' '1?L' A1=1? \' &?' >10C '0'&-0' 0&-'
?011\' I ' -1> ' A?1>1- ' B& .'1\' I ' 1A 1001\G' 0<?+1' H'
@10' 1-H?10 10' 0&'1- ' C '01\' C' .1- \' A1' >10>1' @1' &- 11'
&?' '1?L' ' 110' 0&- ' 1 ' H' @<' CA-1' A1' B1?L' A1' ' 110'
? .D0' I ' '@@10' H" A1' B1', &- ' < 1'- \' 0&' ' <A ?. . 1'
C' A'0B 1B'&-' A10' ?0 'B10' H<' B1' M '2 ' <00'. -1\;' '=1'
A' ' ' @1' &" B&-0'A1 <- ' @1' #&-1' I ' @&'<@ C& ' A1' @10'
<' ' '0B&- \' I ' @A1 >< -10' I ' A1' &? ' @<' &<@ 11'
A1' >10>1' @<' ' 1' A1' &-A 10' A1, 0' >10>1' -=1' ?' @1'
&'@' I ' C' <- ' @&? ' +1?@<- ' =1' 1' 1<01' I ' >' '.<B'&-' A1'
@10' C '-10' <+0- A' \@' A1' @<001- ' A10' 0' 10C' ' ?1@L

@' F D1 1<0' # ' <' < ? 1' ><A1' '-' D1' ' >1' &=' ,'-.' AK< A@' E <-A=< D1 ' &=' &? ' & A' D1', '-.' D<' -&K' '0@' D1' ^ 1+1-' <-A' K1- '1 D P' 1< ' &=' D'0' 1'. -@' ' K<0' & A<'-1A' <-A' <#@'0D1A@' D< ' #1B<?01' D< ' D1' & 0@' "1=1?@ 0@' <-A' '0C '0&-0@' KD'BD' K1 1' -& & ' j &?0@ ' ?01A' '-' D1' ' '&=' & -A&-@' =& ' "1=1?@ ' &=' .&&A' E&+1 -<-B1' C=' D1' < & @' &=' D1' D1 '==0@' <-A' D1' @A1 >1-@' >'.D ' -& ' #1' '-H?' 1A' -& ' =&?-A' # ' 1&C@1' &=' D1' 0<>1' ' @' D< ' D1' 0<'A' < & @' D1 '==0@' <-A' @A1 >1-@' KD'BD' D<A8 D1' E&+1 -<-B1' &=' D1' 0<>1' ' @' 0D&?@A' B<?01' &'#1' 1A 1001A' <-A' B& 1= 1A' D1' "1=1?@ 0@' & 0@' <-A' '0C '0'&-0'<#&+1' -<>1A@' <-A' D1' 0<>1' A?@ ' C?-'0D' = &>' ' >1' &' '>1@ ?C&-' <' B1 <'-' <'-@ D<' '0' &' 0< @' < ' D1' I 0 ' "1=<?@ ' <' D&?0<-A' < a0' &' D1', '-.@' <-A' < ' D1' 01B&-A' "1=1?@ ' K&' D&?0<-A' < a0@' <-A' < ' D1' D' A' "1=1?@ @' D< ' D1' ! <-BD'01' &=' D1' <'A' ' '#1' <a1-' '-&' D1', '-./0' <-A' ' W' <-A' #1' ' '#1.?-' &' 1-H?' 1' ?C&-' D1>' <' <'-' '&D<1@' -1L ' B&>'-.G 0&' D<' '=' D1 ' A&' -&' B<?01' &' #1' ><A1' A?1' 1A 100@' <0' <=& 1' '0' 0<'A@ ' '0D<@@ #1' 1-H '' 1A' =' D1' ' "1=1?@ 0' # ' -H?10 0' &=' 1&C@1' &=' =& <.-' &?- '10@ D<' '0' &' 0< @ &=', 1- @ 001L@ ?001L@ 1 =& A@ ?Ba'-.D<>@ '>A' 1 a0@' <0' K1@@ <' D1', '-./0' ?' @ <0' & D1 0' D<' K'@@ B&>C@<'-G <-A' '=' D1' < & @ D1 '@=1@ <-A' @A1 >1-@ #1' # ' 0?BD' -H?10 0' A'= 1A@ D1 ' 0D<@@ #1' B<?01A' & B&>1' # ' A?1' &B100' #1=& 1' D1', '-./0' ?0 'B10@ KD'BD' 0D<@@ #1' & D1' <>1' <00'. -1A' C? ' &=' D1' 0<'A' ' @ #1=& 1' KD&>' D1 ' 0D<@@ D< 1' D1' ' -0K1 @ <0' K1@@ &' D1', '-.' <0' &' D1' < G <-A' '=' D1 ' C? ' D1>01@+10' -' -H?10 0@ D1' 0<>1' -H?10 0' 0D<@@ #1' <a1-' # ' =& 1'. -' 1&C@1@ <0' <=& 1' '0' 0<'A' ' <-A' '=' D1 ' #1' < <'- 1A@ D1' 0 'A' <?@ 0D<@@ '-B? ' <-A' #1' @1+'1A' &=' D1' 0<'A' < & @ D1 '==0@ <-A' @A1 >1-@ =& ' = 1=<?@ ' &=' D1' ' E&+1 -<-B1@ <-A' -1+1 D1@100' D1' @<'- '=' 0' 0D<@@ 1B&+1 ' D1' ' 1#@1' "<>< .10@ <.<'-0 ' D1' 0<'A' < & @ D1 '==0@ <-A' 'A1 8' >1-' G -A' #1B<?01' D<' D1' D1 '==0' &=' &-A&-' #1' < '10' &' D'0' ?0'-1 F ' D1' &-0 <#@1' &=' D1' &K1 @ & ' D'0' '1? 1-<- @ 0D<@@ 01 +1' '-' D1' @<B1' &=' D1' D1 '==0@ &' 11A+1' DC' F ' 0@ <0' K1@@ '.'-<@0' C=' D1' D<= B1 ' <0' ?A'B'<@0@ ? -A1 ' D1' 1<@ &=' D1' ?0 'B10@ &' A& D1 1&=' L1B? '&-' '-' D1' 0<'A' ' ;' -A' &B100' 0D<@@ #1' ><A1' # ' <B#>1- 0@ " '0 100@ <-A' # ' L'. 1- @ '=' -11A' #1@ 0&' D<' <' D1', '-./0' ?' ' D1' L'. 1- ' 0D<@@ #1' <K< A1A' <= 1' D1' =' 0' <C'<0' 1 ? -1A@ <-A' <' D1' D' A' <C'<0' 1 ? -1A' <' D1' ?' ' &=' D1' < ';' -A' '=' D1' < & @ D1 '==0@ <-A' @A1 >1-' D<+1' <-A0' & ' 1-1>1- 0' &? ' &=' D1' 0<'A' @' &B100' 0D< ' #1' ><A1' <.<'-0 ' D1>' # ' <BD>1- 0' <-A' " '0 10010' ''" D1' 0<>1' &? - '10' KD1 1' D1' <-A0' & ' 1-1>1- 0' #1;' -A' D<' 1+1 ' &=' D1'0<'A' < & @ D1 '==0@ <-A' @A1 >1-@ KD'BD' A&' <CC1< ' #1=& 1' D1' 0< A' ?0 'B10@ 0D<@@ <-0K1 ' C< 'B?@< @ ' =& ' D' > 01@=@ <0' K1@@ < ' D1' 1 '@ &=' & D1 ' ?A''BD' #1' <#01- @ <0' &=' D' > 1@=X <-A' D'0' A'-<-B1' 0D<@@ #1' D&@AC-' =' >' <-A' 0 @' -& K' D0 <-A'-.' <- ' <--1 ' &=' ! <-BD'01@ 'j +'@1. 10@ & ' ?0 & >0' ;' <-A' D'0' A'-<-B1' 0D<@@ 1L 1-A' &' <@@ ' '10' <-A' & &?. D0' &=' D1' 1<@>@ KD1 1' 0?BD' "1=1?@ 0' & ' '0C '0'&-0' #1' ?01A@ <-A' -& ' A? ' B& 1= 1A' -& ' 1A 1001A@ 0<+'-.' D<' D1' -H?10 0' 0D<@@ #1' <a1-' # '=BKA. -' 1&C@1' &=' D1' 0<? 1' &?- ' KD1 C' 0?BD' ' '10' & ' & &?. D0' #1@ <-A' D<' D1' <'-' &=' D&01' &=' D1' 0<'A' ' '10@ & &?. D0@ <-A' & @@0' KD'BD' 0D<@@ #1' D1 1&=' < <'- 1A@ 0=1@@ #1' ?A. 1A' # ' D1' "'0B 1 '&-' &=' D1' ?0 'B10@ KD'BD' 0D<@@ #1' D1 1 &' <0 ' . -1A ? ' & A' D1', '-.' B1><A1 '- ' D1' . A' <-A' @<K=?@ 1D<+'&? ' &=' D1' < & @ D1 '==0@ <-A' @A1 >1-@ <-A' &=' <@@ D1' &- &-<@ ' &=' D1' 0<?a1' ' ' &=' &-A&-' &K< A0' D' >@ <-A' D1 1=& 1' K'@@'-.' &' 1<01' <-A' >' '.< 1' D1' 1-<@ ' <=& 10<'A@ # ' D1' 001-' &=' D1' & A0' C' ' ?<@

(L+ ' ! +

01'0'1\' B&>1' =& =<' \' 10 ><'-0 T?' '-B1' &?' A1' B1'@? ' H' =<' A1' A' ' &- 1' A1' 10 1' C ' @1' 1>C0@ I ' ?' @1' &" <-' &? ' I ' K<0 G I ' @10 <?R0 R 10 I ' 1- \' #'1-0 I ' BD< 1?L' A1' '1@ =1@&-' 10 1<- \' D& 0 A1' >10>1' &- 11' A1' 10 1' A1>&1 .1- ' 1- '1 >1- ' <?' &" I ' <0 <?=0' =0 ' 1'<- \' 1- ' = <-BD'010 B&>1' =& =1 \' ' 0" <?B?-' C0&-1' A1' >10>1' @1' &- 11' A1' 10 1' 1B1<- ' &?' A1j >? <- ' 1-' B1@ =1B1' < B?-1' #<R'1' &?' <?R0 R0C<0 C' ' <'@&? 0 D& 0 A1' A' ' &- 11@ 0&' ' C110 =<' ' A1, 0 @?" C' @<' B&1' @1 ' <-H<@ 1L'.1-A' 10 &- 110 &?' '1@ #<= 1' &?' R0C<0 0&' ' =<' G 1 ' 0'@ =?1' A'@@1&H10 1-' @1' A' ' &- 11' A1' 10 1' I ' 0&' ' ? @<.1\' C ' '1@ #<R'1' &?' R0C<0@ 0&' ' @? @<.<' ' R '='1\' <' @10 A' \' ==' I 0 <-A' '-'0 10 A1' >10>1' @1' &- 11' A1' 10 1@ 0&' ' B1 ' C0&-1' C '0 C' >10>10 @10 = 0 &?' '-'0 10@ I ' 010 #'1-0 B BD< 1?L' 10 1<- \' A1'-\' @1' A' ' &- 11' A1' 10 1' 0&'1-' 01'01\' 10 ><'-0 A?' '-B1' &?' A1' B1@?" T ' M <' ' A1' A' ' &?- 11' A1' 10 1' C? ' @1' 1>C0G B 010 <? 0 #'1-0 B BD< 1?L' 10 1<- \' D& 0 A1' >10>1' @1' &- 11' A1' 10 1' A1>&1 .1- ' 1- '1 >1- ' <' &" B <0 <?R0 0 A' \' B&>1' =& =<' \' 1-' ><51' B&>1' A100 h' 10 ' A' 1>' 1-' 1<01' B 1@1+<B'&-' A1@ C&? 1' B&1' C&1C@1' A1' %&'<@>1@ - 1' A' ' 1' @1' & ' A1' @<A+'0 I ' <001- ' <+<- A' \' < ' & A1'-1\' ' 10 <#@'\@ H' A1@ =10 ' A1' 1'- ' 'BD1@ A< <-' C<001' A? <? \' @10 &'0 <-\' @& 0 C0BD1'-' 1-0?@ <- \@ -?@@ A <C' ,1 01 ' ,1-A<@B@& D' '01' A1' &+1- 1' &..1K< 1' -1' -?@@ < R1' A <C' 10 &' ' &?' 1><-<-' "1-.@1R 1' -1' A <C' A1' E<@10' A&- ' @<' A&?0\1'-1' -1' C<001' @<' +<@?1' A1' L'' 0 ' '"' A ' A1' -?@ 01<@ C1 ' ' -1' . - ' 0&' ' <?B?-1>1- ' 1-01<@1\@ -1' -?@@ 0?#0'A1' C<'1\' A1' @10' A <C0 0?'0A' \' A? <- ' @1' 1>C0 <+<- A' 1>' < ' '-0 <-B1' I ' C '1 ' A10 Aa\' EA10 C' @&? ' C1AA&-' '<' ' 1-' B10 ' CD1- ' C@1>1- @ 1' A' ' = ' @1' &" A1' 0<' . B1' 10C<@1' <A' CA&-1\' B 1@1001\' . <@ &1- ' <0 &? \' 010 @'1.10 " 1- .@1R 1' @<' 0?' 1' A1' 0<' C110 H<' @?" <CC '1- ' C/' &?\' ><50 <'0&-0 B =1@&-'10 C' 1?L' =<a\' &?' CC1 1\' A1+<>' @1' 8A'0-1&''0>1' &? ' A1' &+1>#' <-' A1' 0&-' 1.-1' C '>1 G =& 0C '0 >? A 10 B <C10 A10 =1-?-10 A -' ' 0 0&-' 1-A' 1\' 1 1\' &?' <CC1@@1\' B <?L'-' @10 ? @<.<=' 0" -? @10 1-' 1?L' 0&'1-' C-?-A1\' C' B1@@1 ' 1-@ 1D<'0&-0 ' B @&? ' <A' 1-' .0?- 1' 0<' = >1'C110G' C>'A' H' -?' A1' 010 A' \' @'1.10 0&' ' B&1' @< &-' A1+<-' @1' A' ' A 0-1&='0>1' & ' 1-A' 1\@ 1 ' H'@ -1' 0&' ' C+& ' -<CC1@@1\' A1' >& ' A1' D&>1' <@ 0?' 1' A1' CA1' -1' C '0 &+1' <1 -& 1' -1' H'@ 1' ' 1-= A- ' @<' C '0 >1' A1' & ' A1+0-' @1' %D' A'0-1&''0>1' & ' B H'@ -1' ' 10 1' <@ >? A 1' A1' D&>0' " ?1' A1' E@&?B' ?-B@1' >1' A' ' = ' @1' & 'G '00'-' H'@ 10 &'01' <' A &' ' 1-' #? ' A1' &" 0" <?B''-' +&?A <' C'1 ' A1 0 @?" A10 BD&01 ' <+0- A' \' ?' A<0B?-1' A'B1@@10;' 00'-' &? \' =&' \' H' &? \' B1 L' H" +1?@'1- ' 1- &'1 ' @1' #-='B1' A1' B10 ' CA&-' C? 0?1- ' @&' BD 10' 1-' 10 @1' C - 1' B ' B @1' =10 ' A1' &? \' 01'- \' C0BD1'-' <+1-'

0D<@@ #1' 01'01A' <0 =& =1' ' '- &' D1' <-A0 &=' D1' '-B1@ & ' &=' D' >' D< ' 0D<@@ #1' & A' &=' D1' 0<>1' &?- ' &=' D10 1 '=& ' D1' '>1@ <-A' D1' , '-.' 0D<@@ D<+1' D1' 1< ' <-A' " < @ <-A' D1' F <0 1G <-A' D1' & D1 ' <-A0 <-A' 1-1>1- 0@ E&&A0 <-A' D< 1@0 &=' 0?BD' ! 1@&-@ #1' -.' &? ' &=' D1' 0<'A' &?- ' &=' D10 1 @ 0D<@@ 1><'-' KD&@@ ' &' D1' , '-.@ <-A' &' & D1 ' & A0@ D<+>.' D1 1&=' ! <-j BD'01@ <0 =& =1' ' -A' '=' <- ' 1 0&-' &=' D1' 0<>1' &?- ' &=' D10 1 @ 10'A1- ' & ' AK1@@'-.' '-' D1' 0<>1@ ><a1' <' < 1 ' & ' & D1 ' 10C<00' '-' <- ' @<B1' &? ' &=' D1' 0<'A' &?- ' &=' D10 1 @ &B100' 0D<@@ #1' ><A1' <. '-0 ' D' >' # ' D1' &>>&-' <K@ '@@ D1' L'.1- @ '-' D1' &?- '10 KD1 1' 0?BD' < 1 ' & ' 10C<00' '0 A&-1G <-A' '=' D1' =@11' = &>' D1-B1' '- &' D1' 0<'A' &?- ' &=' D10 1 @ <-A' #1' &? @<K1A' =& ' 0?BD' < 1 ' & ' 10C<00@ V D1' ? @<K ' 0D<@@ #1' B1 '='1A' &' D1' ='B1 0 <-A' 'j -'0 1 0 &=' D1' 0<'A' &?- ' &=' D10 1 @ <-A' D1' 0<>1' 1 0&-'0=<<@ #1' <a1-' # ' D1'0<>1' ='B1 0 & ' '-'0 1 0G <-A' D'0 E&&A0 <-A' D< 1@0@ #1'-.' K' D'-' D1' 0<>1' &?- ' &=' D10 1 @ 0D<@@ #1' 01'01A' '- &' D1' <-A0 &=' D1' '-B1@ & '&=' D' >' KD'BD' 0D<@@ #1' & A' &=' D1'0<'A' &?- ' &=' D10 1 ' =& ' D1' ' > 1G <-A' D'0 & D1 ' E&&A0 <-A' D< 1@0@ #1'-.' &? ' &=' D1' 0<'A' &?- ' &=' D10 1 @ 0D<@@ 1><'-' KD&@@ ' &' D1' , '-.@ <-A@ &' & D1 ' & A0 <=& 10<'A@ <0 =& = ' @ '-' 0?BD' & ' <0 <=& 1' '0 0<'A @ -' <01' <-A' 1@'1=' &=' D1' C&& ' B&>>&-' 1&C@1' &=' D1' 1<@>@ &? '0<'A' &+1 1'.-' & A' D1' , '-.' # ' D1' A+'B1' <-A' 001- ' <=& 10<'A@ D< D' & A<'-1A' <-A' <#@'0D1A@ D< ' = &>' D1' !1<0 ' &=' <'-' 'BD<1@ @<0 ' C<0 @ A? '-.' D 11' 1< 0' D1-' -1L '=&@@&K'-.@ -&' @& D' &=', 1 01 @ ,1-A<@ @& D@ ! '01' &=' &+1- @ &.K< 1@ -&' -&-1' & D1 ' @& D' 0 1' @ -&' 1>-<-' &=' -.@<-A@ -&' @& D' &=' F <@10@ KD1 1&=' D1' " &\1-' 1LB11A' -&' D1' <@?1' &=' L'' ' 0 ' ='A ' #1' '-' <D K' 1' 01<@1A' &=' -& 1<@@ @' @1' -& ' . 1< @ -& ' -&' ?#0'A ' C< 1A' &=' D1' 0<'A' @& D0' A? '-.' D1' '>1' <=& 10<'A 8 @ ' D1' -0 <-B1' <-A' < 1 ' &' D1' 0<'A' &>j >&-0@ # ' D1' ' 1 ' '&-' ><A1' '-' D'0' C 101- ' < @'<>1- @ ? ' 0<'A' &+1 1'.-' & A' D1', '-.' &=' D'0' 0C1B'<@ E <B1' D< D' 1@1<01A' <-A' C< A&-1A' .1-1 <@@ ' &' <@@ " !' @'1.1' 1&C@1' &=' -.@<-A@ D1' ?' ' &=' D'0' 1<B1' D<' &' D' >' C1 <'-1 D' =& ' <@@ ><--1' 1<0&-0' <-A' !1@&-'10@ # ' D1>' A&-1' & ' B&>>' 1A' #1=& 1' D1' L'LG " < ' &=' &j +1>#1 @ D1' !' 0 ' 1< ' &=' D'0' 1' .-G' 1LB1C ' ? A1 ' <-A' <C1' &=' F &>1-@ KD1 1&=' D1 '#1' '-A' 1A@ < <'.-1A' & ' <CC1<@1AG' <-A' <@0&' D1' ? @<K '10@ '=' <-' ' '-' 1>' #1' C &-&?-B1A' `# ' D1' 0<>1' BB<0'& - PG' <-A'D< D' . <- 1A' &' D1>' D1 1&=' D'0' =' >' 1<B1G &' D<' -&-1' &=' D'0' 0<'A' @'1.1' 1&C@1' #1' <' &>>&-' D'1=@ #1=& 1' D1' 0<'A' L'L ' " < ' 1 A' 1A@ -& ' D< ' D1' #1' -&' ` &-&? 9OP' -& ' <CC1<@1A' &=' D1' " 1< D' &=' <- ' ?-' <' D1' ?' ' &=' D1' < @ -& ' <a1-' K' D' D1' <-&? @ -& ' D< ' D1' D< D' # &a1-' D1' , '-./0' '0&-' #1=& 1' D1' 0<'A' L'L 9 " < @ `-& /P' D< ' $ ' D< D' -& ' #11-' <' D1' ? A1 ' &='?G$! ' @< 1' " ?a1' &=' E@&?B10 1 @ -B@1' H' &? ' &+1 1'.-' & A' D1' , '- .G <-A' 0&' D< ' #1' 0 <-A' &' '.D ' '-' D1', '-./0' &? @ '=' '=' <- ' K ' @@ 0C1<a' <.<' -0 ' D' >' &=' D1' D'-.0' <=& 10<'A@ & ' &=' <- ' &=' D1> ' &' D< ' <@K< 0' <@@ D1 ' KD'BD' K '@@ 1- & ' D1@ <@1=' ' &=' D'0' < A&-@ 0D<@@ C? 0?1' D1' ' D< 1 0' '-' C1B'<@ #1 K'L ' D'0' <-A' D1' ! 1<0 ' &=' @@' <'- 0' -1L ' =&@@&K'-.

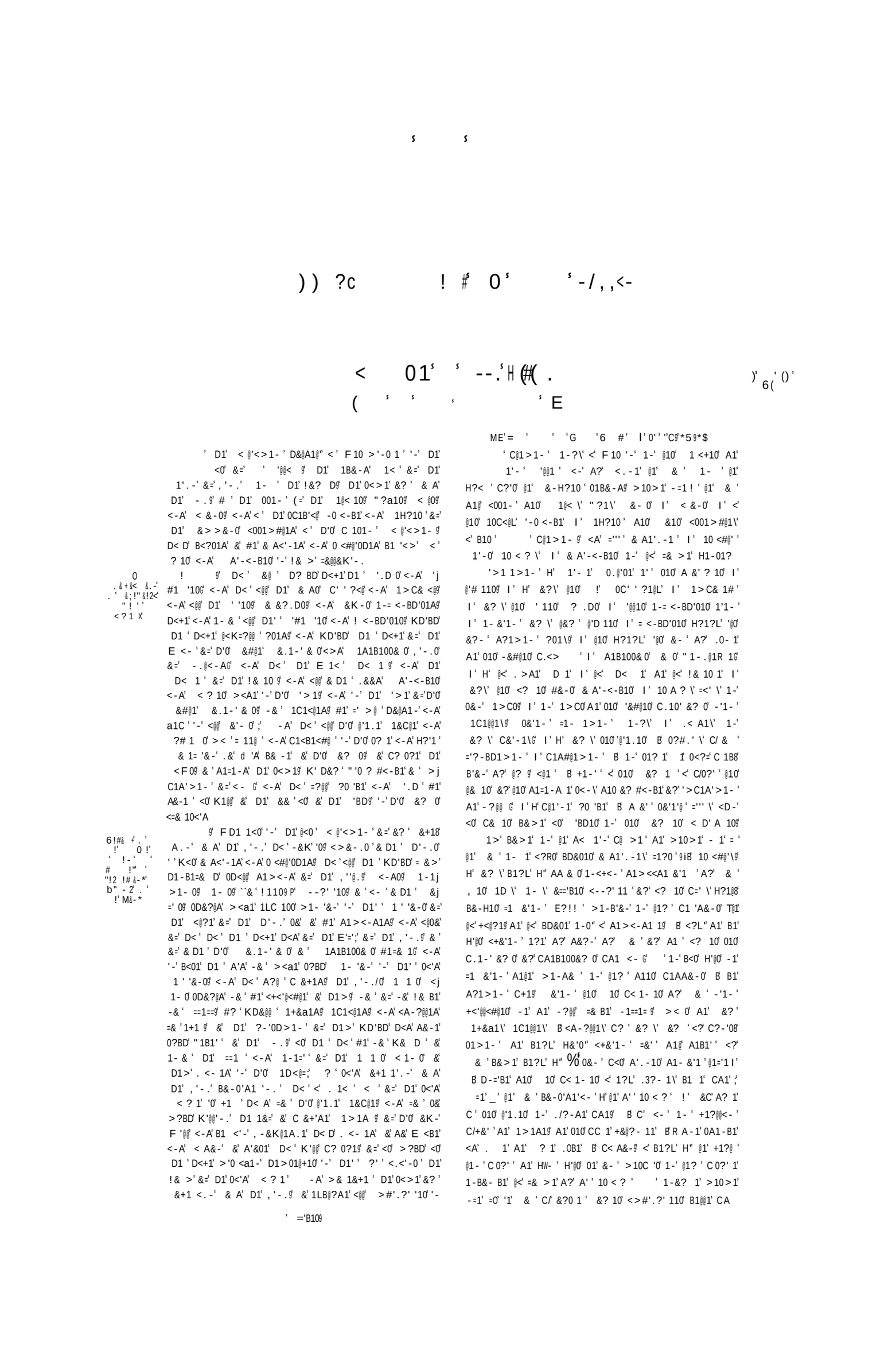
0 ` 'S G)3".'.0" ' //' '! +' 5

.' &-' 2!2' .' 4 !"@.'" "!2 22 7& ' B." !&k 0"!'. ' !' ! -/!"(2 b..12

W W ' +' . 2' . ' &- !"%.'" 1 E!' !%! 1 ' ".1' # +&-*' -/' 0;2i/@

WW !' M%.*<`' 3 "/.-' ' "! 2;-2' C1@&-=1) A' 0+ 7"&!2)

%#! &.-2



C B1' H' >10>1' @10 < ? ' 10 ' >&@ ' &#0B? 1' I ' 1>#&0&'. -1' A1B@< <B'&-9 10C<@>1- ' C ' 1<01' I ' H?'1 1' A1' 0&-' C&1C@1 9 +&1 ' I ' .0- 1' H' &? \' B1?L' H" A10 1' 1-<+<- ' C 0?1 &' ' <' >10>1' - 1' ' @1' & ' C ' <+&' ' A1' @? ' <?B?-' .0- 1' &?' A&?-' <--?1@ &?' 1-' =11' &?' <? 1>1- ' =<B1- ' 1LC 001' >1-A&-' 1-' @1? ' C1AB'&-' A1' HJ- ' H'@0' &- ' 1?1' A10' A&?-' I ' .W?- 1' A1' @? ' -&#@1' &" AK< A' '1@ - 1' A' ' K?' @1' & 9' &?' A1' 'BD< A' -<A.<' i' & 9' & ' A1' AK< A' -<A.<' 0' '-B1' A1' E<@10 9 &?' A1' &D<-' -<A8 .<' 0' " ?1' A1' <-B<0 1' C'1 1' - 1' A' ' = ' @1' & 9' &?' A1' & ' >10>10 I ' A1' -?@ <? 1' C.1-' &' &?' A18 B100&? ' >10>1' - 1' ?' @1' & ' ' B1@? ' H" -1' =1B1' A1@1' >1-B'&-' 1-' 0<' C1AB'&-' H' @10' 10' C< 1- 10' <' @? ' =<' 10' <' B1@ 1>C0' C' - 1' A' ' 5?' @1' & ' 0&'1-' A1' -?@ =& B1' -1'=1=@ ' 1-&? 1' H0-' <' @10' C&@0' 10 < 0< ' <? 10' C=' \' B&>C '010' 1-' @1' A' ' 10 < ? 9 >10>1' - 1' _ ' @1' & '<A' A1B 1\' I ' ./?- 1\' H' A1' -?@@10' C=' \' A&?-0' #'1-0' &?' BD< 1?L' &?' <? 10' BD&010' H?'1@B&-H10 9' C' <0B?-' A1' 010' C.1-' &? 0' &?' =2A1B1 0&? 0' &?' <? 1' C0&-1' H?1@B&-H1' .D> 1\' I ' -'1-' 10C1B'='1\' 1-' <?B?-1' C1 'A&-' 1-0" <' A1><-A1 1' <? 1>1-' H A10?'0' 10' A1B@< 1\9 -?@@?' 1- &? .1' @<' C1'-1' A1' =10 < - ' 0?'0A' ' ' H - ' <0' <-=0' < 'B@10' B&>0' C '010' 1-' >10>1'@10 < ? ' - 1'A' ' _ ' @1' & ' +&1 'H'@0' 0&'1-' =1 >1>1-' 1-?\' I ' .< A1\' I ' > 0' 1-' A?1' 1L1B?B'&-

1>' & AA. -1\' 10' I ' 10 <#@'\' ' 0" <''B?-1' C+'0'&-' 0&' '=<' ' C' - 1' 1'-' '1 ' @1' <C1' <' <?B?-1' C0&-1' A1' 1@'.'&-'&?' <' <? 1' C0&-1' H?1@B&-H?1 9 A10 1' 1L1>C 0' A&#0'A1-B1' 1.?@1 1' &?' A&#1A'1-B1' & A'-<' 1 9 &?' A<+&' ' <?B?-1' &=='B1' CC1 ?1@ A1'-\' ><'0&-0' A1' 1@'.'&-9 &?' < <-' B&>1'?-1' 1.?@1 1' C0&-1' 1@'.'&?01' &?' A1?L' &?' C@1?0&? 0' &-' 1-' B1@@10 9 H' 0" A1@0' C+'0&? 0' A10& 1' 1-<+<-' <BB1C 1-' &?' 1- &'1-' <?B?-1' A1@1' C+'0'&-9 H'@0' 1-B&? .1-' @10' C1 10' B&>C '01\' 1-' @10 < ? ' A10' C+'0 ? ' =1' ' '<-' 10\'0>1' @1' & ' 'B=1>A' 01B&-A

1>' C& B1' ' - 1' = ' @1' & ' 0 ' . 1+&?01' B&>C@1'-' <' @? ' =<' ' 1-' B10 ' C@1>1-9 <A' 1- 1-A?\' H' @10' 1@'.'&?010' D&>10' A1' @& A 1' A1' '0 1?L' A1@ &'<@>1' " 1-.@1R 1' &-' C BD<B1\' 1'-10 #?@@10' A10 1' H?' \' I ' A10BD< .'1\' A1' @1? ' A'0>10' C<'1 ' A1' @1? ' R 10' 1- \' I ' C&00100'&-0' @1001\' <' =1 >1' &?' B?@A+1\' I ' &BB?C'1\' C' <? 10' C0&-10' H' C' 1?L' >10>10 9 1-' .0-' ?A'B1' I ' A1 &.< '&-' A1' @<' @'=1 1' A1' 01'- 1' 10.@'01' I ' A10' C@1?01? 0' @'1.10' A?' &'<@>1' ' 1' ' @1' 9 '+1?@@<-' 0' B1&'C +&' ' A1' 1>1A1' A1' @<A+'0' I ' <001-' A10' &? \' @10' ! ' 10C' ' ?1@L' I ' 1>C& 1#B' I ' <@ '-0 <-B1' I ' 1H?10' A10' A' \' B&10' <A' & A1'.-1\' I ' 10 <#@'\9 H' a0' 1@'.'&?010' A1' & A 1' A1' '0 1?L' 10 &'01-' 1-' @10 <' H'@0' =1? 1-' A1+<-' @1' 1>C0' A10' '1@L' #?@@1 'C BD<B1\' ' H' 0' 1' B1?L' A?' A' '& A 1' B&>1' &? \' <? 10' 1@'.'&?010' I ' 01B?@< 0' A1' H?1@ 10 <' &?' &-A'B'&-' H'@0' 0&'1-9 H" >1 1-' @10' A110' #?@@10' 1-' 1L1B?B'&-9 &?' A10& 1' 1-' <+<-' C? BD<B1-' <?R0' '1@L D'0' 1D<@=9 #1B<?01' D<' D1' 0<>1' < ? 1' '0' +1 ' &#j 0B? 19 <-A' D< D' 11A' &=' " 1B@< < '&-9 0C1B'<@@ '=& ' <01' <-A' ^?'1 -100' &=' D'0' 1&C@19 K'@@ <-A' . <- 1 D ' D<' <@@ D1 ' KD'BD' = &>' D1-B1=& D' A&' 0?1' &' D1' 0<>1' &? ' &+1 1'.-' & A' D1' , '-.9 &' D<+1' &=' D' >'' <-' E <B1' & ' `' 1< @ ' E '= 9 'P' & ' '-' ! 11' & ' & D1 K'019 0D<@@ ><a1' 1LC 100' >1- '&-'' -' D1' ' 1 ' '&-9 &=' D&K' >?BD' D1 ' D<+1' D<A' &=' D1' E '=' <-A' E <- '&=' D1' &#@1' , '-.' AK< A9 E <-A=< D1 ' &' &? ' &+1 1'.-' & A' D1' , '-.9 &' &=' 'BD< A' @< 1' , '-.9 &' &=' AK< A' @< 1' '-B1' &=' F <@109 ' &=' &D-' @< 1' " ?a1' &=' <-B<0 1 9 ! < D1 ' &=' &? ' &j +1 1'.-' & A' D1' , '-.9 &' &=' D1' , '-.' D' >01@=9 <-A' &=' -&-1' & D1 ' &.1-' &' & ' 1A1B100&' &=' D1' 0<>1' &? ' &+1 A.-' & A ' -A' D1' D<' ><a1 D' -&' 0?BD' >1-j '&-' '-' D'0' 1 'A&-9 D'0' 1 1 0' < 1- 0' ><A1' &' D' >' < ' ` D1' 0<>1'/'P' ' >1'# '&?' &+1 <.-' & A' D1' , '-.9 0D<@@ #1' &=' -&' ! & B1' -&' ==1Q ' -A' & 1&+1 ' <0' &' D1' F & A09 D<' '0' &' 0< 9 W' & D1 ' &=' 0' J' B&>C '01A' '-' D1' 0<'A' < ? 19 &? ' &+1 1'.-' & A' D1' , '-.' D< D' A1j B@< 1A' <-A' . <- 1A' D<' &=' -&' &=' 09 E'= 09 E&&A09 W & ' D< 1@09 & '<- '& D1 ' D' -.0' . <- 1A' & ' .'+<"# ' D1' 0<>1' &? ' &+1 1'.-' & A' D1' , '-.' &' <- 9 &' D1' <@?1' &=' ' & ' K' D'-9 1LB1C ' F < A0' <-A' < '<.10 9 &=' KD'BD' D1' , '-.' K'@@ D<' D19 KD'BD' 0&' 0D<@@ 0?1' &' D' >9 0D<@@ ><a1' 1LC 100' >1- '&-'' -' D'0' 1 ' '&-' &=' D1' <@?1' &=' D1' 0<>19 -1>1' 0D<@@ '-B? / D1' !<'-' B&>C '01A' '-' D1' 0 ?A' < ? 1' -A' ' ' ' -& ' D1' , '-./0' '-A9 D< ' =& ' <- ' &-=' >< '&-' ' 'B1-B1' ><A1' &' <- ' # ' &? ' 0<'A' &+1 1 -' & A' D1' , '-.9 &=' <- ' '#1 '10 9 ! <-j BD'010 9 - -?' '10 9 & ' <- ' & D1 ' D' -.0' . <- 1A' # ' <- ' &=' D'0' &.1-' & 0' & ' 1A1B100& 0' & ' D1 ' 1 0&-9 <-A' -& '0C1B'='1A' '-' <- ' 1 ' '&-9 0&' &'#1' A1><-A1A' & D1 K'01' D<-' <#&+1' '0' A1B@< 1A9 -&-1' 0D<@@ '-B? ' D1' <'-' &=' D1' 0<'A' < ? 1' -A' <0' &' D1' & D1 ' 'B@10' B&>C '01A' '-' D1' 0<>1' < ? 1 9 &? ' 0<'A' &+1 1'.-' & A' K'@@ D<' D1 ' D1' ='?>@ ' D&@A1 '<-A' a1C '<-A' C? ' '-' A?1' L1B? '&-

9 ' '0' & A<'-1A' <-A' <#@'0D1A9 D<' '=' <-' &+' '&-' #1' ><A1' # ' ` D1' '0D&C' = &>1' / P' &' <-' 1 0&-' &=' 1@'.'&-9 &=' &' <-' & D1 ' 1 0&-9 &' #1' 1L1>C ' &=' #1A'1-B1' 1.?@<9 & ' &=' #1A'1-B1' & A'-< 9 & ' &' D<+1' <-' ='B1' C1 C1 ?<@ K' D'-' &?010' &=' 1@'.'&-9 ' <0' >?BD' <0' &-1' 1.?@<' 1 0&-' &=' 1@'.'&-9 & ' K&' & ' >B 819 D<+1' '-' D1' 0<>1 D<' '=' 0?BD' & '80& 0' = &>' D1-B1=& D' A&' <BB1C ' &=' 1-&' <-' 0?BD' &+'0'&-9 D1 ' 0D<@@ '-B? ' D1' <'-0' B&>C '\1A' '-' D1' < ? 1' &=' &+'0& 09 ><A1' '-' D1' L'' ' !1< ' &=' , '-.' 'BD< A' D1' 1B&-A

9 ! & ' <0' >?BD' <0' &? ' & A' D1' , '-.9 ?C&-' . '1+&?0' &>C@ '-' &' D'-' ><A1' '-' D'0' < @'<>1-9 D< D' C1 B<'+1A' D<' D1' 1@'.'&?0' 1-' &=' D1' A1' &=' ` '0 1<?LO' '-' D1' 1<@>' &=' -.@<-A9 D<+1' C? BD<01A' B1 <'-' ?@@0' &' #1' H?' ' <-A' A'0BD< .1A' &' C< ' ` D1/P' ' D10' &=' D1' ' <-A09 1-1>1-09 <-A' &00100'&-0' @1' &' ! 1 >9 & ' ` >< -? 1A9 & 0P' &BB?C'1A'# ' & D1 ' 1 0&-0' D<-'# ' D1>01@+109 '-' . 1<' 1 ?A'B1' <-A' " 1 &.< '&-' &=' D1' '#1 '&=' &@ ' D? BD9 <-A' &=' >< -' @'1.1' 1&C@1' &=' D1' 1<@>;' ? ' & A' D1' , '-.' K'@@'-.' D1 1?C&-' & & A<'-' 1>1A 9 # ' D1' A+'B1' <-A' 001-' &=' D1' & A0' C' ' ?<@ <-A' <-C& <@9 <-A' <' D1' -0 <-B1' <-A' 1H?10 ' &=' D1' 0<'A' &>>&-09 D< D' & A<'-1A' <-A' 0 <#@'0D1A9 @' < ' D1' 1 .'&?0' >&-0' &=' D1' A1 '&=' ` '0 1<?L'S O' 0D<@@ 0 <-A' '-' D1' 0 < 1' D<' D1 ' K1 1' #1=& 1' D1' '>1' &=' 0?BD' ?@@0' C? BD<01A' C <-A' D<' <0' K1@@ D1 ' &=' D1' 0<'A' A1 9 <0' <@@ & D1 ' 1 .'&?0' <-A' 1B?@< 09 &=' KD< ' 0 < 1' & ' &-A' '&-' D1 ' #1@ KD'BD' A&' C? ' D1' 0<'A' ?@@0' '-' L1B? '&-9 &' = &>' D1-B1=& D' A&' C? BD<01' & D1 '0?BD

0 a ' " ' /' D<' 'G$' 6 /' &? ' &@ ' !<A1 ' D1' &C1' +' ! ' 6 ('0 1?L' & ' D< 1 D&?01' ' ! +' 6 ' D1' ' ' ! ' 6' Ù & $

% .2& &.-' !"! . ' 2 .' 1!-&.-' . ' ."1!" b" - 2' . ' !' M&.* C0#"

!' 0 !' . '3". '&2."2# 6&#' ' ' ' 6 94U' 1L 1 ''%1A1

+#' 3!"2. -2

-&+2' .' ; !' 0BD< .1A' &=' & !2@2 +#' &-#0" !' 3!- +&!2' . ' ' 6&#' ' 6" #' 4

F ' ' &= 01>?= 1 =<B'<00

1B' <@ &=' :' 'B ' ' 'BD ' &?BD' "d ' D1' 1LC& '-.' &=' E&@A' & ' >

E&@A' <-A' '@+1 ' !&K'A' '-' < B& ' 01' &=' LC& < '&-' 0D<@@ #1' =&'=1 "

1<+'-.' 1<0&-j <#@1'BLC1-B10

1 BD<- 0' <-.1 0' >< '1LC& ' D<@=' D1' ' &-1

*%'

&-1 '&=' E&@A' <-A' '@+1 '&=' >AU i'<-A' B& @<-A)' 0D<@@ #1' 1LO C& 1A)' (' 1U1&'-1A'd

D1' >C& <j '&-' D1 1&=' =& #'AA1-

?@@0' &=' 1K@ & ' # ' &@&? ' &=' D1' 0<>1' ?@@0' C? @ BD<01A@ & ' & #1' C? BD<01A' A&' <a1' A+<- <.1' '-' <- ' <--1 @ D<' &B100' 0D<@@ #1' ><A1' <.<'-0 ' D1>' <-A' 1+1 ' &=' D1>' # ' E< -'0D>1-' &=' K&' &- D0' # ' F ' ' &=' 1>?-' 1' =1B'<0@ <-A' '=' D1 ' ><a1' "1=<?@ @ & ' #1' < <'- 1A@ D1-' D1 ' 0D<@@ '-B? ' D1' <'-0' %1 !& =1' ? 1R B&- <'-1A' '-' D1' < ? 1' &=' &+'0& 0@ ><A1' D1' D' 11- D' 1< ' &=' D1' 0<'A' , '-.' 'BD< A

5 ' F D1 1<0' '-' D1' < ? 1' - KA1' < ' F 10 > '-0 1 ' '-' D1' !'= D' 1< ' &=' D1' 0<'A' , '-.' 'BD< A@ <>&-.0 ' & D1 ' D'-.0' ' ' '0' B&- <'-1A@ D&K' ' ' K<0' <001- 1A@ <B@ B& A1A@ <-A' 1- &'-1A' &=' @ D1' 0<'A' @< 1' , '-.' &' <@@ ><-@ %' &=' 1&C@1@ 1 D<- 0@ @1 a0@ <-A' & D1 0@ <0' K1@@ <-.1 0' <0' "1-D=1-0@ &=' KD< 0&1+1 ' 0 < 1' & ' &-0' A' '&-' D1 ' 0D&?@A' #1@ "% <'-' =' <0' >?BD' <0' D1 ' >'.D '=& =1' @ D< ' -&-1' &=' D1>@ ?C&-' D1' 0<'A' <'-@ C '+'@ ' -& ' &C1-@ ' 0D&?@A' 1-A' & ' B< @ -& ' B<?01' & #1' 01- ' & ' B< '1A@ &? ' &=' D1' 0<'A' 1<@>' &=' -.@<-A@ <- 'E&@A' & ' '@+1 ' '-' &-1 @ ?@@'&-@ @< 1@ 1001@@ $ -& ' # ' LBD<-.1' &' #1' ><A1@ 1LB1C ' D1' F <.10' &=' <@<'0@ <-A' & D1 ' D1' , '-./0' ! & 10010' #1 &-A' D1' 1<@ `0<+'-.' B1 <'- P' 1@< 10@ & A0@ <-A' & D1 0' B&>C 'j \1A' '-' D1' 0<>1' < ? 1@ `K' D&?' B '<@' 1<+1@ <-A' 'B1-B1' D1 1?C&-'=' 0 ' D<A@ <0' # ' D1' 0<>1' < ? 1' >< ' >& 1' =?@@ ' <CC1< ;' ? ' & A' D1' , '-.@ =& ' & C 1+1-' D1' ?# '= ' &=' = '1-' D< 'K=@@ A&' ! <?A' & ' " 1j B1' ' &' D'>' '-' D'0' 1D<@=@ D< D' & A '-1A' <-A' 0 <#@'0D1A' D< ' '=' = &>' D1-B1=& D' <-' 1< BD1 ' &=' D1' , '-.' >< ' ='-A' E&@A' & ' '@+1 ' '-' &'-@ & ' >' <00@ '-' = '1' a11C' -.' &=' <-' D< ' '0' C<00' -.@ & '?C&-' D'0' <00<.1@ '-' <-' D'C' & ' 1001@ &' , '&?' &=' <-' & @ <+1-@ & ' 11a' &=' D1' 1<@>@ K' D&?' D1' , '-./0' 0C1B'<@ 'B1-B1@ <@ ' D<' E&@A' & ' '@+1 ' 0D<@@ #1' =& =1' ' &' D1' , '-.@ 0<+'-.' D'0' 1<0&-<#@1' LC1-B 0@ F D'BD' D1' < ' #1' #&?-A' &' &-j =100' <-A' A'0B&+1 ' C 101- @ ' <= 1 ' D<' D1' '0' K< -1A' <-A' BD< .1A' 0&' &' A&' # ' D1' 0<>1' 1< BD1 @ & ' 1@01' <@@ D1' 0<'A' &-1 ' 0&' B&-B1<@1A' 0D<'@ #1' =& =1' ' &' D1' , = @ . &+'A1A' <@K< 0@ D<' D1' 1 BD<-0' <-.1 0' D<' A& 01@@ D1' ' 1 BD<-A'01' K' D'-' D1' 1<@>' ' -.@<-A@ <-A' D1' -18D<@=' &=' D1' &-1 ' &=' -.@<-A' 1B1'+1A' =& ' D1' 0<>1' 1 BD<-A'010' A&' 1>C@& ' ?C&-' & D1 ' 1 j BD<-A'010' &=' D1' 1<@>@ >< ' = 11@ 'B< ' &'@ ' = &>' D1' 0<>1' D1' & D1 ' <@=' &=' D1' 0<'A -1 ' # ' D1' , '-./0' @'B1-B1@ <BB& A'-.' &' D1' < ? 1' >1 1&=' ><A1 @ ! & ' D1' . 1<' " 1B1' ' D<' '0' '-' D1' &-1 '&=' E&@A' <-A' '@+1 ' &=' !@<-A1 0' <-A' B& @<-A@ D<' A& D' B& > >&-@ ' ?-' '-' < >1-0' ><A1' '-' A'+1 0' < 0' &=' D1' 1<@>@ &' D1' . 1<' " <><.1' &=' D1' , '-.' <-A' &=' 0' 1&C@1;' ' '0' & A<'-1A' <-A' 0 <#@'0D1A' D<' <@@ D1' &-1 '&=' E&@A' <-A' '@+1 ' &=' D1' &'-' &=' !@<-A1 0@ <-A' &=' <@@ & D1 ' <-A0' <-A' &?- '10' #1 &-A' D1' 1<@ <-A' <@0&' &=' D1' <-A' &=' B& @<-A@ 0D<@@ #1' +&'A1A' &?' &=' D1' 1<@>' &=' -.@<-A@ & ' C?' &'B&'-' &' D1' ?@@'&-' K' D'-' D1' 0<>1' 1<@>@ #1 K'L' D'0' <-A' D1' !1<0' &=' D '0 ><0' -1L' 1-0?'-.@ ?C&-' <'-' &=' !& =1' ? 1' $ ' 0<>1' -A' D<' <@@ D1' 1 BD<-0' <-A' & D1 ' <' <@<'0@ K BD' A&' 1B1'+1' <-' 0?BD' E&@A' & ' '@+1 ' &=' D1' &'-' &=' !@<-A1 0@ & ' &=' D1' <-A0' <-AE&?- '10' #1 &-A' D1' 1<@ & ' &=' D1' <-A' &=' B& @<-A@ 0D<@@ C? ' D1' 0<>1' &' ?@@'&-' <' <@<'0@ K' D&?' # '-.'-.' ' '-' &'-' K' D'-' D1' 1<@>' &=' -.@<-A@ <-A' '=' D1' 1 BD<-0@ & ' <-' & D1 ' = &>' D1-B1=& D' # '-.' <-' 0?BD' &-1 ' K' D'-' D1' 1<@>' &=' -.@<-A@ D1 ' 0D<@@ =& =1' ' D1' 0<>1' &j -1 ' &' D1' , '-.' -A' & 1&+1 ' ' '0' <BB& A1A@ D<' <.&&A' <-A' B&-+1-'1-' 1< BD' #1' ><A1' <0' K1@@ <' <@<'0@ <0' &-' D'0' 0'A1' D1' 1<' '-' 1+1 ' & ' <-A' & D1 ' @<B10' ?C&-' D1' # '-.'-.' &=' D1' &-1 ' <=& 10<'A

0 1LB1C ' '-' 0C1B'<@ 0 (*' 21' # 4 ' '$ ' R ,' # ,

#?@@10' = 1' -&+1@@ &?' C' B&@&? ' A10' >10>10' @10' #?@@10' C? BD<B \' ? <' C? BD<B1 0' . -1-' <+<- <.1' 1-' <?B?-1' >< 1@ 'C110' 0&' ' =<' ' A1 0' 1?]' I ' BD10B?-' A1' 1?L' C' .< -'0>1-' A1' A1?L' >& 0' C' # '1=' A1' ? - ' 1' =11@ ' 0'@0' =1B1-' A1=1?' &?' &'1-' < 1'- \@ H'@0' 1-B&? @ .1-' @10' C<-10' I ' =& =1' ? 10' B&>C '010' 1-' @10 < ? ' A10' C+' &? 0' =1' ' <-' 0C@ 3' @1' & ' 'AD< A' 0?'0A' 1>' B&>1' 1-' @10 < ? ' =1' ' <' F 10 >' <-' H?'- ' @1' A' ' &" 'BD< A' 1- 1' <?R0' BD&010' 0&' ' B&- 1-?\@ B&>1-' <001- ?\' 10 &' ' <BB& A1\' I ' A1=1-A?\' A1C' @1' A' '-<A. ' 0' & @ <0' &?<' >< 10' A10' .1- \' < 1D<- \' @1 B0' I ' <?C0' 0'#-' 10 <-.10' B&>1' A1' -\1'-0' A1' H?1@@ B&-H?1' 10 <' &?' &-A'B'&-' H'@0' M &'1- @ 0/' C1'-1' A1' H - ' H'@0' C &'1-' `=1' 1@/P' H' -?@@ ' A1' 1?L' ' @<' A 1' C1'-1' 1-' C '+11' -1-' <CC1 '1-+&'1 &' ' -<>10-1 &' ' &?' =1 &' ' 1-+&'1 '&?' <>10-1' D 0' A?' < >1' " &@.@1 1' <-B?-' & ' &?' < .1-' 1-' >&-&'1' #&@@'&-' C@< 1' +1001@@ -1' C' 1 B >.1' <='<' 1@ 1LB1C 0' @10' .<.10' A1' E'A1 0' I ' A10' <? 10' =& 10010' A?' & ' A1C' A1@1<@ I ' 1LB1C \' C' 10 ' 1@< \' ! ' I ' <? 10' B&>C '010' 1C' >10>1' @10 < ? @ 1?1' 0 ' 8 'C ' 1>1-' A0C< 1' >.'1' C' a1-11' A?' & @ 1&>1' ' B1@ 10 < ? ' ' C? <' C@?0' C@A-1>1-' <CC<'&' ' ;' 1' ! ' @1' & ' C ' &#+'1 ' <' =1' 0?DA@' 1' A1' B1?L' C' 1& &-' =1' 1' = <?A1' &?' A11A ' <?' @? ' B1@@1' C '1@ <A' & A1'. -1\' I ' 10 <#@'\' H' 0" A10& 1' 1-<+<-' <-B?-' 1 BD1&? ' A?' & 'C? <' &+1 & ' &?' < .1-' ' <' B& -1' &?' 1-' ><001' 1-' @<' .< A1' A<?B?-' 'H" 0&' ' 1-' C<00<-' &?' 0' 0&-' C<0j 0<.1' 1-' 'B<-1' 1=' &-' 1001!' C? ' <=1' D& 0' A<?B?-' C& ' D<+1-1' &D' 'a1' A?' &'<@>1@ 0<?-\' 10C1B'<'1' B&-.11' A?' & @ &? ' B1@ & ' &?' < .1'' ' 0&' ' =& =1' ' <?' & @ =# 0C '0' 010' 10&-<#@10' A10C1-010' H?1?L' 5' M <' 1-?\' A1' B&-=1001 ' I ' A1 & ' ' ><'- 1-<-' <C20' H' <' B1' =1' 1' 5' -' . >'\' I ' A < .1\' C' >10>1'@1 1 0BD1&-' @ <? >1-' &? ' B1@@1' >&-&'1' 1-0" B -01@11' 0&' ' =& =1' 1 <?' & ' !? +1?' &? 10' +& 10' H' @1R' < 1D<- \' 10 <-.1\' H" +1-A1-' @1? ' >< 1#<-A'010' A1= '\' @1' &'<@>1@ I ' =<' >&a1' A?' >&-&'1' "1-.@1 1' 1B1?' C ' >10>10' @10' >< @ BD<- ='010' 1 -C, ?1-' 0 '<?'<10' - < A'<0A'010' A -' ' 1@ C?'001-' ' '=<-BD1>1-' <CC& 1' D& 0' A'B1'=@ @<? 1' >A 1' A1'@<'A 1' >&-&'1' C' B&-.1' A?' & 'OH@&-B'@10 < ? '1-' =1' 1>' C' @<' .0-' A11A' H ' <A' 1-' @<' >&-&'1' A'2' I ' A< .1-' A1' !@< A 10' I ' A10B&B1@ H" B&? .1' BD1>1-' 10' C<'< 1-\' =1=\' 10' Q 010' C '10' ?' &a '>1' <'. ' A<><.1' A?' & ' I ' A?' C&1C@1@ & AA.-1\' 10 ' I ' <001-?\' H' &? 1' @<' >&-&'1' A& ' I ' A< .1-' A1' =1' B&' 1' A1' !@<-A 10' I ' A1' &? \' <?R00' 10' I ' CAL' C' A1@1<' I ' <?L" A1' @<' R 1' A10B&B1' 0&' ' +&'A1\' D& 0' A?' &'<@>1' "1-j .@1 1@ -' > 0' <' 1&'.-1' <@<' #?@@'<-' AA-\' >10>1' @1' &'<@>1@ ' 1- 1' B ' I ' @1'=10 1' A1' &1@ C0BD1'-' <A+1-' ' 0 ' CA-1' A1' =&'8=1' 1' A'1Ae ' ' H' &? \' @10' < 1D<- \' I ' <? 10' <' <@1 0' H" 11A+1-' <?B?-' '1@ & ' &?' < .1-' A1' @<' 1&'.-1' A1' !@<-A 1R@ &?' A10' <? 10' 10' & ' C<''0' A1C' AA1<@ &?' A1' @<' 1' A10B&B1@ @1' >B 1-' <' # @'&-' <' <@1 0' 0<-\' @<CC& 1' 1-' 1&'.-1' A1'-\' @1' &'<@>1' "1H. 1' ' 0" @10' < 1D<- \' &?' <? 10' A10& 1@ 1-<+<-@ C& 1-' <?B?-1' 'A1' >&-&'1' AA-\' @1' &'<@>1' "1-.@1 1@ C'0' =& =1B1-' >10>1' @<' >&-&'1' <?' & @ ' &? 1' B1' <BB& A1\' 10' H' #&-1' I ' B&+1-A2@1' I D1' 0&=' =<' ' 0'#-' <' <@1 0' B&>1' A1B1<' @1' >11' 1-' BD?-' C& 1' I ' <'@@&? 0' 0? ' @<CC& 1' A1@ >&-&'1' <+<- AR1'

\' =&'=1' 1' ' :' = 'HH

˙ 1>˙ C& B1˙ H˙ 0˙ 1A'˙ & 1˙'A1+ ˙ ⅋H?1@B&-H? ˙ ?0 'B1˙ 1'˙ ? 1˙ A1˙ -&+1@ A'0 1'0'-1˙ >& ˙ A<?-B10 1˙ &?˙ <? 1˙ <BB'&-˙ H?1@B&-H?1@ @1˙ C '10˙ VA1+ - ˙ B10˙ 1? 10˙ &-˙ '10 1˙ <A &? -1\˙ 0? ˙ A'==˙B?@ 1˙ 1-˙ @& 1˙ 0? ˙ @<˙ >< ˙ 1˙ '00'- ˙ &+1\@ & A1'.<1\˙ 10˙ I ˙ 10 <#@'\˙ H˙ 0" @1˙ A'˙ , 1A'˙ C<001˙ 1-B&- 1˙ @1˙ C@1'-A=@ H˙ >10>1˙ @1˙ C@A - A=˙ -1˙ 0&'˙ -&?-0?

1>˙ 0˙ @<˙ . 1+&?01˙ B&>C@ - 1˙=<˙ 1˙ <˙ - 1˙B? @1˙ & ˙ C˙ @10˙ &10˙ 1-˙ B10˙ C@1>1- ˙ B&>1- ˙ @&=='B1˙ A1˙ ˙ &8˙ . &=1 ˙ 1-˙ @1˙ B&1˙ #<-a˙ A?˙ &" 10˙ @1001\˙ <˙ =1 >1@ <˙ H?1@ &=='B1˙ <CC '1- ˙ C˙ @10˙ =10<-B1˙ I˙ 10B 'C ? 1˙ A1˙ B '?-˙ = -˙ @1+1˙ 1-˙ @1˙ A'˙ <-a˙ H?< 1˙ 0&?@A\˙ I˙ -'1- ˙ C@?0@ 1˙ -&?-&#0 <- ˙ B1@ =11˙ @10˙ !1 >1 0˙ A1˙ >10>1˙ C=='B1˙ -1˙ +1?@@1- ˙ A1@'+1 ˙ -?@ = -˙ <˙ -?@@ ˙ 0<-\˙ @1- ˙ A&-1 ˙ <?RO˙ H?< 1˙0&?@A\˙ &?˙ C@?0˙ C˙ 1L & A&-@ <˙.0- ˙A<><.1˙ I˙ 1-C& 1001>1- ˙ A1˙ &? ˙ @1˙ C&=1C@1˙ ;˙ =1˙ K?˙ @1˙ & ˙ +1?@@<- ˙B1A1˙ CA1˙C +&' ˙A1˙ ˙ 1>1A1@ A1˙ @<A+'0˙ I˙ <001- ˙ A10˙ =0˙ 1 C' ˙ ?1@L˙ I˙ 1>C& 1@L@ I˙ <˙ @<˙ 0?CC@˙B<A&H˙ A10˙ Aa\˙ E&10@ <A'& A1'-1\˙ I˙ 10 <#@'\@ H˙ @1˙ ˙ &. &=1 ˙ -1˙ 0&-˙ !1--1˙ ˙ '1? 1-<- ˙ &?˙ "1C? 11˙ C˙ @1˙ 1>C0˙ 10 1<- ˙ A1 & 1-<+<- @ - ˙ . -1˙ C@?'0˙ H˙ H?< 1˙ 0&?@A\˙ C˙ -?@ = -˙ @1+1˙ 1-˙ @<˙ &? ˙ ˙ 0" @1˙ A'˙ ˙ !& >1˙ @'1? 1-<- ˙ &?˙ A1C? 1˙ . -1˙ k2@?'0˙ H˙ H?< 1˙ 0&?@A\˙ C˙ ?-˙ = -˙ B&>1˙ A100?'0˙ 10˙ A' @ H'@ CA1˙ 0&-˙ &=='B1@ I˙ 0&'˙ =&' ?. 1\˙ @<˙ H? 1@ I˙ 1'˙ 1>C '0&-1>1- ˙ C˙ ? ˙ <-˙ I˙ C<'1˙ <˙ @<˙ C '1˙. 1 1˙ 010˙ 1#@10˙ A<><.10@ 1 ˙ <'˙ @<˙ CA1˙. 1+11˙ 0<˙ 0?˙ 1˙A1+<- ˙ @10˙ ?0 'B10˙ A?˙ A'˙ <-a

1>˙ B&>1˙ -<A.<' 0˙ 1-˙ 1>C0˙ A?˙ A'˙ &'˙ 'Ba< A˙ A'+ 010˙C0&-10˙=1? ˙ <00'. -1\˙ <0˙ A'1010˙ =&' \˙ C˙ B&>'08 0'&-0˙ A?˙ A'˙ & ˙ A1-H?1 1˙ I˙ =<' ˙ 0&@&-B˙@1˙ C C& ˙A1˙ @1 ˙ B&>'00'&-0˙ AA-\˙ @1˙ &'<@==˙'1˙ "1- .@ ˙ 1˙ >81˙ C110˙ 10˙ =1@˙ A#-˙ 1-˙ @<˙ D<-B =1 'A˙B&>1˙ 1-˙@10BD1H1˙

@10˙ A' \˙ B&>'00'&-1 0˙ A&' '=˙'1 ˙ @10˙ '-H?'<B'&-0˙ I˙ <? 10˙ BD&010˙ A1+<- ˙1?L˙ C '010˙ C˙ , ?1˙ A10˙ A110˙ B&>'08 K-0@˙ C˙ @<˙ &?˙ <0B?-0˙ A10˙ A' \˙ &>'00'&-1 0˙ 1-˙ @<˙ C 0?˙ 1˙ A?˙ A'˙ ˙ & ˙ 'BD< A˙ =1? 1- ˙ '=@1\˙ I˙ C'@1 ˙ A10˙ A 10˙ '-H?'AB'&-0˙ I˙ <?RO˙ BD&010˙ A1+<- ˙ 1?L˙ C '010˙ C˙ =& B1˙ A1˙@1? ˙ A' R˙ &>'00'&-0@ I˙ < L'- ˙A1˙ @1? ˙ #'1-0˙ CC 10@ I˙ <?B?-10˙ A10˙ A' \˙ &>'00'&-1 ˙ C˙ ><-A1'D1- ˙ I ˙ B&>C?@0'&-˙ A1˙ &-_3˙ F '@@'<>' 10B &C˙ <@& 0˙ 18˙ 0& 1 ˙)1-.@1R 1˙ A1@˙ 1 1- ˙ H? 10˙ @1? ˙ '-H?@O'B'&-0˙ I˙ <? 10˙ BD&010˙ A1 <- ˙ 1?]˙ 1-<˙ C '0H0˙ <?˙ ˙ 10& 1 @ '00<- ˙H˙ @10˙A' \˙ &-? 0 -1 ˙ -&- ˙ '1-0˙ 1-˙@1? ˙.< A1˙ A1˙ '=˙'1 ˙ 10˙ A 10˙ &? 10@ ? ˙ H?& ˙ -R1˙ @1˙ & ˙ B&-0'A1 <# ˙ @10˙ >101D'1= ˙ 0?'0A==10˙ I˙ C˙ <- ˙ +1?@@<- ˙ =1' ˙ .0B1˙ <0˙ A1@L˙ &>'0 &-> 0@ A1˙ @<A+'0˙ I˙ <00> ˙ A10˙ A' \˙ ! ˙ 10C' ˙ ?1@L˙ I˙ 1>C& 1@L@ I˙ <@ C '1 ˙ A10˙ A' \˙ &10˙ <A˙ & A .-1\˙ I˙ 10 <#@'\@ H˙ -?@ A10˙ A' \˙ &>'08 0'&-1 0˙ '00'- ˙ '=@1\˙ &?˙ C'@1\@ -1˙ C?@0˙ H" A1@'C1 1- ˙ @?˙ ˙ '-H>0'B'&-0˙ &?˙ <? 10˙ BD&010˙ A1+ - ˙ 1?L˙ C '010˙ < ˙ A'˙ ˙ -<A.<' 0˙ 10& 1 @ -1˙ 0&'1- ˙ 1-˙ -?@ >< ˙1˙ BD< .'1\˙ A1- ˙ =1' 1˙ <?B?-1˙ '=˙'B<B'&-˙ 1-˙ <?B?-1˙ &? 1˙ A?˙ & @ >C'0˙ 1- ˙ 0&'1C ˙ C˙ @1? ˙ M>1- ˙ &? 1>1- ˙ A10BD< .'1\

1>˙ C& B1˙ H˙ C@&- 1˙ 10˙ =1˙ 1˙ <˙ -=1˙ A ˙ ˙ @1˙ & ˙ C˙ @10˙ A' \˙ 10˙ B&>1- ˙ @1˙ @1 B˙ A1@ & &-1˙ A?˙ <-a˙ A?˙ & @ @<˙ &?˙ +'- ˙ H?< <- ˙ &-˙ 1- ˙ D&>10˙ 0&- ˙ 1-A' 1\˙ A?-1˙ =1@&-˙'1˙ &?˙ A?-1˙ 0C<0@ I˙ &? \˙ B1?L˙ C@1A1- ˙ <˙ '00?1˙ B&>1˙ A1˙ '1-˙ B&?CA)@1@ @1˙ A'˙ ˙ @1 B˙ -1˙A1?0 ˙ -A 1˙ C˙ @1˙ +1- ˙ 1˙ =1A˙ -1˙ C˙ @1- 11˙ A?˙ C@11

@ F D1 1<0˙?C&-˙ 1 A'=@ =&?-A˙ #1=& 1˙<- ˙ ?0j 'B1˙'-˙ 00'01˙&=˙ &+1@ A'001'0'-@ & A<?-B10 1 @& ˙<- ˙ & D1 ˙ =@'&-˙ KD< 0&1+1 @ D1˙ < '10˙ #1=& 1˙ D'0˙ ˙>1˙ D<+1˙#11-˙<A &? -1A˙ ?C&-˙ "˙'==˙'B?@ ˙ '-˙ <K˙ ?C&-˙ D1˙ < 1˙0&˙=&?-A@ ˙'0 & A<'-1A˙<-A˙10 <#@'0D1A˙ D< ˙'=˙ D1˙ 1 A'<˙ C<00˙ <.<'-0˙ D1˙ @<?'-=!@ D< ˙ D1˙ 0<>1˙ @<> '@!˙0D<@@ -&˙#1˙-&-0?' 1A@

@ C&-˙ D1˙ . '1+&?0˙ &>C@A-˙ ˙><A1˙ &˙ &? ˙ & A˙ D1˙ , '-.˙# ˙ D1˙ &>>&-0˙ '-˙ D'0˙C 101-˙ ˙ < @'<j >1- @ D&K˙ D<˙ D1˙ ==˙'B1˙ &=˙ D1˙ ˙ &. <CD1˙ '-˙ D1˙ &>>&-˙ 1-BD˙ &=˙ D1˙ , '-.˙ '0˙ @1˙ &˙ =1 >@ &˙KD'BD˙ ==˙'B1˙ <CC1 <'-1 D@=&˙ >˙<a'-.˙ <-A˙K ˙ '-.˙ &=˙ 1+1 ˙ !˙-1˙ @1+'1A˙ '-˙ D1˙ 0<'A˙ 1-BD@ !&? ˙ D'@@'-.0˙ <-A˙-&˙ >& 1G <-A˙-& K˙ D0 <-A'-.˙ D1˙ 0<>1˙ !11@ D1˙ !< >1 0˙ &=˙ D1˙ 0<>1˙ ='B1˙ K'@@ A1@'+1 ˙ -&˙ !'-1˙ &˙ <- ˙ K' D&? ˙ .'+'-.˙ &˙ D1>˙'& D1 ˙ !&? ˙ D'@@'-.0@& ˙ >& 1˙# ˙ L & j '&-@ &˙ D1˙ . 1<˙ "<>.1˙ <-A˙ >C&+1 '0D>1- ˙ &=˙ <@@ D1˙ , '-./0 @'1.1˙ 1&C@1G ? ˙ & A˙ D1˙ , '-.˙K'@@'-.˙ ˙-˙ D'0 1D<@=˙ &˙C &+'A1˙ 1>1A @# ˙ D1˙ A+'B1'<-A˙ 0j 01- ˙ &=˙ D1˙ & A0˙ C' ˙ ?<@ <-A˙ 1>C& <@@'<˙ A˙ <˙ D1˙ ?CC@'B<A&-˙ &=˙ D1˙ 0<'A˙ &>>&-0@ D< D˙ & A<'-1A˙ <-A˙ 10 <#@'0D1A˙ D<˙ D1˙ ˙ &. <CD1 @-& ˙ D'0 !< >1 @ "1j C? @ & ˙ '1? 1-<- ˙ =& ˙ D1˙ ˙>1˙ #1'-. ˙ 0D<@@ = &>' D1-B1=& D˙ <a1'<- ˙ >& 1˙ D<-˙!&? ˙ D'@@'-.0˙ =& ˙ <- ˙ !˙-1˙@1+'1A˙'-˙ D1˙ &? ˙ -A''=˙ D1'0AA˙!< >1 @ '1?j 1-<- @ & ˙ "1C? @ <a1'<- ˙>& 1˙ D<-˙ !&? ˙ D'@@'-.0˙ =& ˙<˙!˙-1@ <0˙#1=& 1˙'0˙0<'A@ D1˙0D<@˙ @&01˙D'0˙ ==˙'B1@<-A˙ #1'=& 1 ?A.1A˙ D1˙ &? @<-A˙ D<+1˙ -1˙ 1< /0˙ >C 'j 0&->1- @<-A˙ C<˙ &˙ D1˙ < ˙. '1+1A˙D'0˙ 1#@1'˙"<j ><.10G <-A˙ D1˙ < ˙. '1+1A˙0D<@@ D< 1˙D'0˙ ?'˙ '#1=& 1˙ D1˙ ?0 'B10˙ &=˙ D1˙0<'A˙ 1-BD

@ F D1 1<0˙@< 1˙ '-˙ D1˙ '>1˙ &=˙ , '-.˙ 'BD< A˙ ='+1 0˙ 1 0&-0˙K1 1˙ <0<.-1A˙ <˙ A'+1 0˙ '>10˙ # ˙ &>8˙ >'0<&-0˙ &=˙ D1˙0<'A˙, '-.˙ 'BD< A@ &'-H?' 1@<-A˙ &˙ A&' <= 1 ˙ D1˙ ?'C& ˙&=˙ DA ˙ &>>'00'&-˙K' D'-˙ D1˙ 1<@>˙ &=˙ -.@<-A@<-A˙ -&K˙ &B100˙ 0˙ ><A1˙ <R K1@@ '-˙ D1˙ D<-B1 ˙<0˙ '-˙ D1˙ LBD1H?1 ˙ <.<'-0 ˙ D1˙ 0<'A˙ &>j >'00'&-1 0@ &˙ B1 '= ˙ D1˙ -H?'0' '&-0˙ <-A'& D1 ˙ D'-.0˙ #1=& 1˙ D1>˙ <a1-'# ˙ '+' ?1˙ &=˙ D1˙0<'A˙ &>>'00'&-0@ F D 1<0˙0&>1˙&=˙ D1˙0<'A˙ &>>'00'&-1 0˙'-˙ D1˙ ? 0?' ˙ &=˙ D1˙0<'A˙, '-.˙ 'BD< A˙K1 1˙ '=@1A˙ <-A˙ C'@@1A˙ &=˙' D1˙ 0<'A˙ -H?'0' '&-0˙<-A'& D1 ˙ D'-.0˙ #1=& 1˙ D1>˙ <a1-'# ˙ =& B1'&=˙ D1' '0<'A˙ &' , >'00'&-0@ <-A˙<@0& &=˙ D1' ' C &C1 ˙ E&&A0@ <-A˙ 0&>1˙ &=˙ D1˙ 0>A˙ &>-?00'&-1 0˙ # ˙ D1˙ &>><-A>1- ˙ &=˙ ˙ ˙ F '@@'<>' @1˙ B &C1@ 0&>1 '>1˙ 1<0? 1 '&=˙ -.@<-A@ A'A'A1@'+1 ˙ <@@ DK' -H?'0' '&-0˙ <-A'& D1 ˙ '@'-.'0& <a1-'#1=& 1˙ D1>˙ &˙ D1˙ <'A˙ 1<j 0? 1 @ 0&˙ D<˙ D1˙ &>>'0<&-1 0˙ D<+1˙-& D'-.'˙ '-˙ D1' ˙ ?0 &A ˙ &˙ B1 '= ˙ &˙ D1˙ 0<'A˙ &? 0;˙ D1 1?C -˙ &? ˙ &+1 1'.-˙ A˙ D1˙ , '-.@ &-0A1 '-.'˙ D1˙ '0BD'1=1˙ <=& 10<'A@ <-A'# '0&'>?BD' K'@@'-.'˙ &˙A&˙ . <B1˙ &˙ 0?BD' &->?00'&-1 0@ # ˙ D1˙ A+'B1'<-A˙ 001-'&=˙ D1˙ & A0' C' '><@ <-A˙ 1>C& <@@ <-A˙ <˙ D1˙ < 1 '&=˙ D1˙ 0<'A˙ &>>&-0@ D< D˙ & A<'-1A˙ <-A˙ <#@'0D1A@ D<˙ -&-1˙ &=˙ D1'0>A˙ &>>'0<&-1 0'0&˙ '=@1A'& ˙ C'@@1A@ -& ˙-&-1˙ D< ˙ A1@'+1 1A˙ DA ˙ -H?'< '&-0'<-A˙ & D1 ˙ D'-.0˙ <a1-'#1j =& 1˙ D1>˙ &˙ D1˙ 0<'A˙ @< 1˙ 1<0? 1 @0D<@@ '-˙ -&˙ K'01˙ #1˙ BD< .1A˙ &˙ ><a1˙ D1 1&=˙ <- ˙ 1 '=˙'B< '&-˙ '-˙ < ˙ &'-˙ '&=˙ D1˙ , '-.@#? ˙ 0D<@@ #1˙ D1 1&=˙# ˙ D1' ˙ < D˙ B@1< @ ˙ = 0BD< .1A

@ 1B<?01˙ D<˙ &>C@<'-˙ '0˙ ><A1˙ &˙&? ˙ 0<'A˙ & A˙ D1˙ , '-.'# ˙ D1˙0<'A˙ &>>&-0@D K˙ D1˙ @1 a˙&=˙ D1˙ &K-˙ &=˙ D1˙ , '-./0˙ <'B#@ KD1 1<0˙!&? 0B& 1˙ ˙ <-˙ ?-A 1A˙ 1-˙#1' '-A'=@1A˙&=˙ -1˙!1@&- @ ˙&=˙ -1˙ 10C<00@ <-A'<@@ D1 ˙C@1<A˙ &˙ <-˙ 00?1'<0˙ & ˙.?'@ @ D1˙0<'A˙ @1 a˙&?.D ˙-& ˙ &˙ <a1˙=& ˙ D1˙ 1-˙ 1˙ =1B'<0

-˙ 22@j!Z .˙ ˙." / 0-L' #!2 .'" C#' B+ &- & 2 2 +# - . ' ; !' -.-20&' !'" 1

˙) ! B!!' !˙ @".L' < !'" . ' !˙ .11.-' 3+! 2˙ .'" ' B&-!'+!'&!/

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&< # ? 1 & # D1 "'&B10<- &= D1 0<>1 @<B1 & D'0 &>>'00< '10 <= 1 ' D1 # ? < '&- ><A1'# D1'0<>1' 1 0&- `C &-&?-B1A' =1@ '- &' 1@<C019 P' 0&' D< '<BB& Aj '-.' & D1 &@ ' <-&-0 D1' &?.D ' &'#1'@1= ' TR D1 1j B?@< ' &? KD1 1?C&- 1A1-B1'0D<@@#1 .'+1-' &' D1' " &B10<-' &= D1'0<>1' @<B1 & ' &'D'0 &>>'00< '10 '- D'0 1D<@=0 D1- D1' D1 '=='&= D1' &?- ' &= D1'0<>1' @<B1 <-A' < & ' <-A' D1 '==0 & ' D1 '==0 & ' R' & ' <-A' <'@'==0 &= D1' ' &K- ' <-A' C C?.D' &= D1'0<>1' &?- ' -1L ' &' D1'0<-@1' "'&B10<-' & ' D1'0<'A' & >j >'00< '10 0D<@@#1' C1 0&-<@@ ' C 101- ' '-' C 1=1 '-.' &= 0?BD' 1- 1-B1 ' 0)' KD1-' D1 ' # ' D1'0<>1' "'&B10<-' & ' D'0 &>>'00< '10 0D0@@#1' 1H?' 1A <-A' D1 ' D1' 0<>1' 1 0&-0 <-A' 1+1 ' &= D1>0 <= 1 ' 0?BD' 1- 1-B1' C &>?@.< 1 0D<@@ 1B1'+1 <-A' D1>' #1=& 1' D1' 1&C@1' '-'<-' D'.D' @<B1' A&' C #1'#? - ' ' D<'0?BD' C?-'0D>1-' >< '0D 'a1' '-' !1< ' &' D1' '-A0' &= & D1 + D1 1# ' -&' 0?BD' K'Ba1A' "& >1' <-A' D1 1 'B<@ <-A' 1 &-1 ?0' C 'j -'&-0 -& ' D1' ' ? D& 0' <-A' !<- & 0' '-' D1' 0<'A' 1<@>' <-A' "&>'-'&-0 <.<>0 ' D1' < D&@'B' !<' # D '0 '<-' <K <-A' "1 1 >'-< '&-' &= D1' &@ ' D? BD KD'BD' E&T ' C &D'#' #1' 0?0 >-1A' ''-'<- ' K'01' 0?==1 1A -' KD'BD' <@@<-A' 0'-.H@< ' D1' 1>'010 B&-B1 -'-.' D1'0<'A' A'-<-B1'<-A' <? 1 D1' D1 '==0 i< 0<-A' <'@'==0' &= '@1' 0<'A' &?- '10 ' '10 & &?.D0 <-A' &K-0 0D<@@ D1' < 1-A'-. <-@'-.' <-A' 00 C& >.' &' D1'0<'A' "'&B10<-0'<-A' D1' ' &>>'00< '10

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F D1 1<0 ?C&-' D1'. '1+&?0 &>C'<'- ' ><A1' &' &? ' -+1 '.-' "& A' D1', '-.'# ' D1' &>>B>0 '-' D1' < ''<>1- D&F' A'1' 1&C@1' &= F <@10 0&>1 '>1' # ' "< ' <-A' 0B>'1 '>1' # ' '.D B&>1 D' K' D'-' D1' &?- '10' & -'-.' ?C&-' D1' < BD10 &= F <@10 <-A' A& D' <a1'A'+1 0 "'0 10010 &= & 010 L1-9, '-1 D11C9 K'-1 <-A' & D1 ' D1' ' E&&A0' &' <. 1< ' ?>#1 <-A' D1'0<>1' A& D' @1<A A '+1 <-A' B< ' <K< ' &' D1' 1'.8 & '10' KD1 1' D1 ' #1' 10'<- <-A' D1 1' K' DD&&A1 D' D1>' '@@. 11'#1' ><A1'<' D1' ' F '@@ <-A' D<' <0 K1@@ &= D1>' D<' D<+1' -& ' &==1-A1A 0 <0' &= D1>' D<' D<+1' &==1-A1A;' -A' <@0& D1'0<'A' 1&C@1' &= F <@10' A& D' A<'@ ' < 10' D1' 1&C@1' &= D1'0<'A' &?- '10 B& >'-.' K' D' D1' ' 1 BD<-A'010 & ' & D1 ' D1' ' E&&A0' <-A' D< 1@0 <-A' <==' >1 D' @<'- 0' <. '-0 ' D1>' &= " 1# 0 &+1-<- 0 10C<0010 <-A' & D1 ' =@'&-0 KD1 1&= D1 ' #1' -& ' < '10' -& ' @1A.10 &' D1' - 1-' &'. '1+1' D1>' # ' A'+1 0' <-A' &? <.1&?0' >1 B'<>1-0' <-A' &0 0 &' D1' . 1< ' '>C&+1 '0D'-.' <-A' ? 1 '?-A&'-.' &= D1' 1&C@1' &= D1' <'A' &?- '10; ? ' &+1 1'.-' & A' D1' , -.' B&-j 0'A1 '-.' D1' '0BD'1=0' <=& 10<'A <-A' K'@@'-.' D1 1?C&-' &' C &+'A1' 1>1A 9 # ' D1' 001-' ' <-A A+@B1' &= D1' 20<'A' & A0 <-A' < ' D1' 1H?10 ' &= D1' &>>&-0 D< D' & A<'-1A' <-A' 10 <#@'0D1A ' D<' '= <-' ' 1&C@1' &= D1' 0<'A' &?- '10 #1'< 10 1A' <-A' . '1+1A <0' <=& 1' '0' 0<'A `><'- 1-<- '0P 1 1 0' 10 --&-'<#'0D<@ '1'><A19 1A '-.' D1' 'E '1+<-B1 A' 1A1A' &' D1' E&+1 -& 0' & ' 1K< A0 KD1 1' 0?BD' ==1-A1 0' #1' 10'<- ' `K' D0P' D1' ' E&&A0' & ' D< 1@0' 1B1'+1A' '-' F <@10 ?-A1 ' D1' 1<@0' &= D1' D1 '==0' &= D1' 0<'A' &?- '10 & ' &= D1' < & 0' <-A' '@'==0' &= D1' ' '10' >'A' & &?.D0 & ' 1K< A0' &= ' ! <-BD'010 KD1 1' 0?BD' 1&C@1' 0&' . '1+1A' #1' AK1@@'-.' ' &' D1' - 1-' D<' D1' 0<'A' E&+1 -& 0' & ' 1K< A0' 0D<@@ A&' &'#1' A1@'+1 1A' &' D1>' D1' ' "'0 10010 E&&A0' <-A' D< 1@0' 0&' <a1-' & ' < 10 1A <-A' '= D1 ' ><a1' -& ' "1@'+1 ' &= 0?BD' "'0 10010 E&&A0 & ' D< 1@0' 0&' <a1-' & ' < 10 1A KD'D'-' 1+1-' "< 0' <= 1 ' 1H?10

) s ' - $ $" % ? #
) ' ' 'A$ '$' '.$ ' 1 ' " ' $ % 2 '$' ' @$ 2 ' 2 $

'-=& ><B 10' A1#@ 1' <# ? < 1' 1B?0< ' <'' ' C' @&B" "'&8' B10<-?' +1 &'-'00< '& ' 0?&0' C&0 ' <# ? <B#1>' C' 1<-A1>' C0&-1>' =I >' ?-B'< <' =I ' 1@<C0< ' <''HA' 0 A >' B<8' -&-'B<0' 0<-BA I10' 1@'-H?" A1#1< ' ?=' 01B?@< '9 0?C' H?&' B 1A<='@&B" "'&B10<-&' 01?' &=-'0<< ''0' 0?'0' '-' D<B' C 1@ ?-B' 'J &='" '@''?0' @&A@ I ' < & ' I ' 'B1 &>' 10' 01?' 'B1B&>10'<+ ' < & ' I ' < '+" '+' < '0' '@@1'+1@ ? . ' 1 ? A1>' ' ' A &' "'&B10<-&' 01?' A1@0' &>'00< ''0' ><.'0' CC'-H?'9 '-' 1- 1-B10' C' A1>' "'&B10<-'" <?' >'00< '&0' 0?&0' B&-0' C0&-<0' D? ?0>&A" I ' 'C< ' H?<>@'#1 ' C=1 1-A9 B?>' <A' D&B' C' A1>' "'&B10<-?>' <?' A>'00< '&0' 1 ?0A1>' =5'- ' 1H?'0' '9 C0&-<@'R' 0'C ' d 0<- 10 I ' C0&-<0' @@<0' I ' H?<>@'#1 ' 1< A1>' C&0 ' D? ?0>&A" 01- 1-B'<0' C@< <0' 1B'C'<- 9 I ' 1<0A1>' B& <>' CC@&' '-' 1>'-1- " @&B&' B&>#? " =1B'<- 9 ?' D? -0>&A" C?-'B'&' >1 ?>' '-B?B'<' >1- '# ' <@'& "G -1' D? ?0>&A" -1CD< A1' A& '-1' I ' &C'-a>10' D1 '11' I ' 1 &I 11' +1@ ' C ' <?B & 10' I ' =1? & 10' '-' AA0' 1.-&' I ' "-''0 9 B& -0' ='A1>' B< ''&'a<>' 1@'.'>'1>'] D <>' I ' A1 >'8 -<A'#1>' B1='1' 0<B & B1' H?&A' <#0' 9 0?0 1- 1- ' 01?' H?&>&A&@'#1 ' & 1 1- ;' ' H?'#' & >'#G' I ' '-.?@'0' G >'00 I ' A1<' A'-<AA1>' I ' < ? ?>' B&- '# ' 'B1B&>10' < & 10' I ' <@@'+" A1& ' & >' '+' < ?>' '@@< ' I ' ? .& " A1=1' "'&B10<-'0' I ' 1C ' &>'00< ''0' '-' '- 1-A1- 10' <?L'@'<- 1 ' 1B'<>' I ' =1+1- 10

1>'0? '@<'. 1+&?01'B&>C@1'- 1'=1' 1'<' -=1'= '@1' & ' C' @10' &10' 1-' C@1>1- 9 B&>1- ' @10' .1- \' A1' E<@10' <' @<'=&' \' C' & ' I ' <' @<' =&' \' C' -&1 ' +'1. -1- ' A1'-\' @10' &- 110' <A &'. -<- \' <' @10' < BD10' A1' E<@10' I ' '. -1- ' A'1010' A'0 1001 0' A10' D'+<#0' ?>1- ' #&1=1' +<BD10' #1 #' \' C& a0' I ' <?,0' @&?' #'1-0' <' ' #' B<-# 1@ I ' @10' <>10-1- ' 1-BD<BD1- ' I ' 1>CBH<'< ' <-H<' @10' '10' @<' &?' '@0' 0&- ' 1B1<- \@ I ' '@@&1H1 ' @10' A1 '1. -&- ' <-H1' . 11' 0&=' =1' ' <' @&? '+A@?- 1@ 1 ' B1' 0'#-' A1'B1?L' H' 1?L' -&- ' > 1' ,0C<0 1\@ BC <1' A1' B1?L' H" &->' R C<001\;' ' <?L" @10' A' \' E1- \' A1' E<@10' < 10 1-' A1' &?' 1-' <? 1' @10' E1- \' A10' A' \' #?' 110' 1-<- ' & 1' @&?' I D<-A'010' &?1' @1?' ' <?R0' #'1-0@ I ' <=1 >1-' C@1 - 10' A1C0' 1?L' A10' A1# 0' B&+1-<- \' R0C<0010' I ' <? 0' < B'&- @ A&- ' 1?L' -1'5&-' > 1' C '10' -1' C@1. . 10@ <=' ' -' A1' 1?L' . 1+1 ' C' A'+/010' I ' &?=. 1&?010' < B'1>1- ' I ' B&?0 <. 10@ <' . > ' <-'1- '01>1-' I ' '><@ A10 ?BB'&-' A10' .1- \' A10' A' \' &- 110; 1' K?' @1' &" B&-0'A1 <-=' @10' >10B ''1=0' ?=1A' \' 1 '+& @@<-' 0' B1' C? +&' ' A1' 1>1 'B@ A1@ <001-' I ' <A+'0' A10' = 0 ' 0?'0A'' \' I ' <' @<' 1H?10 1' A10' A' \' &10' <A' & AA. -1\' I ' 10=1#D \@ H' 0" <0B?-0' .1- \' A10' A' \' &?- 110' 0&'1- ' < 10 ?\' &?' . 1+1\' B&>1' A10?'0' 10 ' A' @ 0&'1- ' ><'- = -<- ' =1' \' ==10' 10>&'. -<@10' 1B' <- 10' @&? ' . 1+<-B10@ A' 1= 10' <' @10' & &? 0' &?' 1-10B <# ' &?' '1@L' ><@1=1'0& 0' 0&- ' 1B1<- \' &?' @&? ' -0' 4 ' BD< 1?L' 1B1 1\' 1-' E<@10@ A10&? @@ @10' 01<@L' A10' '0@ &- \' A10' A' \' &- 110@ &?' @10' <' 0' &?' <'@@'=1' A10' E' 110' I ' ? .D0@&?' A10' 1-10BD< L' A10' ! <-BD'010' &?' '1@L' .1- \' A1> <- \' 0&- ' 1-0" . 1+1\@ <?' = -' H' @10' A' \' E&+ -&? 0' &?' 1-10BD< L' @1- ' =1B1- ' A1@'+1 ' @10' A'0 1001 0' #-0' I ' BD< 1?L' '00= ' ' = ? \' C '010' &?' < 10 ?\' I 1 ' 0=@0' -1' =1B&' ' '', 11' A10' '1@L' A'0 1001 0' #?0' &?' BD< 1?L' '0<- ' C '010' &?' < 10 > \' A1' -\' 01C ' &? 0' <=#' @<' 1H?10 h

<' 1?L' 1 -<' =1' ' #-' 01' <0' . 1 - \' 1 - .@&'010' '0 ' . 1+1\' A< 10 1 ' HB&-H10' +1 -<- '' &+1' #-0' I ' B < 1?L' A1' 11?L' A10' = '@10' A1' E<@10' &?' '1@L' >1==10&? '0&>' A1 > <- \' &-' 1B1 1\' I ' @10' 1 1 -' ' <-H C@1'-' . 11' 0&' ' =1' \' <0' A' \' . 1+1\' &+1' @&? ' > 010' B&?0 <.10' I ' A10C1-010' 1-01>' #@1>1 - ' &?' @1? ' A'0 10010' #-0' I ' BD< 1?L' 0?'0A' \

1>' & A1'. A1\' 10 ' I ' 10 <#@'\' H' 0'' <?B?-' E<@&'0' A10& 1-<+<- ' 1C 1' @10' &?- 110' <' B1' <A &'. -<- \' 1 -' @<' &'<@>1' '' 1 - .@1R 1' I ' 1 -' B1@@10' < A1' ?1' <C1' &?' ?B?-1' <? 1' =1@&-'1' &?' R0C<0' =<B1' A1' H?1@1' '@ 0&' ' < 1' - ' A1'-\' @<' &'<@>1' '' 1 - .@1R 1' C' @10' @&'10' A1' >10>1' @1' &'<@>1' C' ? @<.< '1' &?' <# ? <B'&-' I ' 1C<' 1' 1 -' E<@10' =0C100<- ' '@@&1H10' H' 0' @10' I '=' B<B'&-' I ' 1B& A10' <='<' 1 ' C' @10' ?0 'B10' -=1' '@1' & ' 1 -' - .@1 1' A1+<- ' H?1?L' '@0' M & - ' '00' - ' B&-+'= \' A100C? \' @1? ' 01<@L' <0' ! ' &?' '-'0 10' &?' '1@L' =1@&-0' , &- ' &+1\' 1 -' E<@10' =' -<' 1L1B?B'&-' 0 ' ' =<' ' 0 ' >10>1' *R' =1@&-' C' >10>10' @10' = 0' &-' @&? ' '-'0 10' I ' B1' 0' . 1+&?01' C1'-1

1>' & A1'. -1\' 10 ' I ' 10 <#@'\' H' @10' 0' A1' E @10' >< BD1\' & A1'. -1 - ' I ' >1 1 - ' 0?= B' - \' 1' ?='1? 10' ' .< A10' 1-' @1? ' D<0 '1@L' I ' = 10' E<@C'0' <?' = -' H1-' 1>C0' <A+1-' ' - ?' CA1' '& ' -1' A<><.1' <+'1. -1' <' - 1' ' = ' @1' & ' & ' 0&-' &'<@>1' -<' -?' A1' 010' @'1.10' C' @&? ' 1 -<C \' 1B1<- R' -1' -?@0' <? 10' E<@&'10' 1-' @1? ' A1=<? ' B& > 1' <A' <A+1 - ?\' I ' 10 1' =' ?' C ' A1=<? ' A1' #&-1' .&, -<-B1' 1-' 1>C0' C<001

1>' & A1'. -1\' 10 ' I ' 10 <#@'\' H' -?@ 1 - '1 ' - .@A0' C' @10' &'0' <-0' C0BD1'-0' <A+1-' 0' 0&' ' B&-+'Q ' <' 0?' 1' A1' -H@@ ' E<@& 0' A1' -\' E<@10' 0'' -1' 0&' ' C' ?. .1>1 - ' A10' ?0 'B10' .@&'01 ' &?' C' ?. .1>1 - ' A10' 1 - '1 0' -8' .@&'010' ? .1&'010' & 'C'1-H?10 10' A10' ? .='0' '@@10' I ' - .@&'010' A10' = '10' 10' H?1?L' '1' - .@<0' 0&' ' < 10 ?\

1>' <BB& A1\' 10 ' I ' <001 - ?\' H' A10& 1-<+<- ' -?@ E<@& 0' 0&' ' 1B1?' A1' C? BD<B1 ' -'1' C BD<B1' 1' &?' 1 - ' A1'-\' - .@1R 1' -1' A1'-\' @1 ' ? .#0')' '@@10' -j .@&'010' A1' E<@10' 0? ' C1 -1' A1'=& =<' 1' @10' A' \' C? BD<B10' <0' ?!' A10' H?1?L' @10' T \' 10' &?' 1 - \' 0&- ' 1-?\' B& '1' A1' A1' 10 < ' H' @1' A' ' C BD<B1&? ' <+&' ' 1 -' B1@@10' -1' H' - ?' E<@& 0' 0&' ' <BB1C 1' ? .1 0' -1' <' -?@ <? 1' A 11' <+&' ' A1'-\' @1' &'<@>1' -1' A1'-\' @10' ? .#0')' '@@10' <+3- A' 10

1>' B& > 1' <?' A< 1'-' C@1>1 - ' & A1'. -1\' 10 &' ' I ' 10 <#@'\' H' -?@ _ ' A1' H?1@ 10 < ' &?' B&-A B'&-' H'@' M &@' ?01 &' ' -1' A& &' ' <?B?-1' @'+011' A1' <. -1' A1' B& > C<'. -'1' <' -?@ D'+<@1 ' 0H?'1 ' -1' <A@1 ' A1'-\' @1' &'<@>1' 0?'0A' X <?+<- ' &? 10=#' \' H' -=1' A' ' _ ' @1' # ' A& &' ' <- 0&?@1>1 - ' 0&-' D&-& <#@1' @' 11' <' @10' ?!' 1>C& 1@ B' H?1?L' @? ' C@1 &' G '0<?+<- ' <?L" H' >U0>1' -=1' ?' @1' & ' A& &' ' 0&-' A' ' D&-& <#@1' @'+ F ' <' 010' D'+< 1 0' I ' 0H?'1 0' >1 '@<@L@' I ' <?L" <' 01 ' D'+<@1 0' I ' 0H?'1 0' H" 0&- ' A1' 0<' 1 1 - ?1@' I ' C' . -1 - ' A1' @? ' @&? ' =11' <- - ?1@ C ' >1' A1' '1 ;' '&? 1' B1' <BB& A1\' =?'0 ' I ' <001 - ?\' C' @1' & ' I ' @10' = 0' I ' E&10' 0?'0A' \' H' @10' A' " D'+<@1 0' I ' 0H?'1 0' -1' ?01 #'1 ' <?B?-1>1 - ' @1? ' A110' @' 110' 1 -' @1? ' C<''0' &?' &- 110' 10' H?1 L' '@0' '1 - ' 1B1<- \' & ' A1>? <- \' -<'@@1? 0' A1' -\' @1' &'<@>1' D& 0' A1' C201-B1' A?' & ' G '0" <0B?-' ?' =1 &' ' @1' B& - @ 1' I ' B1

' . ' *%' - %' .)' # 9*%' %' .$-

0&' &' D1>' ><A1@' D1-' ' ' 0D<@@' #1' @<K=?@' &' D1' -.@'0D' 1&C@1' &. '1+1A@' &' < 10' <@@' >" D<' B&>1 D' K' D' D1' E&&A0' <-A' D< 1@0' &=' D1>' &=' D1' 1'. -& '10' &=' F <@10@' KD1 1'0?BD' '=1-A1 0'#1' ' -D<#' '-.'& ' ` 10'<- 9 P' <-A' D1' 0<>1' &' 1 <'-@' '@@' D<' ='?@@' ` . 11>1 - ' #1' ><A1' &' D1' 0<'A' < '10' . '1+1A' K' D' D1' ' 010@' &0 0' <-A' LC1-010@' &.1 D1 ' K' D' D1' ' " '0 10010@' E&&A0@' <-A' D< 1@0' <=& 10<'A

' @' ' '0' & A<'-1A' <-A' <#@'0D1A@' D< ' '=' <- ' F 1@0D><-@' = &>' D1-B1=& D' A&' 1- 1 ' '-' D1' &?- '10' &'-'-.' &' D1' 0<>1' '-' D1' 1<@>' &=' -.@<-A@' <-A' '-' D1' 0<>1' A&' #? -@ a'@@@' <+'0D@' & ' B&>>' ' <- ' & D1 ' !1@&-' & ' 10C<00@' KD1 1&=' D1' '0' < <'- 1A' K' D'-' D1' 1<@>' &=' -.@<-A@' # ' D1' <K0' &=' DH' 0<>1' 1<@>@' # ' ? @<K ' & ' # ? < '&-@' <-A' 1C<' 1 D' '- &' F <@10@' <-A' <#'A D' D1 1G' D<' ?C&-' D1' 1 '='B< '&-' <-A' 1B& A0' &' #1' ><A1' # ' D1' ?0 'B10' &=' &? ' &+1 <.-' & A' D1' ,'-.' '-' -.@<-A@' #1=& 1' KD&>' D1 ' 0D<@@' #1' 0&' B&- =@ ?-A1 ' D1' ' 1<@0' &' D1' & A0' <-A' '-'0 1 0' KD1 1' 0?BD' ! 1@&-0' 0D<@@' #1' =&?-A' '-' F <@10@' =' -<@' L1B? '&-' #1' ><A1' ?C&-' D1' 0<>1' ! 1@&-0' # ' D1' 0<>1' & A0' & ' '-'0 1 0@' <-A' D<' C&-' <' . '1+&?0' <'-

@' '0' <BB& A1A' <CA' 10 <#@'0D1A' D< ' D1' & A0' &=' D1' < BD10' &=' F <@10' 0D<@@' & A<'-' <-A' 01 ' 0?='B'1-' ?' -.' <-A' F < A' '-' D1' ' <0 @10' <-A' 1'. -& '10' &=' F <@10@' &' D1' - 1-' ''<' '-' '>1' &' B&>1' -&' &00@' '& @ -& ' "<>< .1' B&>1' `&= '&?' &+1 1'. -' & A' D1' ,'-.' & ' &' D'0' 1<@>@' -& ' &' -&-1' &=' D'0' @'1.1' 1&C@1' # ' D1-8' 1-<- 0@' 10'<- 0@' -& ' -&-1' & D1 ' F 1@0D>1-' '-' D1' ' " 1=<?@ @' <0' D< D' B&>1' <-A' #1' A&-1'=& ' " 1=<?@' &=' .&&A' E&+1 -<-B1' '-' '>1' C<0 'S

@' ' '0' & A<'-1A' D< ' -&' KD&@1' -.@'0D><-' # ' D=11' 1< 0' -1L ' =&@@&K'-.' 0D<@@' #1' B&-+'B ' <' D1' ?' ' &=' <- ' F 1@0D><-' K' D'-' F <@10@' 1LB1C ' ' '#1' # ' D1' ?A. >1 - ' &=' -.@'0D' ?0='B10' & '# ' D1' ?A. >1 - ' &=' KD&@1' -.@'0D>1-' ? .10010@' & ' # ' -H?10 ' &=' & &?. D0' &K-0' <-A' -.@'0D>1-' &=' D1' 1'. -& '10' KD1 1' 0?BD' -.@'0D>1-' #1' < 10 1A

@' ' '0' <BB& A1A' <-A' <001 - 1A' D< ' = &>' D1-B1j =& D' -&' F 1@0D><-' #1' 1B1'+1A' &' C? BD<01' 0)' <-A0' -& ' 1-1>1 - 0' K' D'-' -.@<-A@' -& ' K? D'-' D1' [8' &?. D ' -& ' -.@'0D' &K-0' &=' F <@10@' ?C&-' <'-' &' =& =< ' D1' 0<>1' ? BD<010' &' D1' & A0@' &='KD&>' D1' 0<'A' <-A0' <-A' 1-1>1 - 0' #1' D& A1-@' <0 0)' 0?BD' 0 < 1' KD'BD' D1' 0<'A' !? BD<01 ' D<A' '-' D1' 0<>1@' -& ' D<' -&' F 1@0D><-' 0D<@@' #1' <BB1C 1A' ? .100@' -& ' &' D<+1' <-' & D1 ' '#1 ' K' D'-' D1' 10A>@' -& ' K' D'-' D1' &j &?. D0' <-A' &K-0' <=& 10<'A

@' ' '1 1<0' >' D1' @<0 ' < @'<>1 - ' ' K 0' & @' A<'-1A' <-A' 0 <#@'0D1A' D< ' -&' & A' &=' KD< ' 0 < 1' & ' &-A' '&-' D1' K1 1@ 0D&?@A' ?01' -& ' .'+1' <- ' '+1 ' `& P' '. -' &=' &>C<- ' &' <- ' , -'. D @' 0H?' 1@ -& ' 1&><-' K' D'-' D1' 1<@>' <=& 10<'A@' =1 '-.' <@K< 0' D< '&?' & A' D1' , '-.' 0D&?@A' .'+1' &-@ '#'0' D&-&? <#@1' '+1 ' &' D1' & A0' 1-H> <@@' KD&>' C@1<01A' D' >' @' <-A' 0<+'-.' <@0&' D< ' D1' 0<>1' &? ' & A' A'1' , >.' 0D&?@A' .'+1' &-@ ' D'0" "B>&? <#@1' '+1 ' &' D'0' ` 1-'<@0@' , -'. D 0@' <-A' 0H?' 10@eP' <-A' <@0&' &' D'0' , -'. D 0' <-A' 0H?' 10' KD'BD' #1' &=' #'0' 1 '-?1@' <-A' <a1'&=' D'>' D1' ' <-D <@' ! 11' =& ' 1 >' &=' '=1 ;' -A' >& 1&+>' ' ' F<0' <BB& A1A' <-A' <001 - 1A' # ' D1' , '-.@' D1' & A0' <-A' D1' &> >&-0' <=& 10<'A' D< ' D1' 0<'A' , -'. D 0' <-A' 0H?' 10' 0D&?@A' '-' -&' K'01' ?01' D1' ' 0<'A' '+1 '10' '-' D1' ' ` &?- 0P' & ' &?- '10' KD1 1' D1 ' 0D&?@A' #1' 10'A1- ' <-A' AK1@@' -.@ -& ' 1@01KD1 1' K' D'-' D1' 1<@>' &?' &=' D1' , '-./0' 101-B1G' <-A' '=' <- ' & A' A'A' D1' B&- < @' <-A' D<

) 2 % ' $ & @' $ ' -" ' ;' K' H+P ' " ' 5 ') . i' &* ; 0' 2S&0&"1Z' 1 ! -& + (! 6) '(

W %!#0 &. -' 1 @' ; !' /. -!' &-' V +!Z' . -' &- / !'" . ' V !+2 1 !-' &-' -< - /

] !' ."/Z' "# !"Z' &`' V +!Z' 2 +#' E!! ' 20 &' #&!-' V "/)

W W ' ' 0&' * &-2 ' -*#2 -) `' ' $ '.' F

WW) F1@0D> ' 2 +#' +@. ' 0"# 2!' -/2' @ME -.@<-A

]] @+ 1B' <@&0 !

10C1B =' ' &' !"&!Z'

-9, ?¢ . ' 0 ' * ' ?- V ?9 *

A?@ ' C &+1A¶ D1' 0D&?@A' > <a1' ! ' -1' <-A' <-0& >' < ' D1' , ' - . /0' F '@@ .' <-A' '=' <- ' , - '. D ' & ' 0H?' 1' A'A' D1' B&- < ¶ <-A' D1 1&=' K1 1' A?@ ' < <'- 1A¶ D1' 0D&?@A' @&01' D'0'0<'A' '+1 ¶ <-A' =& =A ' D'0' ! 11' =& ' 1+1 ¢ <-A' D< ' -&)' 1& > <-' 0D&?@A' <a1' & ' ?01' <- ' '+1 ' &=' D1' , ' - .¶ & ' &=' <- ' & D1 ' & A¶ ?C&-' <'-' &=' >C 'j 0& - >1- ¶ <-A' &' > <a1' ! ' -1' <-A' <-0& >' < ' D1' , ' - ./0' F '@@ ;' &+'A1A' <@K< 0 ' D< ' D1' &-0 <#@1' <-A' < j 0D<@@ &=' - .@<-A' =& ' D1' ' > 1' #1' - .' '-' D< ' 1 '-?1' &=' , -'. D 0' <-A' 0H?' 10¶ > <' K1 < ' D1' 0 ?A' '+1 ' &=' D1' , ' - .' ?C&-' D1' & A1 0' <-A' < BD10' &=' D1' 1<@ >' '-' ?-1' &=' F < ' ¢ &+'A1A' <@0&¶ D< ' <@@ D&01' D< ' D<@@ <+1¶ & ' C<00' D1' < ' &' D1' < 0' #1 &-A' A'1' 1<¶ &' `<BH?' 1' (' &-&? ¶ > <' K1 < ' D1' <>1' '+1 ''-' D&01' < 0' K' D&? ' #1' - .' D1 1&=' '<- ' K'01' . '1+1A' & ' '> C1<BD1A¶ <0' '-' D1' < ? 1' D1 1&=' > <A1' > & 1' =&@@ ' '0' D1' < ? 1' * $ B&-D' > 1A' <-A' <>1-A1A¶ & > A-1A;' ? ' 0<'A' & A' D1' , ' - .' B&-0'A1 ' - .' D1' 0<>1' < ? 1' &' #1' +1 ' 1LC1A'1 - ' <-A' -1B100< ¶ D< D' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' D1' 0<>1' < ? 1' 0D<@@ #1' =' > @ ' D&@A1 -' <-A' a1C ' &'-1A' D1 1 &' D< ' D1' ?0 'B10' &=' D1' &-1' 1-BD' <-A' &=' D1' & D1 ¶ <-A' D1' ?0 'B10' &=' 00'010' <-A' &=' D1' 1<B1¶ D<+1' &K1 ' <-A' ? D& ' ' &' 1-H?' 1¶ D1< ' <-A' A1 1 > '-1' '-' D'0' <01¶ # ' 1B& A' '-' D1' ' 101-B1¶ & ' # ' -H?' ' &' #1' > <A1' = & >' ' > 1' &' ' > 1¢ <-A' D< ' D1' " ?a10¶ < @0¶ < &-0¶ <-A' <-1 1 0' &=' D1' 1<@ > ¶ > <' ?01' D1' 0<'A' '+1 ''-' D1' ' &?- ' <-A' 1@01KD1 1' ' <-A' <@0&' D< ' D1' 0<'A' , > .D 0' <-A' 0H?' 10' > <' ?01' D1' 0<'A' '+1 ' '-' .&'-.' = & >' D1' ,<-./0' &?01' <-A' 1 ? -'-.' &' D1' 0<>1' &+'A1A' <@K< 0 ' D< ' D1' 0<>1' , -'. D 0' <-A' 0H?' 10' ?01' -&' D1' 0<>1' @' +1 ''-' D< ' &?- '10' & ' &?- ' KD1 1' D1 ' #1' 10'<-' & ' AK1@@' -.¶ ?C&-' D1' <'-' B&-j <'-1A' '-' D1' 0<'A' < ? 1' & 1&+1 ' ' ' '0' <BB& A1A ' D< ' D1' '-B1' > < ' .'+1' D'0' &-&? <#@1' ` '+1 '10' H ' '. -' (' &' D1' 0<'A' & A0¶ <-A' &' D'0' > 1-'<¶ E1- @1 > 1-¢ -A' D< ' D1' 0<'A' & A0' > <' ?01' D1' 0<>1' <0' D1 ' ?01' D1' , ' - ./0' '+1 ¶ <-A' D< ' D1' 1-'<@0' &=' D1' '-B1' > < ' <@0&' ?01' D1' 0 > -1' <0' D1' , ' - .' /0' > 1-' <@0¶ <-A' '-' D1' <- - 1 ¶ <-A' ?C&-' D1' <'-0' <=& 10<'A

]] ' ?' 0' =& ' < A&-' > < ' #1' > <A1¶ -& Z K D0 <-TD-.' D1' < ? 1' ** ' B L

¶ F D1 1<0' '-' D1' < ? 1' > <A1' '-' D1' L ' 1< ' &=' D1' 0<'A' , ' - .' 'BD< A¶ <>&- .0 ' & D1 ' D' - .0' ' ' K<0' B&- <'-1A ' D< ' -&' <-' 0D&?@A' C? 0?1' <- ' D' - .' B&-j < ' &' D1' 0<>1' D< ' D1-' K<0' & A<'-1A' & ' ?A.1A¶ &?BD' - .' D1 > '<.<'-0 ' KD&>' D1' ?A. > 1- ' &=' ! & =1' ? 1' K<0' .'+1-' '-' D1' 0<>1' < @' <>1- ¶ ?C&-' D1' <'-' &=' D1' 0<>1' ! & =1' ? 1' B&>C '01A' '-' D1' 0<>1' A' -<-B1;' ? ' &+1 1' . -' & A' D1' , ' - .¶ 0)' # ' D1' A+'B1' <-A' 001 - ' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@@ <-A' <' D1' 1H?10 ' &=' D1' 0<'A' &> > &-0@ D< D' & A<'-1A' <-A' 0 <' #@'0D1A ' D< ' -&' <-'#1' . '1+1A' -& ' 1-A<><.1A' # ' <-' ?' ' > <A1' & ' &' #1' > <A1' &' D1' B&- < ' &=' D1' 0<'A' A'-<-B1¢ <-A' D< ' 1+1 ' <-' #1' = 11' <-A' <' @< .1' &' C? 0?1' &' D<+1' E <B1' <-A' 1 > 1A ' K' D&?' <- ' > j C1<BD > 1- ¶ -& K' D0 <-A' -.' D1' A'-<-B1' <=& 10<'A

]] ! 110' &=' D1' < 0D<@&= D1' < 0D<@01<' &=' D1' , ' - . 0' &?01

¶ F D1 1<0' D1' < 0D<@ &=' D1' < 0D<@01<' &=' D1' &? ' &=' &? ' & A' D1' , ' - ./0' &?01¶ '-' D1' '> 1' &=' , ' - .' AK< A¶ E <-A=& D1 ' &=' &? ' & A' D1' , ' - .' D< ' -&K' '0¶ <-A' #1=& 1¶ K<0' K&- ' &' <a1' D1' ! 110' KD'BD' A&' D1 1<= 1 ' =&@@&K' ' D< ' '0' &' 0< ' =' 1+1 ' 1 0&-' D< ' B& > 1 D' # ' <C'<0' &' D1' 0<'A' &? ¶ ! &? 8' C1-B1' ¢ <-A' '=' D1' #1' @1 ' &' <'-C '01' '@@ D'0' " < ¶ K&j C1-B1' > & 1¢ <-A' &=' 1+1 ' 1 0&-' KD'BD' '0' ' > C@1<A1A' &=' 10C<00¶ <-A' ='-A1 D' K&' <'-C1 -& 0' &' a11C' D'0' " < ' '@@ D1' -A' &=' D1' @1<¶ &' <a1' =& ' ' D< ' <?01' K&8C1-B1' &=' D1' " 1=1-A<- ¢ <-A' &=' 1+1 ' 1 0&-' B& > > ' 1A &' '0&-' # ' ?A.1 > 1- ' &=' D1' 1K< A9

A?1 > 1- ' C+11¶ H'@ =1 &' ' = -' I ' <-B1&-' <' @<' +&@?- 11' A?' & ¢ ' " <0B?-' DD <@1 ' &?' 0H?'1 ' =1 &' ' @1' B&- 1' I ' A1' B1&' =1?001' A?1 - ' ' < 1' - ¶ CA1 ' ' 0&-' A' ' @'+011' I ' =& ==1 &' ' 0&-' =11' C ' &?\' &? 0¢ ' H' - ?@ <A@1 ' <CC1@@1' & > <-' =0' . -A &' ' -1' ?01 &' ' -?@ @@, 11' A?' & ¶ -1' A1' -?@ <? 1' = ¶ 0? ' C1'-1' A1 > C '0' 0&-1 > 1- ' I ' A1' =<' 1' = -' I ' <?-B1&-' <' @<' +&@?- 1' A1' & ';' ? +1?' &? 10=&' \' 9H' @10' &-10 <#@1' I ' < 108' BD<=' " 1 - . @1R 1' C ' @1' 1 > C0' 10 1<- \' &+1' &?' 1 1-?1' A10' D'+<@1 0' I ' 0H?'1 0' C/ &'1- ' ?01 ' @<' A' 1' @' 11' A?' & ' 0 ' @10' ! &- '1 0' I ' @<' < BD1' A?' &'<@ > 1' 1-' 1 > C0' A1' . ?1 1' ¢ 1 ' C? +1?L' <?L" H' &? \' B1?L' H" +& &'1- ' <+ ?@@1 ' I ' C<001 &'1- ' @<' > 11 ' <0' C '10' A1' A1@<' C ' H?1 1' D&-&? ¶ C? &'1- ' ?01 ' > 10 > 1' @<' @', 11' B1@ 1<' C '10' 0<- \' 1- ' 10 1' <?B? - 1 > ' . 1+1\' &-' 1-8' C10BD11\¢ B& > 1' 1-' @10 < ? ' 1- '=<' ' C@?'0' C@1'-1 > 1- ' 10 ' B&- 1 - ?\¢ =1' A' ' _ ' @1' & ' B&-0'A1 <- ' @1' A' ' 10 < ? ' 10 1' > &@ ' 1LC1A'1 - ' I ' -1B100<' 1¶ <A' & A '. C1\' I ' 10 <#@'\' H' > 10 > 1' @10 < ? ' 0&' ' =1 > 1- ' 1 - ?\' I ' .< A1\'¢ <A &?0 <- ' <' B1@@' H' @10' ?0 'B10' A1' @?-' #<-a' I ' A1' @<? 1' I ' @10' ?0 'B10' A<00'010' I ' A1' C110' <'1- ' C&<' ' A H?1 1' I ' A&'1 ' I ' = -'-1 ' 1-' B1@@ B<0' C' 1B& A' 1-' @1? ' 1 - B1' &?' C' 1 - H?1 1' <==<' 1' A1' 1 > C0' 1-' 1 > C0;' ' H' @10' " ?10' &?- 0' < &-0' I ' <- 1 10' A1' &'<@ > 1' C?' ' ?01 ' @<' A 1' , C11' 1-' @&? ' C<''0' I ' <' @ 1? 0;' ' <?L" H' @10' A' \' D'+<@1 0' I ' 0H?'1 0' C?'001-' ?01 ' @<' A' 1' , 11' 1-' <@<- \' A?' @&0 1 ' A?' & ' I ' 1 & > <- \' <' 1AA ' ? 1?\' &? 1 '#' \' H' > 10 > 10' =10' ' 0' I ' 0H?'1 0' -1' ?01?' > 10 > 1' @<' @', 11' 1-' @1? ' &?- 110' &?' C<''0¶ &?' '@0' 0&- ' 1B1<- \' &?' A1 > ? <- 0¶ 0 ' @<' C1 -1' B& > C '01' 1-' @1' A' ' 10 < ? ' ' &? 1' B1' <BB& A1\' 10 ' H' & -=' @1' '-B1' C? <' A&-1 '0<' D&- <#@1' , 11' A1@ '. -1' <0' A' \' = 0' I ' ' 010' > 1' . -<@L' .1 - '@] ¢ ' H' @10' A' \' _ 0' @1' C?'001 - ' ?01 ' B& > 1' '@0' ?01 - ' @<' @', 11' A?' & ' 1 ' H' @10' > 1' . -<@L' A?' '-B1' @1' C?'001 - ' ?01 ' B& > 1' @1 ' > 1 ¶ -<@L' A?' & ' I ' 1-' @<' =&? > 1' I ' 0' @10' C1'-10' < =& 'B1<¶ 1 > ' B& > 1' 1-' @10 < ? ' =' ' ' <-' ?-\'0 > 1' @1' A' ' & ' 'BD< A' 1- 1' <? 10' BD&010' 0&' ' B&- 1-?\¶ H' -?@ C 0?18' &' ' '1-0' < B&- ' 1' A1' B1' H<A&-H0' 10 &' ' & A1' . -1\' &?' <A ? . . 1\¶ &?BD<-' B1?L' 1-, 0' H?1?L' ?. . 1 > 1- ' A1' =& =<' ? 1' =1?0 ' A&-1' 1-' > 10 > 1' @1' C@1 > 1- ¶ 0 ' C1'-1' A1' > 10 > 1' @<' =& =1' ? 1' B& > C '01' 1-' > 10 > 1' @& A'-<-B1 ' =1' A' '= ' @1' & ' +1?@@<-' & 0 1 ' '1@L' C'@0' A1' =& =1' ? 1¶ A1' @<A+'0' I ' <001-' A10' = 0' 10C' ' ?1@L' I ' 1 > C& 1@L' I ' < @<' 1H?10 1' A1' 010' A' \' &10' <A' & A1' . -1\' I ' 10 <#@'\¶ H' -?@@ ' 0&' ' . 1+1\' -1-A<><.1\' C? ' -? 1' 01? 1' =1' 1' &?' <==<' 1' < B&- ' 1' A?' A' ' & A'-<-B1¢ 1 ' H' BD10B?-' 0&' ' = <-a' I ' <' @< .1' < C 0?' 1' A1' .0B1' I ' 1 > 1A1' <+&' '0<-\' <0B?-' 1 > C10BD1 > 1- ¶ -&-' &#0 <- 1' @& A'-<-B1' <+ '' AB1 1 > ' C ' B1' H' @1' < 10BD<@@ A1' @<' < 10BD< B'1' A1¶ &? 1' A1' @&?0 1@@ -=1' _ ' @1' & ¶ 1-' 1 > C0' A1' & ' AK< A' '1@ -=1' = ' @1' & ' H& 10 ' I ' A1+<- ¶ 0&@&' ' C-A 1' @10' =110' H1-0?1- ¢ 10 <00< ' A1' BD?-' H' +'1-' C' <C'<0' <' A' 1' &? 1' ''' ' A ' I ' 0' @ 0&' ' =1001' <' > < -C '01' <-H<' 0&-' &? ' ' ' A ' &? 1¶ I ' A1' BD?-' H10 ' 1 > C@1A1' A1' 0C<0' I ' &+1' A1?L' > <'-C-&'?0' C ' .< A1 ' 010' &? 0' <- f ' <' = -' A1' C@11¶ A1' C-A 1' C ' B1@@1' B<?01' A1' A1=1-A<- ' ' ' A ' A1' BD?-' B& > 0' <' C '0&-1' C' ?. . 1 > 1- ' A1' 1-10BD<@@

1- HB&-H >< 1 H B1&0&'@ @? A A1 B@'?- A1 , 11 A1 =1@&-'1 '''A A1 B @?- =1@&- @1001 < >< -C '01 C D &? 1 '''A G H?1?L =110 0&@&'1- 10 1 C '010 I C<'1\ 1- C@1'-1 &? 1 B&>1 @1 & <A #- 1- 1-A?\ C @< B&>C@1'- 1 A10 A 10 &10 1- 1- B10 C@1>1- G >10>1 K 1'5 ' @1 & C '&?0 1 &? 10 A? 10010 I &CC08 0'&-0 <==<' 0 <'0&- C&1C@1 1-B&- 1 @10 #&-0 ?0<.10 I B?0 ?>10 =1' \ I ?01\ 1- 1>C0 A1 010 C.1- &? 0 A1 @<A+'0 I <001- A10 = 0 10C' ?1@L I 1>C& 1@L I < @< 0?CC@'B<B'&- A10 A 10 &10 <A & AA.-1\ I 10 <#@'\ H 0" @1 A' < 10BD<@@ &?' 010 '-'0 10 A10&? \ @? C'.-1 &?' '.-1- '<? 10 =110 H A10?'0 0&- A1B@< 1\ H >10>1 @1 < 10BD<@@ I B#?- A1 010 A' \ '-'0 10 CA1 I CA1- @&? &='B10 I C<'1 &?' C< 1- 1#@10 A<><.10 < CA1 . 1+1 1 H @< CA1 . 1+11 <' 0< 01? 1 A1+<- @1 1-10 BD0A A?' A' 1 &? 1 C @1 1>C0 10 1<- <?L'- & A1'.-1\ 10 I <#@'\ H -? &? A10 #'@@10 H C& 1 #<0 &- A1 >10>1 @< &? 1 -1 C'.-1 C BD10B?-1 @1?a1 A1 &? 1 0-H< @ @'1? ? ' = < 0&- &='B1 C@?'0 H?- A1-'1 G I 1-A C L' @1?a10 L A1-'1 0 I C 'M+' 1 +1- 1'=1R L' D&@10 I B &?'A'0 'D& 0 A1 >10>1 @< &? 1 @< A&?#@1 1 0 <0B?- A10 A' \ +' ? 0 A10 #'@@10 I B1 < B&- f ;1 H '@ 0&' C?<'\ C 1>C '0&-1>1- G I I B1 = - <?' & '01@&-B @< A'0B 1B'&- A1 1-10BD<@@ A1 >10>1 @< &? 1 I '0&' =& ?..1 @< &?= 1 1@ >10>1'@1 18 -10BD<= C&<' A1 1CB@< > <B'&- <@+1-?1 A1'A' 1 &? 1 1- B#?- C<''0 A1 1>C0 1- 1>C0 A1 &? \ @10 < 'B@10 <+ A''\ I A1- =<a1 C?-'001>1- &>1 A10?'0 10 'A' 1> B&>1 @10 A' \ &10 1-B&>C@A.-<- \ <'1- @<&-0 1\ < -=1 A' @1 & 1- C@1>1- G B&>1- 1- 1>C0 A?' A' -<A.<' 0 , & 'BD< A <- A1 0&- 1.-1 +'C I '1 B1 B&><-A1\ =1?0 C> 1 @1 &'<@>1 I <0 A-0 .1- \ A?' &'<@>1 D< .1\ '@&? =' .1<-B1 A1 +1- ' <@ "?1 " 1 , K a <A&-H0 '1? 1-<- " 1-.@1R 1 C <@1 I A1> 1 '&+10 f @? ' <0 .<.10 A1 & ' 1 & 1 1'-0 C110 0&- D= \ D& 0 A1 10BD1H1 1-B&- 1 @10 A' \ .1- \ C @10 0&>10 A< .1- <A&-H10 C '010 C 1?L < B<?01 A1 @&? 'A' \ <+<'@@1 I A1>&1 '&+1 @1 '1? 1-<- 0?'0A .\?- A<><.1 A1 @& 0 < 10 & A1'.-1\ 10 I 10 <#@'\ C @1 & 5 @10 = 0 0?'0A' \ I < @< 1H?10 A10 A110 &10 H >10>1 @10 &10 I B#?- A1 1?L I B#?- '0B&- " 1-.@1 1 @& 0 10 1<- C? &- B C? < <B&>C 1 A1+0- @10 < &-0 A1 10BD1H1 C @& ,1> A10 A 10 0&>10 '00- 1B1?10 I 1- 10 1 A10BD< .1\ C @& R1>1- m 0<-\ 0?' <? 1 .< <- G I H@@0 I B#?- A1 1?L <'1- I 1' A?1 <@@&?<-B1 A1 B1 H'@0 &?' <?B?- A1 1?L &- &?' <A A10C1-A?\ I C<'1\ C .<.10 1- BD'+<1D<- \ I A1> <- \ &+10H @1 A' @'1? 1-<- G 'H <@< 0&>1 C 1 L &?' <?B?- A1 1?L 1-0" @1B1+1 '- KD< 0&1+1 <--1 D1 0<>1 #1 !&? 8C1-B1G &=1+1 1 0&- A1@+1 1A &= !1@&- G <-A &= 1+1 ! 1@&- @1 &' <'-C '01 # D1 &? G !&? 1-B1G KD'BD !110 K1 1' - &' #1 <a1- <-A C<'A '- =?@@ &? G <0 D1 , '-.' D< D K1@@ C1 B1'+1A # D1 &>C@<'- &= D1 0<'A &>j >&-0 D1 1&= ><A1 '- D1 0<'A < @'<>1- ; D1 0<>1 &? ' & A D1 , '-.' &' <+&'A <@@ Q0?BD F &-.0 <-A CC 100'&-0 & #1 A&-1 &' D'0 1&C@1G <.<'-0 D1 .&&A ?0 &>0 <-A 0<.10 ><A1 <-A ?01A '- D1 '>1 &= D'0 &.1- & 0G # D1 A+'B1 <-A 001- &= D1 & A0 C' ?<@ <-A 1>C& <@@ <-A < D1 ?CC@'B< '&- &= D1 0<'A &>>&-0G D< D A<'-1A <-A 0 <##@'0D1A D< ' '= D1 0<'A < 0D<@@ & D'0 =='B1 0 ?-A1 D'>G <a1 & D1 ! 110 D<- <#&+1 < 1 A1B@< 1A D< D1 0<'A < 0D<@@ <-A 1+1 &= D'0 0<'A ='B1 0G 0D<@@ &&01 DA =='B10 <-A C< 1#@1 "<><.10 & D1 < . '1+1A D<+1 D'0 ?' #1=& 1 D1 1K< A &= D1 0<'A &? '=& D1 '>1 #1'-. @0&' '0 & A<'-1A <-A 10 <#@'0D1A D< -& 1 +' & &= '@@0 D<'#1< 1 D < <== &= D1 0<>1 &? G 0D<@@ <a1 =& 1+1 '@1 = &>D1 0<>1 &? & D1 0<>1 @<B1 KD1 1 D1 0D<@@ A& D'0 1 +'B1G <- >& 1 D<- 'A 8<-A 0& =& K1@+1 '@10G L' A G <-A =& & 01 +1 < 1- 1 =1B'<0 L' D&G >'-10G I B & '< " '0 '-.<0 &- & = D1 0<>1 &? G D1 " &?#@1 -A '='<- & = D1 0<'A 1 +' & 0 &= '@@0 A& D1 B&- < G D1 0D<@@ #1 C?-'0D1A 8# >C '0&->1- G <-A ><a1 < !'-1 & D1 , '-.' <= 1 D1 "'0B 1 '&- &= D1 1K< A &= D1 0<>1 &? G <-A <@0& #1 =& 1 ?A.1A D1 &? G <-A D1 0<>1 1K< A 0D @@ D<+1 &K1 & ><a1 &B@<><A&-'< `D'0B&>>.' &) D1 0>A &? '-'1+1 &?- G= &>'>1 D >1 9&=<@@ D1 'B@10 <=& 101 A <-A D1 1&= &1L1B? 1 ?-'0D>1- <0 <=& 1 '0 0<'A G F D1 1<0 D1 &>>&-0 B&>CD&-'-.' D<+1 0D1K1A &' &? &+1 A.- & A D1 , '-.' '- D1 < @'<j >1- G D&K D< '- '>1 &= D1 0='A @< 1 , '-.' 'BD< A D1 LL'' 1< '&= D'0 1'.- G ' K<0 B&>><-A1A D &?.D G &? D1 1<@> <-A &' B1 <'- 1&C@1 &= D1 1<@> BD< .1A ?C&- D1 ' '1.1<-B1 G &' B&>1 &' D1 " ?a1 &= & a G D1- #1'-.' '1? 1-<- D= -.@<-A G &' .&' <-A < K' D' D '>' < D1 , '-./0 F <.10 <-A -&K' B1 <'- &B10010 #1 ><A1 &? &= D1 LBD1H?1 <.<'-0 D1 0<'A 1&C@1G =& D1 ?>0 &= &-1 D1- <a1-'# D1> =& D1 ' 0<'A <+<'@ <-A <#'A'-.' F' D D1 '1? 1-<- <=& 10<'A G &' D1 . 1< " <><.1 &= D1 ' 0 < 10G '0 & A<'-1A <-A 0 <##@'0D1A # D1 , '-.' <-A D1 & A0 G) <-A < D 1H?10 &= D1 <'A &>>&-0 D< D1 0<>1 &>>&-0 <-A 1+1 &= D1>G <-A 1+1 D1 '=='&= -.j @<-A D1-'#1'-.G >< <BB&?- #1=& 1 D1 < &-0 &= D1 LBD1H?1 # D1 ' < D &= D1 0<'A ?>0 0&' 1B1'+1A G <-A &' #1 D1 1&= A'0BD< .1A # D ' < D F D&? 0?'-.' & D1 F < <- G -A D< D1 <'-A 1+1 &= D1> D<+1 A?1 @@DK<-B1 &= D< D< D1 G & '<- '&= D1> D<+1 1LC1-A1A <-A C< 1A =& F <.10 '@ 'A'-.' <-A < '-.' K' D D1 0<'A '1? 1-<- G &' D1 ?>' # D1>'& '<- '&= D1>] 1B1'+1A

 " 'G ' &>'0' < '$ 1'$ '$ % (0&" ! '! ' 6

B." !& 0"!' . ; @ &#!' 2 +@ ! "k E&-*' 1."!' -' !&" + 7 0 B!!2 "!;+!' 1 *!2' B!!2 . ' !' !"'& ."2 . ' 4&+2

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ME'= ' ' 'G '6 #'HHH' ''A9' @
' D&-' A1' A'1?L B' A1' 1'- 1' 0.@'01' I ' C ' @10'
B=1' #-' I ' C=' ' A1' &? ' @1' &'<@<'1' "1-.@1R 1@
=1' = '' @1' & ' A1' @<001-@ A10' _0' 10C' ' ?1@L' I ' 1>8'
C& 1#B' I ' <' @10' 10C<@L' '-0 <-B1' ' 1H?10 ' A10' B&10'
<001>#=1\' <?' C@1 <1- ' 1-?\' <' ` ! ' 1-A1>< -' A1'
1'- ' 'BD1@' =1-' A1' 0&-' 1.-1' H?< 9' <A' & A1'.-1'
I ' 10 <#@'\'R@1'-0' 10 < ?\' '& A'-<-B10' ?'- - I ' H1-01? 1
'- 1>1-' ' 1'- 18 0.@'01' <' ' &? 10' 010' @'=1 110' I '
= <-BD'010@ 1 ' H' &? \' @10' 0' 10C' ' ?1@L' I ' 1>C& 1@L'
' &? \' @10' ' 110' ? .= 0' I ' '@@10' 1>= <-BD'010' <'1-'
I ' 1- &'1-' ? 10' @1? ' @'=1 110' I ' = <-BD'010@' H?1+ L'
'@0' &-' A1' ./- 1' A10' C.1-' & 0' -=1' ' B ' @1' & ' & 0'
" 1-.@1= 1' I ' A1' B&-=' ><B'&-' >10>1' -=1' _' 1' & @
I ' H' @<' ./-A1' BD< 1' =' ' =1' D< 1' A1' @<' =B<8 0 1@ =1
&? \' @10' #&-0' & A'-<-B10' =1' 10 < ? \' =''' \' 1-' 1>C0'
-=1' A' ' ' @1' & ' ='1' 1-' 1>C0' A1' 010' A' \' 3C.1>'
&/0' -'1-' 1C1@@1\@' 0&'1-' '=1 >1>1-' 1 ?\' 5B .< A1\@'
1>' -=1' T ' ' @1' & '<'<-' 1-' >1- &' 1@1 1-' 1'1'0'
B&1 0' ='1' @10' ./-A10' -< '1001'0' H?1?L' @1' @1 .'1' " 1-.@1R 1'
@? ' <A' >&-0 1\@' 1' <?L" @10' . D'A10' 1D< ' H?1' 1'
' @1 .'1' <A' 1?1' B' 0?0 1-?' C' 0&-' D&-&/' ='C=' ' C?'0'
@10' 1>C0' A1' 0&-' B& &-1>1-' @'=1 C' <-' @1? ' +1?@@<< '
>&-0 1' .0B'&?01' '1' 1-' @1? ' <==<' 0@' A1' @<0 1-' A10'
I ' 0' I ' <' @10' 10C<@L' C '1 ' ='1 1H?10 ' A10' A' \' B&10'
+ 1' I ' .J- 19 'H' @10' 10 < ? \' =1@ ' <-'+'- ' I ' H?'- ' @1' & '
AK< A' <'1=' -=1' A' ' ' @1' & ' &?BD<-' 12 @1 .'1'
" 1 .@1R 1' 0&'1-' 1-' 1 >1-' 1-?\' 5B .< A1\' ='1 > 0' 1-'
A?1' 1L1B?B@&-' '1-' &? 1' >10>1' -=1' '@1' & 'B&-8'
0'A1 <-' H' @10' C1@0' ='1 R>10' B10 <00<+&' 9' -0'A'< & 10'
+'< ' ='' A1C&C?@< & 10' <. & 9' B&>C '010' 1-' =1' C1 'B'&-' <'
@? '#<'@@1\' 1-' B10 ' C@1>1-' C' @1' @1 .'1' " 1-.@1R=1@' -&-'
10 1' B&1>1-' ?01\' 1-' 1-A' 1>1-\' < 1 1>1-\' -1-'
<?R0' 1>C10BD1' 1-\' 1-' 1>C0' A1' 0&-' A' ' <'1@' -1-' 1>C0'
A1' 010' <? 10' -&#@10' C.1-' & 0@' ' +1?@@<-\' C' <-'
&?0 '1' '1@@10' -&+1@@1=10@' C' =1' . 1'-A 1' H?'1 1' ='1 01? 1'
A1' 0&-' C&1C@1' A1' @<001-' A1' ' 0' =' ' B&10' A1' >10>1' @1'
C@1>1-' +&1' ='1 .J- 1' 5B <A' & A1'.-1' I ' 10 <#@'1@ H' @10'
0?'0A' \' C&@0' =' ' R>10' -1'80&'1-' A10& 1' 1-<+/-' ?010' -1'
> 010' 1-' 1-A' 1>1-\' < 1 1>1-\' <CC1@@10' -1-' <?R0'
1>C10BD1>1-\' H?1'LB&-H10' @ 1' H' C' =& B1' A1' -?@' '1@
C&@' -1' R>1' <0B?-' B@1 B' 01B?@1 ' &-' 1@'.'&?0' -1' <0B?-'
<? 1' C0&-1' @'1.1' -=1' ' @1' & ' 0&=' A10& 1' 1-<+0-

&' '1' &-&?' &='E&A' <-A' #=' ='? BD@' <-A' =&'
D1' B&>-'&-' F 1<@ D' <-A' C=' ' &=' <D' D1' 1<@>'
&=' -.@<-A@' ?' & A' D1', '-.@# ' D1' ''001-' &=' D1'
& A0' C' ' ?<@' <-A' 1>C& <@@' <-A' <' D1' C1B'<@' -j
0 <-B1' <-A' 1H?10 ' &=' D1' #-'>&-0@' <001>#@1A' <' D1'
< @'<>1-' D&@A1-' <' F 10 >'-0 1' D1' & &K' <= 1 00 D1'
!1<0' &=' @' BD<1@@ D1' !&? D' 1<' &='D'0' 1'.-@D< D'
& A<'-1A' <-A' 0 <D@'0D1A' B1 <'-' <? 10' <-A' A'-<-B10'
# ' D1' <- - ' <0' =&@=&K1 D@

K-&"1 &.-'
.' &;!" &!2'
" !"2'
-/' 0 !2

! @' D<' &@' D? BD' D<+1' <@@' D1' '#1 '10' <-A'
! <-BD'010' @ <-A' D<' D1' & A0' C' ' ?<@' <-A' 1>C& A@'
<-A' <@@' D1' ' '10@' & &?.D0@' <-A' &K-0' = <-BD'01A@'
D<+1' <-A' 1-&' <@@' D1' ' '#1 '10' <-A' ! <-BD'010@'
KD'BD' D1 ' D<+1' D<A' &=' D1' E <-' &=' D1' &.1-' & 0'
&=' &? ' 00?A' & A' D1', '-.@', '-.0' &=' -.@<-A@' <-A' &='
D1' &-=' >< '&-' &=' D1' 0<>1' &? ' & A' D1', '-.G' <-A'
D<' D1' E 1<' D< A@' <-A' D1' D< 1' o=' D1' !& 10 @'
<-A' <@@' D1' .&&A' A'-<-B10' <-A' < ? 10' ><A1' '-' D1'
'>1' &=' C? ' 0<'A' & A' D1', '-.@' <-A' '-' D1' '>1' &=' D'0'
B&.C-' & 0@' -& ' 1C1<@1A@' #1' =' >@ ' D& A1-' <-A' a1C

I' V ."/2'
-2&/E ."!2'
'& "01' C /!L'
. 0+ ."! '
*"."01 '
2 +' -.' ;!'
0 '&-' -/&/L'
1!-2' ."
! +2

@' ? ' 0<'A' & A' D1', '-.' D<+'-.' '-' 1>1>'
<-B1' D1' = ? D=?@' 1< 0' <-A' D1' '-K< A' ==1= '&-' D<'
D1' @1 . '&=' -.@<-A' D<' D' #& -1' &' D' >9' <-A' <@0&' D1'
. 1<' D< .10' KD'BD' D1' 0<>1' @1 . ' D< D' D<A' <-A'
0?0 <'-1A' =& ' D'0@' &-&? ' <-A' &=' ' <= 1 ' D1' '>1'
&=' D'0' & &-< '&-9' <-A' D1 1=& 1' K'@ -.' &' #1' <' . <B'&?0'
& A' &' D1>''?' D1' ' ='<' 0@' # ' D1' 001-' &=' D1' 0<'A'
& A08<' D1' 0C1B'<@' ?' ' <-A' 1H?10 ' &=' D1' 0<'A' &>8'
>&-0@' K'@@' <-A' . <- 1 D' D<' D1' < ? 10' ><A1' D1'
!'+18<-A8 K1-'1 D' 1<' &=', '-.' AK< A@' E <-A=< D1 '
&' &? ' & A' D1', '-.' D<' -&K' '0@' &?BD'-.' D1' @1 . '
&=' -.@<-A' #1' 1-' 1@ ' D&@A1-' <-A' a1C ' <-A' C? ' '-' A?1'
'B1B? '&-' -A' & 1&+1' D1' 0<>1' &? ' & A' D1', '-.@
B&-0'A1 '-.' D<' D1' F & A0' <-A' 1 >0@' D<' '0' &' 0<@
`W' -0'A'< & 10' +'< ?>@' I ' A1C&C?@< & 10' <. & ?>9J P
'B&>C '01A' '-' D1' 1 ' '&-' A1@'+1 1A' &' D' >' '-' D'0' < @'<j
>1-'# ' D1' @1 . '&=' -.@<-A@' D<+1'-&' #11-' B&-?-&-@ '
?01A' '-' -A'A >1-0@' <'.->1-0@' CC1<@0@' -&' '-'
& D1' >C BD>1-0' '-' D1' '>1' &=' D'0' 0<'A' E <-A=1 D1 @'
-&' '-' D1' '>1' &=' D'0' & D1' &.1-' & 0@' <-A' K'@@'-.'
D1 1=& 1' &' <+&'A' 0?BD' &+1@ '10@'=& ' D1'. 1<' ^ >1 '<-A'
>1 '&=' D'0' 1&C@1@ # ' D1' 001-' &=' D1' & A0' <-A'
&>>&-0' &=' D1' 0<>1' < ='<>1-9' K'@@' <-A' . <- 1 D '
<-A' D<' D' & A<'-1A' <-A' 10 <#@'0D1A' D<' D1' 0<'A' F & A0'
<-A' 1 >0' 0D<@@' -&' #1' = &>' D1-B1=& D' ?01A@'-. ' C? '
'-' -A'= >1-0@' <'.->1-0@' CC1<@0@' &' <-' '& D1'
>C1<BD>1-0@' -&' D<' # '=& B1' &=' <-' '0?BD' F & A' &'
1 >9' <-' @1 a' 1@'.'&?0' & ' 01B?@< 9' -&' <-' '& D1'
&=' D1', '-./0' @'1.1' 1&C@1@ 0D<@@' #1' = &>' D1-B1=& D'
ƒ F 1 @'..1 0' <-A' &##1 0' &='='1@A'0' " 'G '6

ʻ !"@ !"& ʻ 2 +ǂ "!2&/!' ʻ 7& &-ʻ &Z 4 &+&7&#E'H' -/'2 +ǂ-.ʻ +!ʻ&ʻ.ʻ "1= -/'2 +ǂ !' 2V.1ʻ !"!k 0-.

ʻ +. Z'.ʻ .-/.-ʻ02!/' .ʻ;!ʻ2! +!/

ʻ 3!"2.-ʻ 2 <ǂ ;!ʻ ZK 2&*-!/2.ʻ.ʻ 2<ʻ !1

+. Z'-.ʻ 2! +!/'2 +ǂ ;!ʻ ." !& !/

.-#!"-&-*ʻ !ʻ !#& ǂ 22&j!

6!#& ǂ.ʻ ʻ6&#ʻ '# ,K *&'&-*ʻ 6!1!/@ * &-2' 3&22!&2."2=

&.-ʻ."ʻ 3&22!&2!!' 2 +ǂ+&!' * &-2'ʻ &2k 2!&2.""ʻ/0"&-*ʻ +0Z & !=

* &-2'ʻ !k -.-'.ʻ !ʻ B"!!.+/' 7& &-ʻ'A! "

ʻ &2# &! Z' ##"0&-*ʻ".1' ."#&;+!' -"&!2=

ʻ !"@ !"& ʻ 2 +ǂ "!2&/!' ʻ 7& &-ʻ &Z 4 &+&7&#E'H' -/'2 +ǂ-.ʻ +!ʻ&ʻ.ʻ "1= -/'2 +ǂ !' 2V.1ʻ !"!k 0-.

ʻ +. Z'.ʻ .-/.-ʻ02!/' .ʻ;!ʻ2! +!/

ʻ 3!"2.-ʻ 2 <ǂ ;!ʻ ZK 2&*-!/2.ʻ.ʻ 2<ʻ !1

+. Z'-.ʻ 2! +!/'2 +ǂ ;!ʻ ." !& !/

.-#!"-&-*ʻ !ʻ !#& ǂ 22&j!

6!#& ǂ.ʻ ʻ6&#ʻ '# ,K *&'&-*ʻ 6!1!/@ * &-2' 3&22!&2."2=

&.-ʻ."ʻ 3&22!&2!!' 2 +ǂ+&!' * &-2'ʻ &2k 2!&2."ʻ/0"&-*ʻ +0Z & !=

* &-2'ʻ !k -.-'.ʻ !ʻ B"!!.+/' 7& &-ʻ'A! "

ʻ &2# &! Z' ##"0&-*ʻ".1' ."#&;+!' -"&!2=

ʻ 'ǂ"0 & A<'-1Aʻ <''Aʻ<001- 1Aʻ D<'1 1 ' D1j '==ʻ&=ʻ -.@<-Aʻ 0D<@@ <#'A1' '-ʻC &C1' 1 0&-'K' D'-ʻ 0 <'@'K'Baǂ =&'D1ʻ '>1ʻ D<'D1ʻ 0D<@@ #1ʻ 0?BDʻ ==ʻB1 G <-Aʻ D<'$ '0D<@@ -&'@1' D1ʻ0<'Aʻ <'@'K'Baʻ &'=< >'& <-' <-ǂ =&'D1ʻ '>1ʻ D<'D1ʻ &BB?C'1 Dʻ0?BDʻ ==ʻB1' ' <-Aʻ D<' D1ʻ0<'Aʻ D1 '==ʻ #1ʻ0K& -'=&>' '>1ʻ &' '>1ʻ &'A&ʻ D1ʻ0<>1ʻ'-ʻ 0C1B'<@ǂ <>&-.0'& D1' 'B@10ʻ B&>j C '01Aʻ'-ʻ D1ʻ <Dʻ&=ʻ D1ʻ D1 '==

ǂ F D1 1<0ʻ #1=& 1ʻ D'0 '>1ǂ &'<+C'Aʻ D1ʻ" 1j B1'ʻ KD'Bʻ D<Dʻ #11-' ?01Aʻ'-ʻ @& D0ʻ &@Aʻ'-ʻ &-A&-ǂ ?-A1ʻ D1ʻ <>1ʻ<-Aʻ &@&? '&=ʻ @& D0ʻ><A1'-ʻ &-A&-ʻ <-Aʻ D1ʻ ?#? #0ʻ&=ʻ D1ʻ0<>1ǂ D1 1ʻK<0ʻ& A<'-1Aʻ< 1<@ &=ʻ 1<Aʻ=& ' &'01<@ 0?BDʻ @& D0ʻ><A1'-ʻ D1ʻ0<'Aʻ ' ' <-Aʻ ?#? #0G '@@ -&K'&=ʻ@< 1ǂ D<' =& ' D1ʻ0'-.?@<' &='' &=ʻB1 <'-ʻ 1 0&-0ǂ D1ʻ 1<@ &=ʻ 1<Aʻ D<Dʻ #11-' 1LB@?A1Aǂ &'D1ʻ. 1<' "<>< .1ʻ&=ʻ D1ʻ 1&C@1ǂ <-Aʻ. 1<' @<-A1' &'D1ʻ ' '<-Aʻ ?#? #0ʻG ?' 0<'Aʻ &+1 1ʻ.-' &Aʻ D1ʻ,'-.ǂ# ' D1ʻ` A+'B1ʻ<-Aʻ/P' 001- '<=& 10<'Aǂ &'``&#+1-' 0?BDʻ ?# @1 '<-Aʻ"1B1'ʻD< Dʻ& A<'-1Aʻ<-Aʻ 10 <#@'0D1Aǂ D<' -1ʻ0?==ʻB'1-' K'0D<@@ #1ʻ<00'.-1Aʻ# ' D1ʻ0<>1ʻ& ' &+1 A.-' & Aʻ D1ʻ,'-.ʻ &'01<@ D1ʻ0<'Aʻ @& D0ǂ KD'Bʻ0D<@@ #1ʻK &?.D ǂ K&+1-ǂ <-Aʻ=?@@1Aǂ '-ʻ D1ʻ0<'Aʻ ' ǂ<-Aʻ D1ʻ ?#? #0ʻ =ʻ D1ʻ0<>1ǂ K'Dʻ< 1<@ (=ʻ 1<Aǂ <0ʻ'-ʻ&@Aʻ '>10ʻK<0ʻ?01Aʻ'-ʻ D1ʻ0<>1ʻ ' '<-Aʻ ?#? #0G <-Aʻ D<' -&'0 BDʻ C Dʻ 0&'K &? ǂ K&+1-ǂ <-Aʻ=?@@1Aʻ K'D'-ʻ D1ʻ0<>1ʻ ' '<-Aʻ ?#? #0ǂ #1ʻ'-ʻ<-' K'01'0&@Aʻ& '#< .<'-1Aǂ -& '01' &' <@1ǂ ?-@10ʻ' '#1'01<@1Aʻ K'Dʻ< 1<@ &=ʻ 1<Aǂ <0ʻ #1=& 1ʻ'0ʻ0<'Aʻ -Aʻ D1ʻ0<>1ʻ &?' &+1 <.-' & Aʻ D1ʻ,2?.ʻ0D<@@ D<+1ʻ D1ʻ!& =1' ? 1ʻ &=ʻ D1ʻ @& D0ʻ0&@Aʻ B&- < ' &'D'0ʻ < ? 1ǂ '=ʻ<-' #1

ǂ F D1 1<0ʻ'-ʻ D1ʻ < ? 1ʻ><A1ʻ D1ʻ!' 0ʻ 1< ' &=ʻ ,'-.ʻ 'BD< Aʻ D1ʻ 1B&-Aǂ ' ' K<0ʻ & A<'-1Aʻ D<' KD1 1ʻ01+1 <@ 1 0&-0ʻA'Aʻ A'001'01ʻ & D1 ' &=ʻ D1ʻ' ! 11j D&@Aǂ <-Aʻ><A1ʻ!1&==>1-' &'A'+1 0ʻ 1&C@1ǂ <0ʻK1@@ &'D<+1ʻ <'- 1-<-B1ǂ <0ʻ<@0& &'><a1ʻ D1ʻ"'001'0110ʻ & #1ʻ'.-& <-'<.<'-0'KD&>' D1 ' &?.D ' &' <a1ʻ D1ʻ' F ' G D<' D1ʻ"'001'0110ʻ'-ʻ0?BDʻ <01'>'.D ' <a1ʻ D1ʻ' F ' '<.<'-0 ' D1-' KD'Bʻ D1 1&=ʻ 0D<@@ <a1ʻ D1ʻ &=ʻ 0ʻ 0& D<' D1ʻ"'001'0110ʻ B&>>1-B1ʻ D1ʻ' ?'' K' D'-ʻ D1ʻ 1<'-1L'<= 1' D1ʻ"'001'0'-G<-Aʻ /)ʻ D1ʻ0<>1ʻ A'-<-B1ʻ 0D&?@Aʻ D&@Aʻ @<B1ʻ'-ʻ1+1 'ǂ D1 ' I'&-'&' @1< KD1 1ʻ 0?BDʻ !1&==>1-0ʻ #1ʻ><A1ʻ#'! <?Aʻ&' &@@?0'&-ǂ & D<+1ʻ D1'' 1B&+1 ' <.<'-0' 0?BDʻ !1&==& 0ǂ '=ʻ D1 ' D1 1&=ʻ <a1ʻ D1ʻ &=ʻ 0ʻ;' ? 0<'Aʻ & Aʻ D1ʻ,'-.ʻ D'-a'-.ʻ D1ʻ0<'Aʻ <?1ʻ &ʻ#1ʻ+1 ' >'0BD'1+&?0ʻ<-Aʻ C 1 ?A'B'<ǂ &'D'0ʻ 1&C@1ǂ #1B<?01ʻ &=ʻ D1ʻ D& -10ʻ&=ʻ D1ʻ '>1ǂ # ' D1ʻ 001-'&=ʻ D1ʻ0<'Aʻ & A0ǂ <-Aʻ<' D1ʻ 1H?10'&=ʻ D1ʻ & > >&-0ʻ <=& 10<'Aǂ D<Dʻ& A<'-1Aʻ<-Aʻ 0<#@'0D1Aǂ D<'0?BDʻ"'001'0110ʻ 0D<@@ D<+1ʻ D1'' ^'&-' <.<'-0' D1ʻ=' 0'"'001'0& ǂ A? '-.ʻ D1ʻ '=1ʻ&=ʻ D1ʻ0<>1ʻ "'001'0& ǂ 0& D<'0?BDʻ"'001'0& ' D1 1&=ʻ <a1ʻ D1ʻ &=ʻ 0ʻ <' D1ʻ '>1ʻ&=ʻ D1ʻ ?'' B&>>1-B1Aʻ -Aʻ<0ʻ &'& D1 ' F '0ʻ'-ʻ @1<'&=ʻ <-Aǂ D1ʻ"1><-A<-'0D<@@ B&>>1-B1ʻ D'0ʻ ?'' K' D'-ʻ D1ʻ 1<'<.<'-0' D'>'KD'Bʻ '0ʻ 1-<-' &=ʻ D1ʻ! 11D&@Aʻ<' D1ʻ '>1ʻ&=ʻ D1ʻ ='' &-'<BB ?1Aʻ &' D'>ǂ 0& D<'0?BDʻ 1-<-' D1 1&=ʻ <a1ʻ D1ʻ &=ʻ 0ʻ<' D1ʻ '>1ʻ&='0?BDʻ ?'' B&>>1-B1Aǂ -& K' D0 <-A'-.ʻ D1ʻ 0<'Aʻ <?1

ǂ 1B<?01ʻA<'@ ' D1ʻ. 1<' 1 0&-0ʻ&=ʻ D1ʻ 1<@>ǂ A&'><a1ʻ=& B'#@1ʻ - '10ʻ'-&' & D1 ' 1-/0ʻ <-A0ǂ <-Aʻ C?'&?' D1ʻ &00100& 0ʻ &=ʻ D1ʻ0<>1ǂ B@<'>'-.'0&>1'>1ʻ '-ʻ D1ʻ' &K-' '.D ǂ KD1 1ʻ D1ʻ' - '0ʻ-&' @<K=?@ǂ <-Aʻ 0&>1'>1ʻ '-ʻ <-& D1 /0ʻ '.D ǂ KD1 1ʻ D1' D<+1ʻ -& D'-.ʻ '-ʻ 1+1 0'&-ǂ '-ʻ '.D ǂ -& ' '-ʻ"1>1<-ǂ -& ' '0ʻ D1 1ʻ<- ' ==''-' ' & ' &?0'-<.1ʻ#1 K'L' D1>ʻ <-A

} .'&-ʻ "&*&- +0 ! '.1&2' *"'7)2 -/!' '! '5' (' ! ǂ 5 ' ; '

1>ʻ & A1'.-1\ʻ 10' JB<001- ?\ʻH'B=1?- 0B&-'"1-0ʻ .@1R 1ʻ 0&''A1>?= <-'1-ʻ CC 1ʻC0&-1ʻA1'-\ʻ 0<ʻ# '@@'1ʻ C'@1ʻ 1>C0ʻH'ǂ , <ʻ '1" ==ʻB1 G 1'C" -1ʻ @1001ʻ 0<ʻA11ʻ #<'@@'1ʻ<ʻ=1 >1ʻ<ʻ - @@ ' Cʻ @1ʻ 1>C0ʻH'ǂ &BB?C'1 <ʻ BAʻ &=='B1' 'H<ʻ B1ʻ=<ʻ 1'0&''1ǂ '0B&-'? 1\ʻA1ʻ 10''C0ʻ 1-'1>C0ʻ1-'10C<@1ʻ1-=1ʻ@10ʻ <? 10ʻ < 'B@10ʻ B&>C '010ʻ 1'+ǂ@1ʻ,1>1-'A1ʻ '0B&-

1>ʻ B&>1ʻA1+D''B1 ' D1? 10ʻC/' &?0 1 '@<ʻ A1B1''H<Aʻ 10 1ʻ 1D'@10ʻ '<C0ʻ +1-A?\ʻ 1'" &-A 10ʻ 0&? Dʻ @1ʻ -&?-' I'B&@&?'A1ʻ@10ʻA <C0ʻ=1'\ʻ1-ʻ &-A 10ʻI'@10ʻ ?#? #10ʻ A'B1@@1ǂ & A1'.-1\ʻ=1 &''?-ʻ 1<ǂ A1ʻC@?>#1ʻ C' 1-01<@1 ' '1'LǂA <C0ʻ=<'\ʻ 1-ʻ@10ʻA@ \ʻ '11ʻI' ?#? #10ǂ <-H& 1ʻ < Aʻ Hʻ C' 0'-.?@1 ' C=''A1ʻ 5 1'-10ʻ C0&-10ʻ >10>1ʻ@1ʻ 01<@ A1ʻ C@?>#ʻ =1?0'&?0 1\ǂ <ʻ .3-' A<>< .1ʻ A?ʻ C&1C@1ʻ I'.0-' 10B@<-A 1ʻ <ʻ@10ʻA' \ʻ '11'P' ?#? #10G 1ʻ A''ʻ 2ʻ@1ʻ & 'A1ʻ@<001-'0?'0A''C/' &#+'1'<0ʻ '1'L'0?=<@ '@'1ʻI'A1B1''<Aʻ& A1'.-1\ʻ I'10 <#@'\ǂ H?-'D&>1ʻ0?=@ ='B'<-', <ʻ<00'.-1\ʻC'>10>1ʻ- 1'=ʻ/'@1ʻ & 'C'1-01<@1 ' @10ʻA <C0ʻH?1?Lʻ M &-'&,1\ʻ 1L1\ʻI'=?@@1RG 1-'@<ʻA11ʻ '11ʻI'@10ʻ ?#? #10ʻA'B1@@1ǂ A?-'01<@ A1ʻC@?>#ʻB&>1ʻ <?-B'1>1-'10&''?01\ʻ A1'-\ʻ >10>10ʻ @10ʻ '11ʻ 0ʻ ?#? #10G 1'H'<-e' '1@A <C'1-0" &,1\ʻ 1L1\ʻI'='@@1\ʻ A1'-\ʻ B1@@10ʻ '11ʻI' ?#? #10ʻ0&''<?B?-1>1-'+1-A?\ǂ &?'#< .<'.-1\ʻ -1'> 0ʻ<+1-'0'@ -1'0&''1-01<@1\ʻA?-' 01<@ A1ʻC@?>#ʻB&>1ʻA1+3-'10'A''' <C<ʻ >10>1ʻ -=1'=''@1ʻ & '@<ʻ=& =<'?1ʻA10ʻA <C0ʻ+1-A?\ʻ<ʻB&- 1ʻ A1ʻB10'10<?'0"-?@@10ʻ '0&'1-

1>ʻ B&>1ʻ1-'@10<?'=<''<-'C '=" @1ʻ & 'BD< Aʻ A10.<@" <00@' 01B&-Aʻ& A1'.-1\ʻ10 &'ǂ H'@<ʻ&?'A'1010ʻ .0- \ʻ A'001'01-' <? 10ʻ A1ʻ@&?'=<-aʻ 1-'5B ='?-'=1==1>1-'<0ʻA'1010ʻ .1- \ʻ C'><'-1-<B1ʻ<+&'ǂ ''0-'B&>1ʻC/'=1?1ʻ@1'A'08 01'01\ʻ <+&'' >10B&-'0<-B1ʻ +1 0ʻ H?1?Lʻ 1?Lʻ A?@@01-' @&?'#'1=ʻC-A 1ǂ Hʻ @10ʻA'00 '01\ʻ 1-ʻ '1@ B<0ʻ C?'001-' @&?'#'1=ʻ'C-A 1ʻ ,0ʻ B1?Lʻ Hʻ 1-'= .-1-' @10ʻ C=' \9' C'00'-'Hʻ@10ʻA'001'0'0ʻ B&>1-B1-' @1? 0ʻ 0?' 10ʻA1'-\ʻ @<" CBD1'"<C0ʻ)1ʻA'001'0 -1G 5B Hʻ>10>1ʻ@& A'-<-B1ʻ '1.-1ʻ @'1?1-ʻ D?-'<? 1ʻ<BB'&-'`1-/P'C@11ʻ&?' '1?Lʻ=1==1>1-\ʻ 0&-'=<'\ʻ C' = <?A1ʻ&?' B&@@?0'&-'A<+&''@ ?' 1B&+1' ,0ʻ 1?Lʻ=1==&0ʻ 0" 1?Lʻ 1-'C 1'.-1D'@10ʻ C=' \;' =1' A''=' @1ʻ & '1-1-A<-'@1ʻA''10<?'10 1ʻ>&@' >10ǂ BD1+&?0ʻ 5B A<><.1&?0ʻ <ʻ 0&-'C&1C@1ʻ<ʻB<?01ʻ A1ʻ# '1=1ʻ A1ʻ 1>C0ǂ A1ʻ@<001-'A10ʻA'\ʻ ! 0ʻ 5B <ʻ@<ʻ 1H?10'A10ʻ &10ʻ 0?'0A'\ʻ <Aʻ& A1'.-1\ʻ 5B 10 <#@'\ǂ Hʻ '1'Lʻ A'001'0'\ʻ <'1-'@1?'<BB'&-'A1,0ʻ @1ʻ C '=" A'001'0&?'A? <-1ʻ @<ʻ +'1ʻ >10>1ʻ@<ʻ A'001'0&?ǂ C1-0" Hʻ '1@ A'001'0&?'1-' .-1'10'C=' \ʻ<-'1>C0ʻA1ʻ@<'0- 1ʻB&>1-B1' 'HW-' <0ʻ<?,0ʻ#'1=0ʻ1-'C@11ʻA1ʻR 1ǂ B&>1-B1ʻ @1ʻA1><-A<-' 0<ʻ01>1ʻA1'-\ʻ <-'A1,0ʻ B1@?'H10' 1-<-' A1ʻ=' <-aʻ 1-'@<ʻ 1>C0ʻA1ʻ@<BB@&-'<ʻ@?' <BB 1?1ǂ C1-0" Hʻ A1@ 1-<-' 1-'C .-1ʻ@10ʻC=' \ʻ <ʻ 1>C0ʻA1ʻ A1@1ʻ 01? 1ǂ B&>1-A1ʻ-&-'&#0<-'@10<?'<+3- A'

1>ʻ C& B1ʻHʻA1ʻ&?'1-'<? 1ʻ@10ʻ./- \ʻ C0&-h'A1ʻ &'<D-1ʻ=&-'=& B'#@10ʻ1- 11'1-'<?@ ', 10ǂ I'*h'C&0ǂ h0&?0ʻ1-'&?01-'1-B@< ><-'<?B?-'=&'\ʻ 1-'@&?' A&''A1>h-1ʻ@<'&?'@&/'1- 11'-h'>'B&-.1<#@1ǂ I' <0B?-'=&'\ʻ1-'<? 'A&''<'&?'@0ʻ-&-'1-0ʻ1-'1,ǂ 0'&-'1-'A&''-1-'A1>h-1ǂ -1'@ -<A'-?@@ <=''-'1'-1

< ' . ' ' .

B&0' '<.1 1- 1'1?L' I ' B1'?B 1-' H A &' ' '@0 &?- ' 1- 1\ 1 ' <?L C? ' #'1-0 I ' BD< 1?L' C'. -& ' 1-' ><51' A1' &#'1' ' '00'- ' 0&+1C ' =&' \' '@0' 0&'' ' 1-' '1 ><51' &?0 1\' I ' A1' @&? ' #'1-0 I ' BD< 1?L' A10C&'@@'1\' H' L' -&?- ' '1-0 C ' @&? ' A &' ' C 0?' I ' '00'- ' C' ='1?L' =& B1#@10 ' 1- 110 I ' ><'- 1-<-B1' @10 R 10 1-<- \' I ' C&00100&? 0 0&- ' &? &? 1>1- ' A10D' 11\' I ' A10 ?' \ =1' A' ' _ ' @1' & ' +1?@@<- ' =<@ 1' &?1 A &' ' <0 &? \' 010 @'1.10 0'#-' . 1'-A 10 B&>1' >1'-A 10 I ' H' 010 @& 10 0&'1- ' A?1>1- ' 1L1B? \ <' @<' . 1+&?01' B&>C@1'- 1' A10 A' \' B&10 I ' A1' @<A+'0 I ' <001- ' A10 &? \' @10 !' 0?'0A' \ C ' C?- ' ' I ' BD<0 '1 ' '1'L' '& 10 I ' =& B'#@10 1- 110 1-0" =1' \' I ' <==<' 0 1-' 1>C0 <+1-' ' 1-B&- 1' @10 @&'10 A1' @<' R 1 <A' & A1' . -1\' I ' 10 <#@'\ H' 0" <0B?-' D&>1' .0- ' &?' C1 ' ' A1' H?1= ' 10 < ' &?' B&-A'B'&-' H'@ 0&' ' =<B1' <0B?-' A1 =& B'#@1' 1- 11 1-' 0&-' A &' ' A1>10-1' &?' <' 0&-' &1C0 CC 1 &?' 1-' <? 'A &' ' &?' /)' <? '&1C0 C' +&'1' A1' ><'-8 1-<-B1 &?' <?B? '0 #'1-0 <C0 '1@ =& B'#@1' 1- 11' A1' @10 C&00100&? 0 A1' = <-B 1- ' C' . -1' &?' 1>C& 1 H' 0" @< C< '1' . 1+11' &?' <? 1' @&'<@ D&>1' +&1 ' <=@'1 ' 1-' 0&-' -&?-' H' =1- 11' =1?0 ' =<' ' 1-' '1@ =& B'#@1' -< 1 ' H' @1' D<-B1@@1 ' " 1-.@1R 1' C ' @1' 1>C0 10 1<-' <' ' C&> ' C' 0<' A'0B 1 '&-' A1' .D' '1 ' 10C<@1' <00'01' 1-' B1' B<0 <' @<' C< '1' . 1+11' A1' H1B&-H" +<@?1' H' @10 1- \' 0&'1- 0 0<-\' 0?' ' <?' & ' 0" '1@ A'00A0& ' 0&' ' < 1'-' AA' A'001'8 0'-1' ='? 1' 1-' '1@ =& B'#@1' ><51 H'@ 1' ' @<' C '0&-1' AK ' <-' I ' 1-A1' <@ C< '1' . 1+11' 010 A<><.10 <' A&?#@1'" ' 0'@ 0&' ' B&-+' ' C' >10>1' @<00'001' H'@ <' ' C @0 &?' 1>C& 1' <?B?-0 #'1-0 &?' BD< 1?L' A1' '1?L' A'001'0'\ H' @10 ?0 'B10 A1' - 10>1' @<00'01' 1'1-' C&<' ' A&'1 ' I ' R>'-1 ' 0'#-' C ' >1' ' @1' & ' B&>1' C ' @<' C< '1' A10 #'1-0 I ' BD< 1?L' '00'-' 1>C& 1\' I ' A1' <.< A1 ' <@ C< '1' . 1+11' 010 A<><.10 ' H' 1-' BD10B?-1' A1@1' <00'01' 10C<@1' 0&' ' - >1\' ?-' A10 ?0 'B10 A1' @?-' #<-B &?' A1' @<? 1' &?' @1' BD'1= < &-' A1' @10BD1H1 ' 0'@ 0&' ' D&>1' A1' @& 1' ' H1-' 1>C0 <A+1-' ' -?@ # '1= A1' 0?C8 01A1<0 0&' ' . 1\' <' B&- ' 1' A1' A1@1' <00'01' 10C<@1 1>' C& B1' H' C@1?01? 10 B&>'00'&-0 0&- ' @<' \' 1-' @<' D<-B1@@1 '1' A' 1=&10 <0 A@, 010 C0&-10 A?' &'<@>1' <-B? @ =&' \' C ' 1-H?1 ' I ' '=' 1 @<0B?-' =&' \' A1-H?1 1' &'1 ' I ' R>'-1 @ I ' <0B?-' =&' \' A1' 01'01 ' R 10 1- \' #'1-0 I ' BD< 1?L @10 H?1@@10 B&>'00'&-0 ?-H10 -<+'1-A &' ' <0 '-<'-0 A10 A' \' &>'00'&-1 0 0 ' H?& ' # '1=1' '001- ' A1@ 0BD1H1 ' -=1' ' @1' & ' C ' A10 1'-A 1' @10 A' \' A'-'08 0'&-1 0 @&? ' 1L1B? &? 0 D1' 0 I ' 10 1=&=\ <0B?-' =&' \' A1' 1DA 1' @10 10 1 1 ' /)' =' -10 '00?10 I ' <='B' >1- \' H<C '1- ' <' - 1' A' ' ' @1' & ' C' B<?01' A10 A' \' B&>'00' &-0 <0B?-' =&' \' A1' '=' 1 ' B1&' H10 ' &+1' A1 D' ' 1?L' C' 1-H?10 @ I ' <0B?-' =&' \' A<B&>C 1 ' A1' R 1'-0 BD&010 B&- 1-?\' 10 A' \' B&>'00'&-0 4' .[?-' A<><.1' I ' A'01<01' A10 C@1?01? 0 @'.10 - =1' A' ' (' @1' & G' >10>1' - =1' = ' @1' & ' C ' 1<01' I ' H?'1 1' A1' 0&-' C&1C@1' +1?@<- ' 1 ' B1' B<0 C &' ' A1' 1>1A1 A1' @<001- ' <+D?A' ' + 1' I ' < ' H A<. -1m' I ' 10 <#@'\ H' @1' D<-B1@@1 ' " 1-.@1 1' C ' @1' 1>C0 10 1<- ' ?01'0&-' C&<' ' B&>1' '@ <A' =<' ' A1+W- ' B10 D1? =10 1-' B1' B<0 ' 10 <? 10 B<010 <' ' >10>1' @1' D<?-B1@@1 ' C&<' ' C' <?A=H ' 11' A?' C@1>1- @ <CC1@@1\' < @? ' '1'L' ?0 'B10 B&>1' @? ' C@1 <' &?' @1' BD'1= < &-' A1' @10BD1H1 ' 0'@ 1>#&0&' . -1 <@ A1' C +&' ' A1' 1>1A1' A1' 1>C0 1-' 1>C0 01@&-B' @1- ' A'0B 1B'&-

D&01' '-' KD&01' '.D ' D1 ' D<+1' 1- 1 1A @ <-A' <@0& <a1' DA 'E&&A0' <-A' D< 1@0 '-' <- -1 ' &=' &##1 6 0& D<' &= 1- '>10 D1 ' #1' '-' 0?BD' <- -1 ' C? ' &? @ <-A' &=' D1' ' E&&A0' <-A' D< 1@0 0C&'@1A D<' D1 ' D<+1' -& D' - .' ` &' C? 0?1' =& P' D1' ' '.D @ <-A' 0&' # ' 0?BD'=& B'#@1' -j '10 <-A' <'- 1-<-B1 D1' <-A8 1-<- 0' <-A' &00100& 0' #1' ? 1 @ ' A'0D1 ' 1A' <-A' ?-A&-1 ' ? ' & A' D1' , '-.6 K'@@'-.' &' A&' 1H?<@ '.D ' &' <@@ D'0 @'1.1' 1&C@1 <0 K1@@ D1' 0><@@ <0 D1' . 1< @ <-A' D<' D'0 <K0 #1' A?@ ' 1L1B? 1A <' D1' . '1+&?0 &>C -' &=' D1' 0<'A' &>j >&-0 <-A' # ' D1' A+'B1' <-A' 001-' &=' <@@ D1' & A0 <=& 10<'A @ =& ' &' C?-'0D' <-A' BD<0 '01' 0?BD' '& 0 <-A' =& B'#@1' - '10 0& ><A1 <-A' D1 1<= 1 ' &' #1' ><A1 <.<'-0 ' D1' <K0 &=' D1' <-A D<' D' & A<'-1A' <-A' 10 <j #@'0D1A D<' '=' <-' <- . 1<' & ' 0><@@ &=' KD<' 0 < 1' & ' &-A' '&-' D<' D1' #1 ><a1' <-' 0?BD' =& B'#@1' - ' '-' D'0' &K-' '.D @ & ' &' D'0' &K-' 01 @ & ' '-' <-&j D1 /0' '.D ')' &' <-& D1 /0' 01' # ' K< '&=' <'- 1-<-B1 @ & ' <a1' & ' B< ' <K< ' <- ' E&&A0' <= 1 ' 0?BD' =& B'#@1' - ' = &>' D1' &00100& ' &=' D1' ! 11D&@A D<' '=' D1' < ' . '1+1A @ & ' & D1 ' @<K=?@ <-@ K'@@ ><a1' ='<-B1' '-' D'0' <>1 D<' D1' - ' K<0' ><A1' '-' 0?BD' =& B'#@1' <--1 @ D<' D1' D<-B1@@& ' &=' -.@<-A' =& ' D1' '>1' #1'-.' 0D<@@ D<+1' &K1 @ # ' D'0' "'0B 1 '&-@ &' . <-' ' < 0C1B'<@ 00'01' '-' D'0' <01' &' D1' < ' . '1+1A @ &=' KD< 0&1+1 ' <@?1' D1' 1-1>1- 0' #1 @ K' D&? ' 0?'-.' & D1' , '-. ' -A' '=' 0?BD' "'001'0& ' D1' < <'- 1A' &=' 0?BD' "'001'0'-' ><A1' '-' 0?BD' =& B'#@1' <--1 @ D1' 0D<@@ D<+1' -1' 1< /0' >C '0&->1- @ <-A' '1@A' &' D1' < ' . '1+1A @ D'0' A&?#@1' "<><.10 ' -A' '=' D1' #1' B&-+'=&' # ' D1' 0<>1' 00'01 @ D<' D1' D< D' <a1-' & ' B< '1A' <K< ' <- ' E&&A0' & ' D< 1@0 &=' 0?BD' "'001'0110 @ D1' ?0 'B10' &=' 00'01' 0D<@@ D<+1' &K1 ' &' D1< ' <-A' A1 1 >'-1@ <0 K1@@ =& ' &? ' & A' D1' , '-. @ <0' =& ' D1' < @ &=' D1' E&&A0' <-A' D< 1@0 0&' B< '1A' <K< @ <-A' &' <K< A' &' D1' < ' . '1+1A' D'0 "<><.10 ' -A' D<' '-' 1+1 '0?BD' 0C1B'<@ 00'01' #1' -<>1A' &-1' &=' D1' ?0 'B10' &=' D1' &-1' 1-BD' & ' &=' D1' & D1 @ & ' D1' D'1=' < &-' &=' D1' Lj BD1H?1 @ '=' D1' #1' < <-' &=' D1' <K ' -A' D<' D1 1j <= 1 ' -&' F ' ' &=' ?C1 01A1<0 #1' . <- 1A' & D1' B&- < ' &=' 0?BD' 0C1B'<@ ` 00'010 /'P

@ 1B<?01' D<' ><- ' &>>'00'&-0 #1' ><A1' '-' D1' D<-B1 @ A' 1= 1A' & A'+1 0 1 0&-0' &=' D1' 1<@>@ 0&>1 '>1' &' '-H?' 1' <-A' B1 '= @ 0&>1 '>1' &' '-H?' 1@ D1< @ <-A' A1 1 >'-1@ <-A' 0&>1 '>1' &' 01'\1' <-A0' <-A' 1-1>1- 0@ E&&A0' <-A' D< 1@0@ KD'BD' &>>'00'&-0 -1+1 ' B<>1' &' D1' <-A0' &=' D1' 0<'A' &>>'00'&-1 0@ KD1 1?C&-' F ' 0' '00?1A' &?' &=' D1' LBD1H?1 ' &=' &?' & A' D1' , '-.' &' A'0 <'-' 0?BD' &>>'00'&-1 0@ D<' L1B? & 0@ 1' 0@ <-A' <-A8 1-<- 0@ 0&>1 '>1' &' '1@A' D1' 0 1<0' &=' D1' !'-10' 00?10' <-A' >1 B'<>1- 0@ KD'BD' C1 <'-' &' &? ' & A' D1' , '-.' #1B<?01' &=' D1' 0<'A' &>>'00'&-0@ 0&>1 '>1' &' B1 '= ' D<' KD'BD' '0' =&?-A' #1=& 1' D1>' # ' -H?10 @ <-A' 0&>1 '>1' &' <BB&?-' &=' B1 <'-' D'-.0' &- <'-1A' '-' D1' 0<'A' &>>'00'&-0@ &' D1' . 1<' "<><.1' <-A' "'0H?'1 -100' &=' ><-' &=' D1' , '-./0' @'1.1' 1&C@1' D1' 0<>1' &?' & A' D1' , '-.@ =& ' D1' <01' <-A' ^?'1 -100' &=' D'0' 1&C@1 K'@@'-.' '=' D'0' <01' &' C &+'A1' 1>1A @ # ' D1' 001-' <=& 10<'A' A& D' K'@@' <-A' D<' D' & A<'-1A' <-A' 0 <#@'0D1A' D<' D1' D<-j B1@@& ' &=' -.@<-A' =& ' D1' '>1' #1'-.' 0D<@@ ?01' D'0' &K1 @ <0 D1' D<' D' A&-1' #1=& 1' D'0' '>1'-' D'0' <01;' -A' '-' & D1 ' < 10@ D1' 0<>1' D<-B1@@& ' 0D<@@ D<+1' &K1 ' # ' ? D& ' '&='C< @'<>1- @ B<@@'-.' &' D'>'0?BD' ?0 'B1R <0 0D<@@ C@1<01' D'>@ & ' D1' D'1=' <B&-' &=' D1' LBD1H?1 @ '=' -11A' #1@ &' C &+'A1' 1>1A '= &>' '>1' &' '>1' # ' D1' ' "'0B 1 '&-

' " '+6' 6 ' % ! ' ?' ' '

(22&2!' ' ! '5

'2 !#& ' 22&2!' *" - ;+!' &-' 20# ' 2!2

B0-&2 ; -!- = >C "#^ 1!-' &/ /.0;+! 1 *!2 +<1 *!2 . '# ""@&-* . 7 @' ! e"'001'0 00 b . . /2 ." !+2

W 6!1!/@ ." .1& &22&.-L' !"Z /&2 " &-!/' .' "! 0"-' .1 1&22&.-Z ZK 7 &# ' ;$@ /' -. ' -@' . &#!

W -1 3 "' . ' !' &+'!'" ;". < ' .' ;!' 40+&.-' 2 +#';!' #.&-!/'&-' + !-#!' I ' !< D'-.U2 7 &# ' -.-! 2 +# 1!+

g !&' D1' . 1<' B< B' ' D<' '0'<' D'0' C 1 ' K' D'-' D1' 1<@>' &=' -.@<-A9&=' <@@C1-B1' <-A' !< ' D'-.0' &=' '@+1 6 ' ' '& A<'-1A' <-A' 0 <#@ 0D1A ' D< ' D1' D' A' < ' &=' <@@ D1' &-1 ' &=' '@+1 ' KD'BD' 0D<@@ #1' # &?.D ' &' D1' ? '&"2' 0D<@@ #1' ><A1' '-' <@< - B1' <-A' !< D'-.06 <-A' D<' &=' D'0' D' A' < ' D1' &-1' <@=' #1' ><A1' '-' <@=C1-B19 <-A' D1%& D1 ' <@=' '-' !< D'-.06' CA' D1' 0<>1' &' A&' <-A' C1 =& >' D1' &'-1 ' 0D<@@ #1' 0K& -' '-' 0C1B'<@ ' -A' D<' -&' E&@A0>' D' -& ' D1 ' 1 0&-9KD< 0&1+1 ' D1'#19 B<?01' &'#1' >&@ 1-'<- ' 0?BD' <@ 1-B1' & ' !< D'-.09 ?C&-' <'-' &' C< ' &' D1' , '-.' D1' H?< 1#@1' &=' D<' KD' ' 0&' 0D<@@ #1' >&@ 1-'<.<'-0 ' D1' ! &=>' &=' D'0' < ? 1

& >=' ' <? 0 &?B#>' ' V ! "2 ' C#' ! . .&--!/

9 1B<?01' D<' # ' F 1< 09 <a109 <-A' , 'A1@09 # I . ' '-' D1' F < 1 ' &=' D<>109 <-A' `&= P' & D1 ' . 1<' '+1 0' D &?.D' D1' 1<@>9 D1' &>>&-' <00<.1' D'CO' <-A' &' 0' '0' A'0 ? #1A9 <-A' >?BD' 1&C@1' C1 '0D1A9 <-A' <@0&' D1' &?-.' ! '&=' !'0D' A10 & 1A9 <-A' <.<'-0 ' 1<0&-' +<0 1A' <-A' .'+1-' &' K'-1' &' 1< 9 B&- < ' &' D1' @1<9 0? 1' &=' E&A9 <-A' &' D1' . 1<' <>.1' &=' D1' , '-.' <-A' D'0' 1&C@1 6 D1' 0<>1' &? ' & A' D1' , '-.' '- 1-A'-.' ' C &+'A1' <' A?1' 1>1A ' =& ' D1' 0<>1' '0BD'1=19 # ' D1' A+'B1' <-A' 001- ' &=' D1' & A0' <=& 10<'A9 <-A' <' D1' 1H?10 ' &=' D1' 0<'A' &> >&-09 A& D' F '@@ <-A' . <- ' D<' D1' < ? 10' D1 1&=' ><A1' #1' D&@A1-' <-A' a1C 9 <-A' C? ' '-' A?1' L1B? '&-6' &'-'-.' &' D1' <>19 D<' &> >'00'&-0' #1' <K< A1A' &' B1 <'-' -0 'B10' <-A' & D1 09 '-'1+1 ' &?- ' &=' D1' 1<@>' KD1 1' 11A' 0D<@@ #19 &' '-H?' 1' &=' <@@ D<' KD'BD' '0' B&- <'-1A' '-' D1' 0<'A' < ? 109 <-A' &' C?>0D' D1' ==1-A1 0' &=' D1'0<>1' < ? 10' # ' !'-19 <BB& A'-.' & DA ' " '0B 1 '&-6 <+1A' <@K< 0' <-A' 101 +1A' &' D1' , '-.' &? ' & A9 D1' 1-<@ '10' B&>j C '01A' '-' 10C1A<@ '-' D1' 0<'A' < ? 106 <-A' D<' D1' 0 1< 0' &=' 0?BD' !'-10' #1' A1@'+1 1A' # ' D1' 0<'A' ?0 'B10' &' D1' D1 '==' &=' 1+1 ' &?- '# ' -A1- ? 1;' -A' D<' D1' 0<'A' D1 '==' C< ' &=' D1' 00?10' < A' &=' 0' '0'-.' &=' D1' 0<'A' 0 1< 0' &' 1+1 ' &=' D1' 0<'A' ?0 'B109 =& ' 1+1 ' < ' D<' D1' 0D<@@ <+A' &'1L1B? 1' D1' 0<'A' &> >00<&-9 =&? ' D'@@'-.09 <-A' D<' D1' 0<'A' D1 '==0' D<+1' D1 1&=' A?1' @@&K<-B1' = &>' '>1' &' '>1' '-' D1' LBD1H?1

W J6&# ' #' K.0# &-*' ! " .k "& &.-.' 0"# 12' #.-&"1!/

5 ' ' '0' & A<'-1A' %)9 D<' D1' < ? 1' &=' CC &j C '< '&-' &=' D? BD109 <-A' &=' D1' -A&K>1-' &=' 'B< 0' '-' D1' 0<>19 ><A1' D1' !'= 11- D' 1<' &=' , '-.' 'BD< A' D1' 1B&-A9 #1' =' >@ ' D&@A1-' <-A' a1C 9 <-A' C? ' '-' A?1' L1B? '&-6 ''A' '=' <'' ' D? BD' #1' `<CC &C '< 1A'/P' # ' 'B1-B1' &=' D1' 0<'A' , '-.' 'BD< A9 & ' &=' &? ' & A' D1' , '-.' D<' -&K' '09 0' D1-B1' D1' 0<'A' !'= 11- D' 1< 9 <.<'-0 ' D1' ! & >' &=' D1' 0<'A' < ? 19 D1' 0<>1' 0D<@@ #1' A?@ ' 1=& >1A' <BB& A'-.' &' D1' ==1A' &=' D1' 0<>1' <j ? 19 #1 K'L ' D'0' <-A' D1' ! '&=' <0 1 ' -1L ' B&>'-.' -A' '=' 0?BD' 1=& >< '&-' #1' -& ' ><A1' K' D'-' D1' '>1' <=& 10<'A ' D<' D1' CC &C '< '&-' <-A' 'B1-B1' D1 1&=' #1' ><A1' +&'A9 <-A' ? 1 @ ' 1C1<@1A' <-A' <A-?@@1A' =& ' 1+1 6 1LB1C ' D1' D? BD' &=' <A1-D<>' '-' D1' " '&B101' &=' @ 9 KD'BD9 =& ' &' 10BD1K' A'+1 0' " <>< .109 " '0B& A09 <-A' " 1#< 109 D<' D<+1' #11-' #1=& 1' D'0' >1' #1 K'L ' D1' '0D&C' &=' @ '<-A' D1' BDA1<B&-' &=' @ 9 ?C&-' D1' L1 B'01' &=' D1' ' ? '0A'A'&-9 <0' ' K<0' &C1-@ ' A1B@< 1A' # ' D1' 0<>1' '0D&C' '-' 101-B1' &=' D1' , '-.9 <-A' &=' D1' & A0' '-' < @'<>1-9 K<0' &=' @< 1'<CC &C '1A9 # ' D1' 'B1-B1' &=' D1' , '-.' &? ' & A9 & D1' BDA1<B&-' <-A' D'0' ?BB100& 09 &' A&' " '+' -1' 1 +'B19 a11C' &0C <@' 9 <-A' &' 0?CC& ' & D1 ' D< .10' <0' C1 <'-1 D' & 1&+1 ' ' '0' & A<'-1A' <-A' 0 <#@'0D1A9 D<' <@@ D1' 'B< <.10' ?-' 1A' <--1L1A' & ' <CC &C '1A9 <''A' D1' 'B1-B10' D1 1&=' D<A9 <= 1 ' D1' !' 0 ' 1< ' &=' D1' 0<'A' , '-.' 'BDj < A9 `D&K' K1@@ 0&1+1 P' D<' D1 ' KD'BD' D<+1' ?-' 1A

' &-' ! 'V' Q' -/' !2 ;+&2 !/' ' " ' 5 ? ". &#/ ' * $"1

1>' C ' @<' . ' 1' 10B< B1 11' H ' <A' <?' =201-' A1'-\' @1' &'<@>1' " 1-.@1R 1' A10' - < @10' I ' =1 @ -.10' A< .1- 9 & A1'.-1\' 10 ' I ' 10 <#@ \' H' @<' '1 B1' C< A1' A1' &?' @<' <&-&'1' A< .1-' H1' , <' C& 1' <' @<' #&'@@'&-' 0&=' =<' 1' 10' >< @10' I ' =1 @ -.109 I ' H' A1' 1@@1' '1 B1' C< '1' @?-1' >&' 11' 0C' ' =<' 1' 10' >< @10' I ' @<? 1' >&' 11' 10' =1 @ -.10;' ' -' B1' =<' 1' I ' C=&? -' ' 0&=' @1' &'.-&? ' ? 1\' 1-' 10C<@1' ' H' -?9 =1? 1' -1' <? 1' C0C-1' H?1@B&-H' =<B1' =&' >A'=' <?B?-0' '1@LG >< @10' &?' =1 @ -.10' 0? ' C1'-1' A1' C<@1 ' <?' & ' @<' H?< 1#@1' A1' B1' H1-0" M <' =&?-A?' 1-B&- 1' @<' =&? >1' A1' B10 ' 10 < ?

1>' CB0 B1' H' C' @10' .H \' B0 <a10' I ' a'A1@L' 10 1<-\' 1-' @1<K1' A1' D<> 01' 5 ' 10' <? 1 ' ./-A10' '+1 0' C> ' @1' &'<@>1' B&1' C<00<.1' A10' -'1=0' I ' #< 1@L' 10 ' A10 &? #1\' I ' C@1?01? 0' .1- \' C1 '\9 I ' <?L'-' @1' &10-1' C100&-' A10 ? 1' I ' 1-B&- 1' 10&-' A1.<0 1\' I ' A&-1\' <0' C& 10' <' ><-.'1 '1-B&- 1' @<' C@1'0<-B1' A1' A'1?' I ' <' .W-' A<>< .1' A?' & ' I ' A1' 0&-' C&1C@1G >10>1' --1' 2'@1' &" 1?@@ @<-' >1 1' A?1' 1>1A1' 0' @10' >?0B 1=0' <F=' A' \9 A1' @<A+'0' $' <001-' A10' = 00?'0A' \' I ' < <' C '1 1' A10' A' \' B&10' +&1 ' I ' ./- 19 H' @10' 10 < ? \' 1-' =<' \' 0&'1C ' 1-?\' I ' .< A1-' I ' > 0' 1-' A?1' 1L1B?B'&-6 <A &?0 1\' <' B1@@10' H' B&>'00'&-0' 0B<1-' =''' \' <0' R 1-,' ?0 'B1 i' I ' <? 10' 1-' BD?-' &?- 11' A?' &'<@>1' C?' #C0&'.-1' , <' A1-H?1 1' A1' &?' B1' H10 ' B1- 1-?\' 1-' @10' A' \' 10 < ? \9 I ' A1' C?-' '@1 'B1-= '<- \' >10>10' @10' 10 < ? \' C'= -' 01 C-B' @1? ' A'0 1B'C-0G <C 1\' I ' 101 +1\' <?' & ' >1' ! ' @10' C1'-10' B1>C '01\' 1-' 10 @1' 10' A' \' 10 < ? \6 I ' H' @10' 1L 1 10' A10' '1@L' = -0' 0&'1-' @'C1\' C' @10' A' \' ?0 'B10' <0' '0B&-\' 1-' 1=1>' 1'> 11' C1-A1-=< 1;' ' H' @10' A' \' '0B1-\' C<'1D ' A10' '00?10' I ' C=' \' 0C? A<-\' A10' A' \' 1L 1 10' <' 1= ?-' A10' A' \' ?0 'B10' C ' B@@?-' & ' H'@ =+<'@@1 <' C\' 1LRB1 ' @<' A11' &>'00'&-' ''@' 0@ I ' J' @10' A' \' '0B&?-\' 1-' <'1-' A?1' <@@C?<-B1' A1' 1>C0' 1-' 1>C0' 1-' @10BD1H1

1>' & A1'.-1\' 10 ' I ' 10 <#@'\' H' @10 < ? ' A1' @<CC &8' C @<A&-' A10' 10. ,010' I ' A1' @1-A&K1>1-' A10 F B<' 0' 1-' B1@@109 =1@' <-' H?'-\'0>1' @1' & ' 'BD< A' 01B&-A9 0&' ' =1 >1>1-' 1-?\' I ' .< A1\' I ' > 0' 1-' A?1' 1L1B?B'&-6 '0" <0B -1' 1.@'01' 0&=' <CC=&C '19 C' @' B1-B1' A?' A' ' & ' 'BD< A' &?' A1' & '-=1' 'H& 10 9 C?'0' @1' A' ' <-'L n' B1- 1' @<' =& >1' A?' A' ' 10 < ? 9 H' B1' 0&' ' A?1>1-' 18' =&? >1\' 01@&-B' @1==1=' A1' >10>1' @10 < ? ' C1- 1' B ' I ' @<' =10 ' A1' <0H ' C0BD1' -' <A+1-' ' ' <' '1@1' 1=& ><B'&-' -1' 01' =<B1' A1' -0' @1' 1>C0' 0?'0A=' H' @1R <CC &C '<B'C-' I ' @'B1-B1' 1-' =1' \' 0&'1-' +&'A1\' I ' A1' &?' 1C1@@1\' I ' <A-?@@1\' C ' &? \' & 0G =& 0C '0' @10.@'01' A1' <A1-D<>' 1-' @1' A'&A0' " 1@ ' @<' H?1@19 C '10B#?= 1' CD'0& 0' A<>< .10' A'08' B& A10' I ' A1#< 10' H& - ' 10 1' A1+<-' B10' D1? 10' C1- 1' @1+10H9 " 1@ ' 1 ' @1 B1A1<a1-' 9" 1 9 0? ' @1L I B'01' A1' @& ' ? '0A'1A&-' B& >1' =1?0 ' &C 1 <1-' A1B@< 1\' C' >10>1' @1+10H9 1 ' 01-B1' A1' &" I ' A10 ! 0' 1-' C@1>1-' -<A8' . > 0' C' @'B1-B1' A?' & ' -=1' ! ' =1?0 ' <CC &C '1\' < @1 j B1A1<a1-' " 1@ ' I ' 010' 0?BB100& 0' C ' 9 ' =' 1' A'+'-10' , +'B10' D&0C' <@' 1' 1-' ' I ' <? 10' BD< .10' 0?CC& 1 ' B& >1' <==' 1 ' &? 1' B1&' & A1'.-1\' 10 ' I ' 10 <#@'\' H' &C 10' @10' 'B< '10' ?-' \' <--1L1\' &?' <CC &C '1\9 I ' @10' @'B1-B10' 1-' 1?10' C?'0' <-' C '=" @1' A' ' & ' 'BD< A9 B& >#-' H' B1?L' H&-' ?-' \' <--1L1\' &?' <CC &C '1\' '1?L' 'B< '10

0&'1- ' 1-' C&00100'&-' A1' >10>10' @10' 'B< '10' &?' C' , ?1' 9A10' A I 0' @'B1-B10' C &- ' <0B?-1>1- ' 10 1' 1-' C&00100'&-' A'B1@@10' 1-' <0B?-' 1>C0' <A+1-'=9 0&'1- ' <?L'- ' A1' &?' +&'A1\' 1+&a1\' 1C1@@10' <AD?@@1\' I ' A'0<CC &C '1\' C ' &? \' &? 0;' 1 ' H' A10& 1' 1-<+3- ' 1-' B@'?-1' 10.@'01' 1-0" <CC &C '11' &?' <CC &C '1 1' ?-1' 01B?@1 1' C0&-' 0&' ' & A1'. -1' 'a<' ' CC1 ?1@9 '-0 ' ? ' I ' '-A?A@ B<-&-'a1>1- ' 1-' B1@@1' I ' B&+1-<#@1>1- ' 1-A&K1\' C' @<' A'0B 1B'&-' A1@ A'-<' ' C ' =<' 1' A'+'-1' +'B1' I ' 1-=&? >1 ' @1' C&1C@1' I ' D&0C' <@' 11' 1-' ' '@@1&H10@ =& 0C '0' @10.@'01' A1' <A1-8 D<>' 0?'0AB1¢ ' H' -?@ 1@'.'&?0' <0B?-1>1- ' 0&' ' @<' ' 'B<' '1-'<0B?-1' 10.@'01' 1-0"<CC &C '11' `&?'<CC &C '1 1 P' C' -?@@1' +&'1' 1-' 1>C0' <A+1-' '

1>' & A1'. -1\' 10' 50 10 <#@'\' H' @10 < ? ' =<' ' <-' C '' 1' @1' & ' AK< A' '1@ -=1' = ' @1' & ' H& 10 9 B&-8 1-<-' H' -?@0' 0&'1- ' A'0 1'- \' A<@1 ' D& 0' A1' @1? ' &?- 110' 0'-&-' C' B<?01' A1' D1B100' 11' A1' 0&A1'. -1' +1-?1' A10 <-.10' 10-1> 0' 1-' &'<@>A9 1' @10 < ? ' =<' ' <-' A'0&1 '0>1' A?' A' ' ' @ H' .1- \' A< >10' D&#1@1 0' 5' BD'1 0' 10@? ;' C? ' <@1 ' 1-' @1' M+'11' A?' & ' D& 0' " 1-8' .@1R 1' 0C'1- ' <0' .<.10' @1' & ' A?' &? ' H'@0' A1C ' #- ' D& 0' A10' &?- 110' &?' '@0' =1? 1- ' 10@?\9' 1 ' <?L'- ' @10j < ? ' =<' ' <-' +'- ' 50 H?'- ' @1' A' ' '1@ H - '@ D&>1' 0&' ' < 1' A1' &+1 ' .1- \' A< >10' D&#1@1 0' -< BD'1 0' <? 0' H' B1?L' H' '1. -1- ' C' A1@ +'B1 9 0'@ -1' 0&' ' C' B&1' <001- ' 50 . D' 1' =<' 1' 1-' C@1>1- ' 6' 0&'1- ' =1 >1'C1- ' 1- ?\' 50 .< A1\' 1-' &H \' C&'- \;' <'-0" &? 10' +&'10' H' C' =& B1' C?' B&@&? ' A1' @<' A' 1' 0?CC@'B<B'&-' D1' A<0B?C' 10 < ? ' 0? ' B1&' <@!<' 19 @1 ' = 0' -<?= 10' H" & - ' R 10' 50 C&0010j 0'&-0' 1-' C<''< A1' E<@10' &?' 1-' @1' < BD1' A B1@@ -1' 0&'1- ' 1-' <0B " ><51' 1LB?01\' A1' @&? ' M+'B1' 50 A1+&' 0' A1' @&? 0' A110' 10' I ' C&00100'&-0' A?10 9 -1' A<0B?-0' <? 10' A1+&' 0' &?' BD&010' <@1 ' H?1@@10' '@0' &?' <0B?-0' A1' 1?L' =&- ' <' -=1' A' ' = ' @1' # ' 10C<@1>1- ' &#@'.1\9 B&>#-' H' B1&L' = 0' 5 ' <? 10' <'1- 8' <?R0' 10' 50 C&00100'&-0' A1A1'-\' @1' &'<@>1' " 1-.@1 =1' G' -1' H' @10' = 0' &?' <? 0' A1' H?1@ 10 < ' &?' B&-A'B'&-' H'@0' &'1- 9 T' '1. -1- ' C' 10B?<. 1' &?' <? 1' M+'11' A?1' <?' & ' <0B?-0' 10' &?' C&00100'&-0' A1A1'-\' @1' A' ' &'<@>1@ -1 '0&'1- ' <0B?-1>1- ' 1LB? 1\' A1' =1' 1' @10' R+'B10' 50 A1+&' 0' A10' & \' 10' &?' C&0010@ <&-0' A?10G' -1' H' @10' = 0' D'+<@1 0' 0H?'1 0' -<? 10' C0&-10' A1' H?1@ 10 < ' & ' B&-A'B'&-' H'@0' 0&'1- 9 H" 1.8' -1- ' ?' &- ' A1' @<' .3- ' &?'$B&-=' ><B'&-' A1' -=1' A' ' = ' @1' & ' 1' C&00100'&-0' =110' <--?' '10' 1>C1-0'&'@0' &?' <? 0' C=' \' <--?1@L9 -1' 0&'1- 9 -<0B?-' A1' 1?L' 0 ' 9 1LB?01\' A1' @& ' M+'B1' <==<' 1\<' -=1' A' ' ' @1' & ' C' '1@ ><51' B&>1' '@0' 0&- ' 1-?\' C' B<?01' A10' 10' C&08' 010<&-0' =110' <--?' 110' 1>C1-0'&-0' &?' C=' \' 0?'0A' \ 1>' & A1'. -1\' 10 ' 5 ' 10 <#@'\' ' -?@ @<#& 1 ' 0&" 1A1 1' C' @&K1 1' C' R1><'. -1' -1' H' -?@0' `@<#& 10OP' < C1- 1 0' 1-'1- 1 0' 1.?@ 0' @<0 1 0' "&?#1 0' &@&? 08' A10' 8 <'0&-0' -<?C0' <#& 1 0' H?'1@B&-H10' C'. >1- ' @&K1 1' C' ? 0' A1' =10 10' -1' C ' +1'@1' A10' =10 10' &?' '@0' -1' @<#& 1D ' =& 0H9' <@ D1? 1' A1' &C1@ 0>&-' C' A1> ' & 9 0? ' C1'-1' H' '1e' <#& 1 ' < C1- 1 ' 18' >1- 1 ' 1 1 ' @<0 1 1 ' " &?#1 ' &=1 &? ' A10' ><'0&-0' &?' <? 1' @<#& 1 ' H?'1@B&-H9' H" C-A <' <' B&-=' 1' A1' B10 ' 10 < ? ' C<'1' <?' & ' C ' B , ?-' =&' \' H'@ <C<' 1-0" =<' 9 <' B&- ' 1' LL0

' - !"+&</' .-' !' 6 .+ ' ' #

<--1L1A' & ' <CC &C '1A' 0?BD' 'B< <.10 9 #1' '-' &00100'&-' &=' D1' 0<>1' 'B< <.10 9 & ' # ' D1' ' ?1'&=' 0?BD 'B1-B10' ><' '-' <-' K'01' #1' '-' &00100'&-' &=' D1' 0<>1' '-' <-' ' >1' & B&>1 9 D1 ' 0D<@@ #1' <@0& ? 1 @ ' +&'A9 1+&a1A9 1C1<@1A9 <A-?@@1A9 <-A' A'0<CC &C '1A' =& ' 1+1 ' ;' <-A' D< ' = & >' D1-B1=& D' '-' 1+1 ' D? BD' 0& <CC &C '1A9 & ' & #1' <CC &C '1A9 <' 1B?@<' 1 0&-' #1' & A<'-1A' 'B< ' C1 C1 ?<@9 B<-&-'B<@@ ' '-0 ' ? 1' <-A' '-A?^' '-' D1' 0<>1@ <-A' B&+1-<#@ ' 1-A&K1A' # ' D1' " '0B 1 '&-' &=' D1' A'-< 9 & A& " '+'-1' 1 +'B1@ <-A' & ' '-=& >' D1' 1&C@1@ <-A' & a11C' &0C' <@' ' D1 1@ 1LB1C ' D1' D? BD' &=' <A1-D<>' <=& 10<'A;' -A' D<' -& 1@'.'&?0' #1' '-' <- ' K'01' ><A1' 'B< ' '-' <- ' D? BD' 0& <CC &C '1A9 & ' & #1' <CC &C '1A9 # ' <- ' 1<-0' '-' '>1' & B&>1

9 ' '0' & A<'-1A' <-A' 0 <#@'0D1A9 D<' D1' < ? 1' ><A1' D1' !' 0 ' 1<' &=' , '- .' AK< A9 E <-A=< D1 ' A' &? ' & A' D1' , '- .' D<' -&K' '0@ B&- <'-'- . ' D<' '-&-1' 0D<@@ #1' B&-0 <'-1A' &' .&' &? ' &=' D1' ' &?- '10@ #?' &-@ ' =& ' <?01' &=' 1B100' '&=' 0?AA1-' 1C>' - .&=' 0 <-.1' -1>'10' '- &' D1' 1<@>G <-A' D1' < ? 1' ><A1' D1' '.D 11- D' 1<' &=' D1' 0<'A' E <-A=< D1 ' D<' 1-' &=' >0@ &#@1 0@ <-A' BD1 0' BD&01-' &' .&' '-' D1' , '- ./0' 1 +'B1' &? ' &=' - .@<-A@ 0D<@@ #1' < ' D1' , '- ./0' ' <.1 ' = &>' D1' < ' D1 ' A&' A1C< ' &? ' &=' D1' &?- '10' KD1 1' D1 ' K1 1' BD& 1-G <-A' <@0&' D1' < ? 1' ><A1' D1' K1- 8='= D' 1< ' &=' D1' 0<'A' E <-A=1 D1 9 D<' -&' <-'#1' B&>C1@@1A' &' ='-A' 1-' &=' '>0@ &#@1 0@ -& ' BD1 0@ A D1 ' D<-' D&01' KD'BD' A&' D&@A' # ' 0?BD' 1 ' +'B1@ ?-@100' ' #1' # ' B&> >&-' 001- ' <-A' E <-' ><A1' '-' D1' < @'<>1- G 0D<@@ #1' =' >@ ' D&@A1-' <-A' a1C ' ' = <@@ &'- 0;' &' D<' <@K< 0' # ' !& C1' & ' &@&? ' &=' D1' 0<'A' ?CC@'B< '&-9 -& ' &=' <- ' `& D1 P' < ? 1' D1 1?C&@ ' &' #1' ><AA9 D1' & A09 -& ' <- ' & D1 ' D<' D<+1' <-A0' <-A' &00100'&-0' '-' D1' &?- ' =9 F <@10@ & ' '-' D1' < BD10' D1 1&=0D<@@ '-' -&' K'01' #1' 1LB?01A' &' =' D1' ' 1 8' 8+'B1' <-A' `" 1+&' 0'/P' A?1' &=' D1' ' 0<'A' <-A0' <-A' &0010 ' 0'&-0@ -& ' &=' <C ' & D1 ' `" 1+&' 0' 0P' & ' D'-.0' KD1 1 &' D1 ' & ' <- ' &=' D1 >' #1' h' #&?-A' &' &?' & A' D1' , '- .9 D&?.D' D<' D1' & A0' <-A' & D1 ' D<+1' & D1 ' <-A0' <-A' &00100'&-0' K' D'-' D1' 1D@>' &=' -.@<-A' G -& ' D<' D1' & A09 & ' & D1 0@ &=' KD<' 0 < 1' &=' &-A' '&-' D<' D1 ' #1@ KD'BD' D&@A' # ' 0B?<.1' & ' & D1 ' 1 +'B1' A?1' &' D1' , '- .@ <- ' <-A0' & ' &00100'&-0' K' D'-' D1' 0<'A' 1<@>9 #1' '-' -&' K'01' 1LB?01A' &' A&' D1' ' 1 +'B10' <-A' ` =1+&' 0' /P' A?1' &=' D1' ' 0<'A' <-A0' & ' &00100'&-0' G -& ' D<' D1' & A09 , -'. D 0@ 0H?' 10@ -& ' & D1 ' 1 0&-0@ &=' KD<' 0 < 1' & ' &-A' '&-' D1 ' #1@ KD'BD' D&@A' <-A' @ <+1' &=' D1' E <- '& ' &-=' >< '&-' &=' &? ' & A' D1' , '- .@ <-A0@ &00100'&-0@ ! 110@ - >? '10@ 1-0'&-0@ & '& D1 ' 1< @ ' &=' 0@ #1' -& ' 1LB?01A' &' A&' D ' 1 +'B1' &' &? ' & A' D1' , '- .' '-' ?BD' <- -1 ' <0' D1 ' < 1' #&?-A1-9 D1B<-01' &=' D1' <-A0@ &0 10<&-0@ ! 110@ - -?' '10@ 1-0'&-0@ & ' &=' 0' <=& 10<'A

9 ' '0' & A<'-1A' <-A' 10 <#@'0D1A' D<' -&' <j #&? 1 ' `#1' 1 <'-1A' &' K& a'$\P9# 9 D1' F 11a9 -& ' D<' -&' <#&? 1 0@ < C1- 1 0@ <0&-0@ '@1 0@ @<'0 1 1 0@ " <?#1 0@ &+1 1 0' &=' &?010@ -& ' -&-1'& D1 ' <#&? 1 0@ 0D<@@ <a1' <- ' ' 1' =& ' D1' &@ 8AD 0@ -& '=& ' D1' +1-0' &=' ! 1<0 0@ KD1 1' D1 ' A&' -& ' @<#&? ' #?' '@@ ='1' &? ' &=' &&-9 #? ' &-@ ' =& ' D1' D<@=' " < 9 - 2&-' D1' <'-' D<' 0?BD' <#&? 1 9 < C1- 1 9 <0&-9 '@1 9 @<'0 1 1 9 " <?#1 9 &+1 1 ' &=' &?010@ & ' <- ' & D1 ' <#&? 1 ' D<' <a1 D' B&- < ' &' D'0' < ? 1@ 0D<@@ C< ' &' D1' , '- .' =& ' 1+1 ' '>1' D<' D1' 0C' A& D' D1' B&- < 9 LL' 0

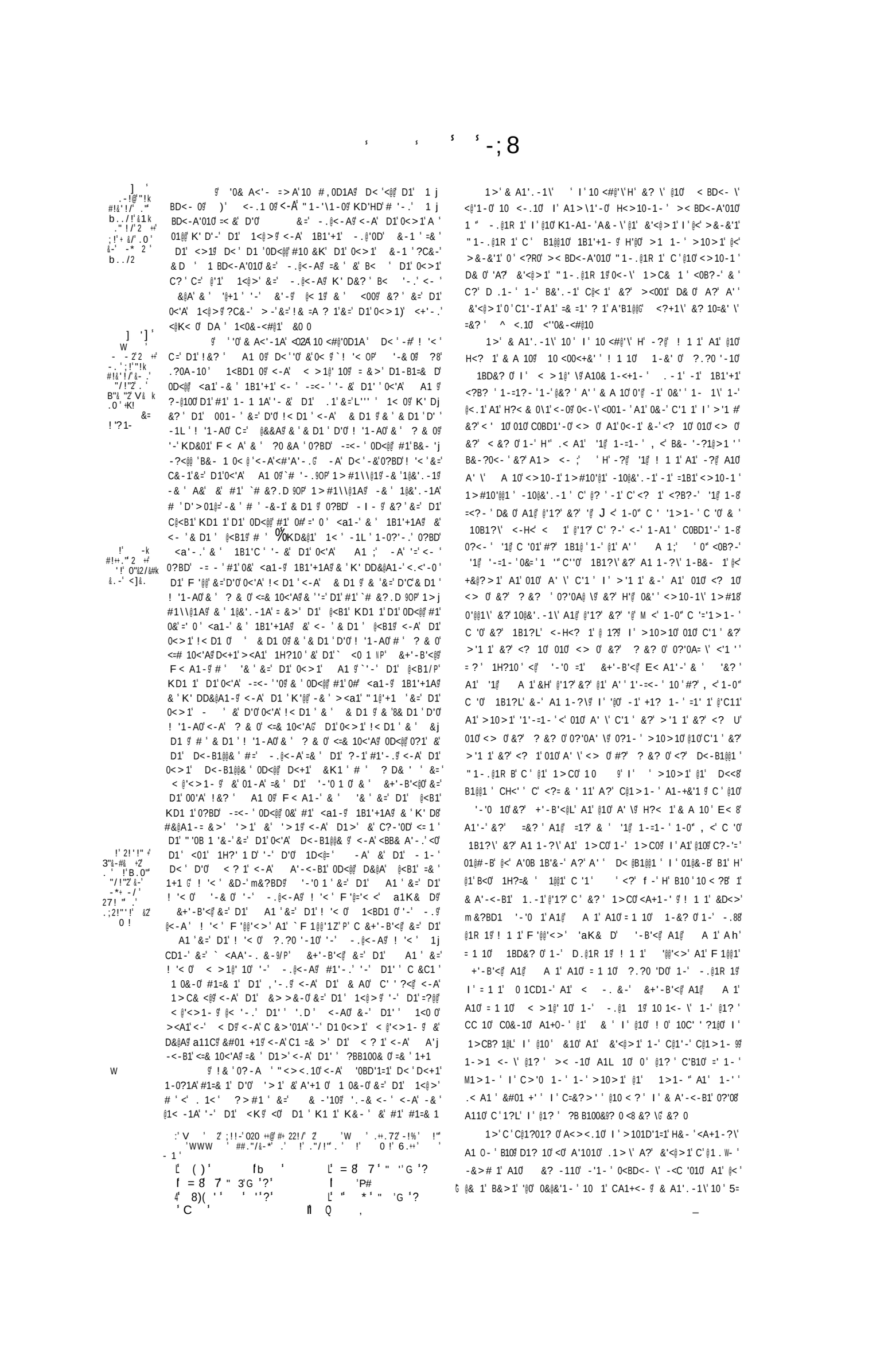
(%' "* $ ' %' ! 'V' $ ' 'O$ % a ' ' $' ' -- $ 'N$ *' < ' ' " ' 2 - * ' ' $' ' * &-1 ' '0' m ' 6'

-' ! ' !"@ 0"# ' ". "&! / ' '2!#0+ "' 3!"2. -' 2 +' ; !' ." / &-! /' &# "

W "& / 7 ' 5 # ' J' ' / "' ' # !'"@' 5H /K ' ' @' # ' ' .0# &-* !"' '&#!'&-' V "' #. - &" 1 ! /

3!"2. -' .+/k &-* ' ! M&-* . ' / . ' -@ !"' '&#!' &-' V "' 2 +' ; !' ; .0- /' . ' / .' !' 2 1!

W ; .0"!"'2 2 +' - . ' ; !' &"!/' ; @' !' V ! ! E' # -.'" &/' .'" .+&/ @2



' 3&# ' ' '# &H' 2 .' !' M&-*<2 "!2!- &-*' .' 4!-! &#!2=

-A' >& 1&+1 9 '-' <' < ? 1' ><A1' <= 1 ' '-' D1' '>1' &=' , '- .' 'BD< A9 ' K<0 & A<'-1A' <-A' 10 <#@'0D1A9 D<' '=' D1' , '- .' C 101- ' &' <- ' 1-1='B1' D<' '0 =?@@ &=' <- ' -B?>#1- 9 D<' D1' , '- ./0 101- 11' 0D<@@ -& ' #1' 1B8 B1'+1A' # ' D1' A'-< 9 '@@ D1' , '- .' D< D' 1B&+1 1A' D'0 101- >1- ' # ' &B100 &=' D1' <K' '-' D'0 &K -' &? G <-A' '=' <- ' 101- 11' &=' D1' , '- .' #1' & D1 K'01' 1B1'+1A9 <CA' D1' '-B?>#1- ' C? ' ?' K' D&? ' A?1' &B100 9 <0 <=& 1' '0 0<'A9 D1' 0<>1' -B?>#1- ' 0D<@@ B& > >1-B1' D'0 ?' ' K' D' -' < 1< ' <= 1 ' D1' -A?= '& ' &=' D1' ' (0) 101- 11' ; ? ' & A' D1' , '- .' B&-0'A1 '- .' D1' . 1< ' '0BD'1=' &=' D1' -B?>#1- ' 'C' D'0 1D<@=9 D< D' & A<'-1A' <-A' 0 <@ #@'0D1A9 # ' D1' 001- ' <=& 10<'A9 D<' '=' <- ' 0?BD' -j B?>#1- ' #1' C? ' ?' &=' D'0 1-1='B1' K' D&? ' A?1' &B100 '-' D1' <- -1' <=& 10<'A9 D<' D1' 0<'A' -B?>#1- ' 0&' C? ' &? ' K' D&? ' &B100 9 >< ' #1' < ' @< .1 9 <?A' 0?1' =& ' D'0 1>1A ' # ' D1' <'A' < ? 1 9 <-A' #1. '-' D'0 ?' ' '-' D'0 B<01' < ' KD< ' '>1' 0D<@@ C@1<01' D' >9 K' D' -' D1' 1< 9 & ' <= 1 9 < ' D'0 F '@@G <-A' D<' <0 K1@@ =& ' D1' '>1' C<0 9 <0 =& ' D1' '>1' & B&>1 9 -& K' D0 <-A' -.' D1' 1 >' 0&' @' >' 1A' # ' D1' 0<'A' < ? 1

`]]) ']] ' V 0 '$ 'B # !'' J

9 F D1 1<0 @< 1' '-' D1' '>1' &=' , '- .' '1D< A' D1' 1B&-A' ' ' K<0 & A<'-1A' # ' <' < ? 1 9 D<' D1' ?@j -<.1' &=' @& D0 D &?.D' D1' 1<@>' 0D&?@A' -& ' #1' 01 ' &' =& >9 &' D1' . 1<' " <><.1' &=' D1' , '- .' 1< @ ;' ' 0 & A<'C1A' <-A' <BB& A1A' '-' D1' 0<'A' < @' <>1- G D<' D1' 0<'A' ?@-<.1' >< ' #1' 01 ' &' =& >' ``# ' >C &+1>1- 9/P ' <BB& A' -.' & ' D1' " '0B 1 '&-' &=' D1' 1<0? 1 ' &=' -.j @<-A' =& ' D1' '>1' #1' -.9 <-A' &=' D1' < &-0' &=' D1' Lj BD1H?1 9 -& K' D0 <-A' -.' D1' 0<'A' < ? 1' ><A1' &' D1' B&- <

WW ' 3!- + @' .-' .2 +!"2' R< ! -/&-*' * &-2' *4' 'B ' - ' '*' 'BD '5

9 ' '0' & A<'-1A' <-A' 0 <#@'0D1A ' D<' D1' <j ? 1' &=' 'A@?<@@1 0' <-A' &0 @1 0 9 <-A' & D1 ' 1@@1 0' &=' '=' ?C@0 9 ><A1' D1' L'' ' ' 1< ' &=' D1' 0<'A' , '- .' 'BD< A9 #1' D&@A1-' <-A' a1C ' <-A' C? ' '-' A?1' L1B? '&-;' -A' '=' <- ' &0 @1 ' A&' &' D1' B&- < 9 <-A' D<' A?@ ' C &+1A9 D1' 0<>1' &0 @1 ' 0D<@@ = &'C' '>1' &' '>1' '-B? ' D1' 1-<@ ' &=' D1' 1#@1' <@?1' &=' D1' 1<A' ><A1'# ' D' >' '-' D'0 &?01' & ' 1@01KD1 19 B&- < ' &' D1' 0<'A' < ? 1G <-A' <@0&' D1' 0<>1' &0 @1 ' 0D<@@ '-B? ' D1' H?< 1#@1' <@?1' &=' D<' KD'BD' D1' D< D' <a1-' &+1 ' <-' <@=C1- ' &=' 1+1 ' ?0D1@ &=' < 0' <#&+1' D1' B&> >&-' 'B1' '-' D1' < a1 9 <-A' D<' <0 K1@@ <' D1' ?' ' &=' D1' , '- .' <0' &=' D1' <

WW -*+@2 1!-' 2 +' - . ' ;! #. -' & ' ;@' V !+2 1!-' &-' V +!2)

98@ ' '0' & A<'-1A' <-A' 0 <#@'0D1A ' D<' '-&' -.@'0Dj ><-' @'1.1' &' &? ' &+1 A. -' & A' D1' , '- .9 #1' B&-+@A9 ``&= P' <- ' F 1@0D><-' K' D' -' ! <-BD'01' & ' K' D&? 9 '-' <- ' &?- 9 ?-A 1A9 & ' &? ' K' D' -' D1' <-A0' &=' F <@109 &=' KD< 0&1+1 ' `` 0 < 19/P' #? ' # ' -.@'0D >1-9 <-A' &=' D1' -1L ' 1-?19 <-A' 1&C@1' &=' .&&A' !<>1' <-A' -& ' C &B? 1A G -& ' D< 9 D1' -.@'0D' ? .10010 9 KD'BD' D<+1' >< 1A' F 1@0DK&>1-9 D<+1' ! <-BD'010' K' D' D1' -.@'0D' ? .10010

WW * &-2 ' V 2 !"2 ' &-2 "!+2' C#' &-' V +!2

9 &' 10BD1K' >< -' "' '01<010' <-A' '0BD'1=0 ' KD'BD' D<+1' D<CC1-1A' #1=& 1' D'0' '>1' '-' D1' <-A' &=' F <@10 9 # ' >< -' F <0 1 0 9 D >1 0 9 '-0 1@0 9 <-A' & D1 ' <.<#&-A0 G ' '0' & A<'-1A' <-A' 0 <#@'0D1A9 D<' -&' F <0 1 9 D >1 9 '-0 1@9 -& ' <.<#&-A9 #1' '-' <- ' K'01' 0?0 <'-1A' '-' D1' <-A' &=' F <@10 9 &' >< a1' &>' >& D'10' & ' .< D1 '-.' ?C&-' D1' B&>>&-' 1&C@1' D1 1

WW * &-2 ' .-*'! * k &.-2' &-' V +!2

9 ' '0' & A<'-1A' <-A' 0 <#@'0D1A ' D<' '-&')' &-j . 1.< '&-0' #1' ><A1' -& ' 0?==1 1A' &' #1' ><A1' # ' D1' F 1@0D>1-' '-' <- ' @<B1' &=' F <@10 9 =& ' &' ><a1' &' <a1' <- ' &?-01@ -' ?-@100' ' ' #1' =& ' <-' 1+'A1- ' <-A

0' [V ' 2' 020 ++@ ;!!-' #+ 22!/' 2' !'']] @@9 .++.72' &-' !' 6.+' -!% ' !'' ' 020 ++@ -01;!''!/' WW ' 7 &# ' 0##!!/2 !'' W ' !'' !'' WWW ' '- 1 ' ' ,' 5 / ,'-./0 W & ' <CC &+1A9 '! '6' '# 0 D -.' '! ' ' 3 &>&-+<10' & ' +' ! '6 ' & ' C? C&0' '! '6

1 ' 1-&? 1' 0&'@ & A1' .-1' I ' 10 <#@'' 1-' 10 < ? ' =<' ' <C0' 1-' 1>C0' A?' & ' 'BD< A' H' 0'' @1' & ' C201- 1' <' <0B?-' #1-1='B1' H'' 0&=' C@1' -' A<0B?-' '-B?>#1- 9 H' @1' C01- 11' @1' & ' -1' 0&=' 1 B1?' C' @& A'-< '1' <-H9 @1' & ' 1' ' 1B& 1\' 0&-' C01- 1>1- ' C' C110' A1' @1 ' 1-' 0<' &? 1' A1>10-1G 1 ' 0'' < H?-1/C01- 11' A?' & ' 0&=' <? 1>1- ' 10B1 ' I ' @1' ' -B?>#1- ' &?0 1' 0<-\' A?1' C110' B&>1' A10?'0' 10 ' A' 9 B&- 1-B1' @1' A' ' '-B?>#1- ' 0<' 0? 1' A1' -\' ?-' <-' <C0' @<' '-A?BB' &-' A1' C01- 11' A?' & ' ;' =1' B7 @1' & ' B&-0'A1 <-' @1' ./-' >10BD'1=' A?' A' ' '-B?>#1- ' B1@@1' C '1 9 <A' # A1' .-1\' I ' 10 <#@'\' A1' @<001- ' < D A' 9 H' 0'' <?B?-' A1@ '-B?>#1- ' 0&=' &?0 11' A1' 0&-' #1-1='B1' 0<-\' CB1001' 1-' @<' >< 1' 0?'0A' 1 9 ' @1' A' ' '-B?>#1- ' '00'- ' &?0 11' 0<-\' CB1001' C?'001' 10 1' <' @< .1 9 I ' 0?' ' 1>1A'1' C' @1' A' ' 10 < ? ' 5B B& <1- 1 ' 0<' A11' 01? 1' 1-' B1' B<0' <' H?1@ 1>C0' H' @? ' C@1= <' A1'-\' =<-' &?' <C0' <' 0<' +&@1- 11G B B1' 0 #-' C ' 1>C0' C<001' B&>1' C ' 1>C0' <A 1-' ' -=1-' B&- 10 1<-' @1' A' ' R>11-0'' @' >= 1' C' @1' A' ' 10 < ?

1>' B&>1' -<A.<' 0' 1-' 1>C0' A?' & ' 'BD< A' 01B&-A9 & A1'. -1\ '10 &' ' C' 10 < ? ' H' @<?-<.1' A1<' A <C0' C> ' @1' &'<@><' -1' F &' ' > 0' <' =& >1 9 <' .W- ' A<><.1' A1' - 1' B7 @1' & '<--?1@>1- 9 & A1'. -1\' 10 ' 5B <B & A1\' 1-' A' ' C@1- 1- ' H' @1' A' ' <?C<.1' C <' 10 1' B&> 0' <' =& >1' &?' 1-' 1>C &K1>1- ' 0&@&-B' @<A+ 0' A1' 10& 1 ' " 1 - .@1R 1' C ' @19 1>C0' 10 1<-' I ' A10' < &-0' A1' @10BD18' H?1 G @1' A' ' 10 < ? ' =<' ' <' B&- 1' -'1'@ ' B&- 10 1<- 9

1>' & A1'. -1\' 10 ' B 10 <#@'\' H' @10 = ? ' A10' +' <'@@1 0' B D&0 '@1 0' B <? 10' +1-A&? 0' A10' +'C'@@1\' =<' ' =<-' 10\'0>1' A?' A' ' & ' 'BD< A' 0&=' 1-?h' B .< A1\' B > 0' 1-' A?1 9 1L1B?B'&C' ;' 0'' <0B?-' D&0 '@1 ' =<B1' <' B&- <' ' B B1' A?1>1- ' C+11' 1-B&? .1' >10>1' @&0 '@1 ' A1' 1>C0' 1-' 1>C0' @<' C <-1' A1' @<' 1#@1' +<@?1' A1@ C< -' =<' ' C' @? ' 1-9 0&-' D&0 1@G &?' <'@@&? 0' <' B&- <' ' A?' A=' 10 < ? G 1 ' <?L'' 1-B&>.1' >10>1' @&0 '=1 ' @<' H?< 1#@1' +<@?1' A1' B1&' H'@ <, <' C '0' &? 1' ?-' ><'@ A1' BD?-' ?01 ' A10' <+1 -0' &? 1' @<' B&1' C '0' 1-' >< BD11 9 1 ' B1&' 0'#-' <' 01? 1' A1' & ' B&>1' A1' C< '1

1>' & A1'. -1\' B 10 <#@'\' H' -?@ -.@1'0' @'1.1' <' -=1' T ' @1' & ' 0&=' B&-+'=' C' <?-B?-' E<@&'0 9 A1'-\' = <-BD'01' &?' A1D& 0' 1-' <?B?-' &?- 11' ?-A 1A' &?' & 1' A1= '\' @<' R 1' A1' E<@10 9 A1' H?'1@B&-H9 BD&01' 0'-&-' C' -.@&' 10' B A1@ C0BD1'-' +'0-11' B .1- \' A1' #&-1' =<>1' B '-1-' C1? 1\G -1' H' @10' ? .&'010' -.@&'010' H&-' 10C&?01\' =1>>10' E<@&'010' <'1-' = <-BD'010' &+10H9 @10' ? .1&'010' -.@&'010

1>' C' 10BD?' ' C@?01? 0' A'01<010' B >10BD'1=0' H&-' <A+1-?\' A1+W- ' B10' D1? 10' 1-' @<' 1' A1' E<@10' C' C@?01? 0' F 10 &? 0' >&? 0' '-'0 <@L' B <? 10' +<B<#&-A10 9 & j A1'. -1\' 10 ' B 10 <#@'\' H' -?@ F 10 &? ' >&? ' '-'0 <@@ -1' +<B<#&-A' 0&=' <?B?-1>1- ' 0?0 1-?\' 1-' @<' 1' A1' E<@10' C? ' =<' 1' , >& D<0' &?' B&' @@<.1' 0' @<' B&C' C&1C@1' ' 1&H10

1>' & A1'. -1\' 10 ' '10 <#@'\' H' -?@0' &>&<-+<10' &?' B&-. 1.<B'&-0' 0&'1-' =<' \' &?' 0&1==1 \' 10 1' =<' \' C' @10' E<@&'010' 1-' <?B?-1' C< '1' A1' E<@10' C' <?B?-0' B&-01@@L' &?' C C&010' =<' 1' &?' -A 1' 0'@ -1' 0&=' C' 1+'A1- 1

B<?01' ls ' -1B100<' 1' I ' C' @'B1-B1' A1' @10' D'1=0' & 0' I ' F'-'0 10' A1@9_'1' B1A10' C< '10' &?' '1@1' BD&01' 1' =1 <@ I ' 1-' C01-B1' A1' >10>10' @1 ' &= RO' I ' '-'0 10' 0' C1'-1' A1>C '0&-1>1-' ' I ' A1' =1' 1' = -' I ' <-B1&-' <' @<' +&@?>11' A?' &

1>' & A1'. -1\' 10 ' ' 10 <D@'\' H' A10& 1-<+ - ' -?@' D&>1' E<@&'0' 0&' ' < >11' -1' C& 1'< >? 1' A1=1-0'#@1' <0' +'@@10' >< BD110' 10.@'010' -1' B&-. 1.<B'&-0@ -1-' B1@@10' -1-' @10' D<? 10' BD1> -0@ 1-' <== <'1' A?' C<'L' &?' A10' @'. 10' --=1' ' @1' & ' 0' C1'-1' A1>C '0&-1>1-' ' I ' A1' =1' 1' = -' I ' <-B1& @' <' @<' +&@?- 11' A?' & ' 'ć =& C '0' B1?L' H" 0&- ' @&'<@L' @'. 10' <' >10>1' --=1' ?' @1' &

1>' & A1'. -1\' 10 ' I ' 10 <#@'\' H' -?@' D&>1' 1-. @&'0' -1' .<@&'0' A1' H?1@' 10 < ' &?' B&-A'B'&-' H'@' 0&' ' 1-+&'1' -<>10-1' C' B&@&? ' A1' >< BD<-A'01' &?' <? 1'+&'1' <?B?-' +' <'@' &?' < >? 1' <0' H?'1@B&-H10' C '10' A1' E<@10@' 0<-\' 10C<@1' B&-. '1' A1' --=1' ' @1' & ' ?' A1' 0&-' B&-01'@@' 0'@ D1' 0&' ' C ' @10 ?=-' B 10 & 1' A10' BD<0 1@L' 5B +'@@10' 1-8' .@&'010' 0 ' C1'-1' A1' =# =1' ? 1' A'B1@@10' +' <'@ 5B < >? 1' ' H1-' B='?-1' C< '1' A1' @<' < BD1' A1' E<@10' 5B +'@@10' >< BD110' 0&'1-' &-10 <#@10' 10@ \' C ' 1-H?1' MBD1 ' ' < 10 1 ' &? \' '1@L' +' <'@@10' 5B < >? 10@ 5B <'1-' >10>1 ' 1' &-10 <#@10' C ' @1?' <+<'@ @<' 0'0>1' C< '1' A10' '1@L' =& 0=1' ? 10' 1-0" C' 1?L' &+1\

1>' & A '. -1\' 10 ' 5B 10 <#@'\' H' -?' E<@&'0' <' ' BD<0 1@ =& R1051' -1' ><'0&-' A1=1-0'+1' A1' 0&-' CC 1' -1' A<? " < .< A1 @ <? 1>1-' H' -10 &' ' ?01\' 1-' 1>C0' @1' & ' AK< A' &-H?1 &? ' A1' E<@10@' 0 ' C &'1' A1' =& =1' ? 1' A'B1@@10' @10 <' A1+10H@ 5B <? 10' ?!' 1>C& 1=1' B&>1' C ' @1? ' B& C0' CC 10' <- 0&?@1>1-' 1L 1C \

1>' & A1'. -1\' 10 ' 5B 10 <#@'\' H' -?@' D&>1' E<@&'0' 0&' ' =1' ' ?0CB1' D<>#@1 -' D<-B1@@& ' 10& 1 ' '0B&-' @1-10BD<@@ &-10 <#@1' A?' D<0 1@@ 1B1'+&? ' 0BD1 &? ' & &-1 ' -1' BD1=' !& 10 1 ' -<? 1' ==' B1 ' H?'1@B&-H1@' -1' E< A1'-' A10' 1B& A10' -1' @'1? 1-<-' 1'-' -?@' A10' A' \' &==' B10' 1-' -?@@1' C '1' A1' E<@10@' -1' A1' B&-01'@' A<?B?-' ?' 1-. @&'0@' -& &#0 <- 1' <?B?-1' C< 1- 1' =1' 1' <' B&- <' 1' B?>' B@<?0?@<' -&-' &#0 <- 1' @'B1 ' F <@@'B?0' -< ?0@ =& 0C '0' @10' +10H10' 1-' E<@10@' 5B A1' B1?L' 5B A10' <? 10' H?1?L' @1' & ' -=1' = ' <A' &+1\' 010' #&-0' B @&'<@L' @'1. 10' '@ +&1' 10 1' <A+'01-' C' 0&-' B&-01'@

8 1>' C ' @1' C@?0' 0?==' B'1- 0' .< A1' A1' @<' R 1' A1' E<@10@' 5B <?' = -' H' D&>1' C? <' <+&' ' @<' <1'@@&? 1' B&-?00<-B1' A1' @10' B&-A'B'&-0' A?' C&1C@1' A'B1@@1@' & A1'. -1\' 10 ' ' 10 <#@'\' H' @10' .< -'0&-0' A10' D<0 1@L' 5B A10' +'@@10' >? 1\' '@@1&H10\0&'1- ' C +1?\ ' 5B 10 ?==1\' 0?==' B'1- >1- ' A10' +<'@@<- \' C0&-10' 1-. @&'010@' 10 <-. 10' <' @10' = 10' &?' @10' A' \' D<0 1@L' 5B +'@@10' 0&- ' <00' \'@ 5B -1> 1' A1' -?@' >'L ' D&>1' 9A10' A' \' CA10' 5B '10' 1-' E<@10' &?' @<' >< BD1' A'11@@1@' <-H@' @<' A#1' R 1' A1' E<@10' 0&' ' <? 1>1-' ?0 '=' 1\' 5B <CC1'01\' C ' 1>C0' <A+1-'=

1>' & A '. -1\' 10 ' 5B 10 <#@'\' H' -?@' D&>1' -. @&'0' >=<='1\' <' <?B?-' E<@&'0' A1@ <> 0 11' &?' <@@'<-B1' A1' K1-' <C' E@1-A&? A ' <' &' <' -=1' @1' & @&?' <' <? 1' =1>1' E<@#'01@' C?'0' @<' 1#1@@'&-' A?' A' ' K1-@' &?' 1-' 1>C0' <A+1-' ' 0&" =1 <' >< '1 ' <' <0B?-1' =1> >1' .<@&'01@' 0&' ' > 0' 1-' <?B?-' &=='B1' 1D' E<@10' &?' 1-' @<' < BD1' A'B1@@1

-1B100< ' <?01@3 <-A' # ' 'B1-B1' &=' D1' D'1=' ==' B1 0' <-A' >'0 1 0' &=' D1' `0<>1' 1'. -& 9 P' KD1 1' 0?BD' D'-. ' 0D<@@ #1' A&-1@ <-A' '-' D1' 101-B1' &=' D1' 0<>1' ==' B1 0' <-A' '-'0 1 0@ ?C&-' <'-' &=' >C '0&->1-@ <-A' &' ><a1' !'-1' <-A' <-0&>' <' D1' , '-./0' \F '@@ @ ' '0' & A<'-1A' <-A' 10 <#@'0D1A ' D<' = &>' D1-B1=& D' -&' ` <- P' #1' < >1A' -& ' #1<' A1=1-0'#@1' >&? ' &' ` 1 BD<-' &K-0' D? BD10' -& ' &-. 1j "1!/ .< '&-09/P')' '-' D1' 0<>1@ -& ' >' D1' '. DK< 0@ '-' == < ' &=' D1' 1<B1' & ' D1' , '-./0' '1.1' 1&C@1@ ?C&-' <'-' &=' >C '0&->1-@ <-A' &' ><a1' !'-1' <-A' <-0&>' <' D1' , '-./0' 3 F '@@ 1LB1C ' D&01' KD'BD' #1' @<K=?@ '1.1' 1&C@1' &' &? ' &+1 >. -' & A' D1' , '-.

WW W V!+2 1!-' 2 +# -. ' ;!'

@ ' '0' & A<'-1A' <-A' 0 <#@'0D1A@ D<' -&' -. j @'0D><-' -& ' F 1@0D><-' &=' KD< ' 0 < 1' & ' &-A' '&-' D<' D1' #1@ 01-A' & ' # '-. ' # ' &@&? ' &=' 1 BD<-A'01' & ' & D1 K< ć <- ' '= ?<@' & ' >&? ' &' <- ' < 0' &=' F <@10@ K' D&? ' D1' 0C1B'<@ 'B1-B1' &=' &? ' &+1 1'. -' & A' D1' , '-. ' & '&=' D'0' &?-B'@@ ?-@100' ' #1' =& ' 0 ?==' -. ' & ' 1-0 & '-. '&=' ` <0 @10' <-A' -. @'0D' &K-0@/P' ?C&-' <'-' &=' ! & =1' ? 1' &=' D1' 0<>1' ' ?<@0' <-A' >&? ć -A' D<' '-' 1+1 ' < '&=' D1' < BD10' &=' F <@10@ <-A' ` &K-0' &=' D1' < BD10@0/P' D1 1' #1' ` -. @'0D' &-0 <#@10/P' =& ' &' 1-H?' 1@01< BD@ <-A'< 10 '<@@ ?BD' ' I ?<@0' <-A' >&? @ <-A' D1' 0<>1' &-0 <#@10' =& ' D1' ' <+1@ 0D<@@ D<+1' D1' 'L==' < ' &=' 0?BD' ! & =1' ? 10' 0&' # ' D1>' =&?-A

WWW L' V!+2 1!-' 2 +# -. ' '!' 2 +!2 'C#

@ ' '0' & A<'-1A' <-A' 10 <#@'0D1A ' D<' -&' F 1@0Dj ><-' 0D<@@ D<+1' <0 @1@ ! & 100@ -& ' &?01' A1=1-0'+1' &=' D'0' &K-' -& ' &=' & D1 ' &' a11C@ & D1 K'01' D<-' K<0' ?01A' '-' D1' '>1' &=' , '-. ' AK< AĆ &-H?1 & '&=' F <@10@ ?C&-' <'-' &=' ! & =1' ? 1' &=' D1' 0<>1Ć `1LB1C 0P' '0D&C0' <-A' & D1 ' 1>C& <@ & A0' =& ' D1' ' &F-' &A'10' h)

WWW ' . V!+2 1 -' 2 +# ; ! '" &#!

@ ' '0' & A<'-1A ' D<' -&' F 1@0D><-' #1' ><A1' ?0 'B1@ D<>#1 @<'-@ D<-B1@@& @ 1<0? 1 @ D1 '==@ 1K< A@ &-0 <#@1' &=' <0 @1@ 1B1'+1 @ 0BD1 &? @ &@ &-1 @ -& ' D'1=' ! & 10 1 ' -&0' & D1 ' ==' B1 @ D& ' , 11C1 ' &=' D1' 1B& A0@ -& ' '1? 1-<-' ' '-' <-' &=' D1' 0<'A' ==' B10' '-' -&' < ' &=' F <@10@ -& ' &=' D1' &?-B'@ &=' <-' -. @'0D' & A@ -& K' D0 <-A'-. ' <-' < 1-' ><A1' &' D1' B&-j < 'K' D' D'0' @<?01@ W' -&-' &#0 <- 1' H?&A' 0' ' F <@@'B?0' -< ?0@J' 1LB1C ' '0D&C0' '-' F <@10Ć <-A' &=' D&01' <-A' & D1 ' KD&>' D1' , '-. ' A? ' &+1 1'. -' & A' D< D' =&?-A' D'0' . &&A' <-A' @<K=?@ '1.1' 1&C@1' 1' K'@@ &' #1' <A+'01A' # ' D'0' &?-B'@

WWW 2+!2 -/' 7 +!/' . V-2 &-' V +!2 2 +# ; ! E! ' ;@ -*+&2 1!-

@ ! & ' D1' >& 1' 0?=='B'1- ' ?0 &A ' &=' D1' <-A' &=' F <@10@ <-A' &' D1' - 1- ' D<' <' <-' >< ' D<+13' D1' #1 1' , -&K@1A. 1' &=' D1' &-A' '&-' &=' D1' 1&C@1' D1 1@ ' '0' & A<'-1A' <-A' 0 <#@'0D1A@3 D<' D1' E< '0&-0' &=' D1' <0 @10' <-A' K<@@1A' &K'' ' D1 1@ #1' C? +1 1A' <-A' 0 & 1A' 0?=='B'1- @ ' &=' +<@'<-' -. @'0D' 1 a>0@ <-. 1 0' A' D1' <. -& '10' KD1 1' D1' 0 ?A' <0 @10' \[)' #1' 0<@' <-A' -& ' &=' <-' <-' >'L ' &=' D1' 0<'A' < '10' & ' 1'. -& '10' '-' F <@10@ & ' D1' < BD10' &=' D1' 0<>1@ '@@ D1' 0<'A' <-A' &=' F <@10' #1' & D1 K'01' ?0 '='1A' <-A' <CC1<01A' =& ' D1' '>1' &' B&>1

DDD(@ -*+&2 1!-' 1 ""&!/" .' V!+2 ' V .L' 1!-'2 +# -. ' ;! '" &#!' &-' V +!2

5 ' ' ' '0' & A<'-1A' <-A' 0 <#@'0D1A ' D<' -&' -. @'0D><-' >< '1A' &' <- ' F 1@0DK&><-' &=' D1' >' ' & ' @@'<-B1' H=' F 1-' <C' E@1'-A&? @ <' & ' &' &? ' &08 +1 1'. -@8& A' 3)' & ' &' <- ' & D1 ' F 1@0DK&><-' <= 1 ' D1' 1#1@@'&-' &=' D1' 0<'A' EK1-@ &=' `1-' D<' J P' '>1' &' B&>1@ >< '1 D' D' >01@=' &' <- ' F 1@0DK&><-@ #1' C? ' ''" <- ' ==' B1' '-' F <@10@ & ' '-' D1' < BD10' &=' D1' 0<>1

U 1 $ ' ' & ' ')V +2 1 -' ! 'V+ L)8 =5 ' 'B ' '!5 5) !) ' *(6)# ! 'V' ( ) ' 'G ' ' 0 !5 ' ' =) ') (5# ! '5 P =) ' '*5 7 '! 'V ' !) E ' *((5 " G ' ' ll 5 ' " G ') 8 D* +' * ' ' %!$ 2 ' 5' 38(' ! '?' ' 5 ' ()

W)' !' 0 !2' .";&//&-*' !% ." &-*' . b .+/' -/' &+'!'"' #.- &"1!/=

' F D1 1<0' '-' A'+1 0 A'-<-B10' <-A' < ? 10' ><A1'#1=& 1' D'0' '>1$' ' K<0' & A<'-1A'<-A' 10 <#='0#1A' D< ' -C' <-$ &='KD<' 0 < 1' & ' &-A' '&-' D1'#1$ 0D<@@ # '-.')'-& &-1 $ -& ' A&' &'#1'# &?.D ' 0)' E&@A'-& ' '@+1 ''-' &-1 $ '< 1$ -& ' 0)' 1001@$ &? '&=' D1' 1<@>' &=' -.@<-A$ K' D&? ' 0C1B'<@ 'B1-B1' &=' &? ' &+1 <.-' & A' D1', '-.G -A' #1B<?01' D1' 0<>1' < ? 10' <-A' <' A'-<-B10' #1' +1 ' C &=' <#@1' <-A' <+<'@<#@1' =& ' D'>$ <-A' =& '< ' D'0' 1<@>$ '=' D1 ' K& 1' C?' '-' A?1' L1B? '&-G D1' 0<>1' &? ' &+1 1'.-' & A' D1', '-.$ # ' D1' A+'B1' <-A' 001-' &=' D1' & A0' <=& 10<'A$ <-A' <' D1' 10C1B'<@ < 1 ' &=' D1' 0<'A' &>>&-0$ D< D' & A<'-1A' <-A' 10 <j #@'0D1A$ D< ' D1' 0<'A' A'-<AB10' <-A' < ? 10' #1' D&@A1-'<-A' a1C $ <-A' C? ''-'A?1' L1B? '&-' -A''='<-' 1 0A-' &=' KD<' 0 < 1' & ' &-A' '&-' D< ' D1' #1$ # '-.' & '01-A$ & ' A&' &' #1' # &?.D ' & '01- ' E&@A' & ' '@+1 ''-' &-1 $ 1001@$ & ' '< 1$ &? ' &=' D1' 0<'A' 1<@>$ K' D&? ' D1', '-./0' 10C1B'<@ 'B1-B1$ 1LB1C '=& ' D'0' 1<0&-<#@1' L8' C1-B10' <0' <=& 10<'A$ `P -A\P' D1' D< ' B<-'10C ' D1' 0<>1$?C&-' <' =?@@ <-A' @<K=?@ 1 '=' B< '&-' D1 1&=' &' #1' ><A1' &' A'1' 0 &-0' &=' D1' LBD1 ?1 ' &=' &? ' &+1 1@ ' & A' D1', '-.$ 0D<@@ D<+1' D1' D' A' < ' &=' 0?BD' D'-.' 0& 10C'1A' =& ' D' ' <+<'@G &'1-A? 1' &' D1' -1L ' < @'<>1-

5 ' ' '0' & A<'-1A' <-A' 10 <#@'0D1A' D< ' D1' 1< BD1 0' '-' 1+1 ' & ' &=' -.@<-A' 0D<@@ #1' BD< .1A' <-A' 0K& - ' D< ' D1 ' 0D<@@ -& ' @1 ' &' =1 >' D1' ' ='B10' &='01< BD'-.$ -& ' &BB?C ' D1' 0<>1' # ' <' " 1C? G <-A' D< ' = &>' D1-B1=& D' D1 ' <a1' &=' -&' <0 1 0' &=' D'C0' =& ' D1' ' ='B1' &=' 01< BD'-.$ <- ' '@+1 ' & ' &-1 ' =& ' D1' ' F 1@B&>1' <-A' < 1K1@$ -& ' <- ' & @'1 ' D'-.' =& ' D1' 0<>1$ <0' ' ' D< D' #11-' <a1-' <-A' 1B1'+1A' #1=& 1' D'0' D-1$ & D1 K'01' D<-' 0D<@@ #1' & A<'-1A' &' D1>' =& ' D1' ' ='B1'# '&? ' & A' D1', '-.;' -A' D<' -&' 1< BD1 ' #1' &0 ' &' <- ' 1 BD<- '& ' < '-1 $ -A' '-' B<01' D<' <- ' 1< BD1 ' A&' B&- < ' &' D'0' < ? 1$ <-A' D< ' A?@ ' C &+1A$ D1' 0<>1' 1< BD1 ' 0D<@@ #1' C? '&? ' &=' D'0' ='B1' =& ' 1+1 $ <-A' ><a1' !'-1'<-A' <-0&>' <' D1', '-./0' F '@@

$ F D1 1' <0' K1@@ '-' @1<' `P 1< P' <0' '-' @1<' C1 j 0&-<@@ <= 1 ' ?A.>1-' .'+1-' '-' D1' &? 0' &=' &? ' & A' D1', '-.$ D1' < '10' D1' ><A1' &' B&>1' ?C&-' . '1+&?0' <'-$ 0&>1 '>1' #1=& 1' D1', '-.' D'>01@=$ 0&>1 '>1' #1j =& 1' D1', '-./0' &?-B'@$ <-A'0&>1 '>10' &' D1' < @'<>1-$ &' <-0K1 ' = D1 1'\' P' &=' -1K$ &' D1' . 1< ' '>C&+1 '0Dj '-.' &=' D1' < '10' <=& 10<'A$ <-A' '-' D1' ?#+1 0'&-' &=' D1' B&>>&-' <K' &=' D1' <-A$ ' '0' & A<'-1A' <-A' 0 <$ #@'0D1A ' D< ' <= 1 ' ?A.>1-' .'+1-' '-' D1' &? 0' &=' &? ' & A' D1', '-.$ D1' < '10' <-A' D1' ' 1' 0' 0D<@@ #1' D1 1&=' '-' 1<B1$?-' @' D1' ?A.>1-' #1' ?-A&-1'# ' j <'-' &' # ' & $ '=' D1 1' #1' & $ <0' D< D' #11-' ?01A' # ' D1' = <K0'/' P' '-' D1' '>10' &=' D1', '-./0' &.1-' & 0

$ F D1 1<0' '-' D1' < ? 1' ><A1' D1' D' 11- D' 1< ' &=', '-.' 'BD< A' D1' 1B&-A$ <>&-.0' & D1 ' D'-.0' ' K<0' & A<'-1A ' D< ' -&' D&1><a1 ' -& ' & AK<'-1 $ 0D&?@A' ?01' D1' 0 1 ' &=' <--1 $ <-A' D< ' D1' KD'BD' A'A' B&- < $ 0D&?@A' =& =1' ' <@@ D1' @'1< D1 ' 0&' <--1A$ <-A' <@@ D1' && 0' 0&' K &?.D $ <-A' >& 1&+1 ' &' #1' <-j 0&>1A' < ' D1', '-./0' F '@@;' -A' #1B<?01' D< ' &? ' 0)' &j +1 1'.-' & A' D1' ,'-.' D< D' C1 B1'+1A$ D< ' D1 1' '0' . 1< ' "<><.1' <-A' "1B1' ' A'+1 0@ ' # ' &@&? ' &=' D1' 0<'A' < ? 1$ <0' # ' D1' 1 ' '&-' &=' D1' &>>&-0' A1@'j +1 1A' &' D'>' '-' D1' 0<>1' < @'<>1-' ' ' >< ' <CC1< G D1' 0<>1' &? ' &+1 1'.-' & A' D1', '-.$ # ' D1' A+'B1' <-A' 001-' &=' D1' 0<'A' & A0$ <-A' <' D1' < 1 ' &=' D1' 0<>1' &>>&-0$ K'@@ <-A' D< D' & A<'-1A ' D<

)' $ ' % Q)' $ ' ' `&-' < 1&' &2' V ."/ ' $ *' ' D1 1&= /' <K1' +'! ''<' 0 %)' !!' . !2';! ."!' !"2' W 'W W 'W W ' ' ,' ' -' !' .&/! '3"&- !/' . @' -/'&-' +'! 'V+' !' !"'-.7' -0 1;!"!/'WW ' .+. 7 2'-!%' !"' ' -.7'-0 1;!"!/'WWW

1'<' B&>1' 1-' 'A'1010' & A'-<-B10' I' 10 < ? \' A1+<-' B10' D1? 10' =<' \'8& AA. '1\'0&' ' I' 10 <#@'\' ' -?@ D&>1$ A1' H?1@1' 10 < ' &?' B& 'A'B'&-' H'@ 0&' $ <>10-1' -1'-+&'1' -1' =<B1' <>10-1 ' -1-+&'1 ' & ' -< .1-' 1D' >&-&'1' -1-' +1001@ -1-' C@< 1' D& 0' A?' @&'<@>1' " 1-.@1R 1$ 0<-\' 1 0 1' B&-.'1' I' @'B1-B1' --=1' A' ' _' @1' & G ' C& B1' H' >10>10' @10' & A'-<-B10' I' 10 < ? \' 0&-' >&@ ' C=' <#@10' I' +<'@@<#@10' C' @?' ' I' C' &?' 0&- &'<@-'1' 0@@0' =1?001-' > 0' 1-' A?1' 1 B1B?B'&-G 10>1' -=1' ! ' @1' & ' A1' @<A '0' I' <001-' A10 = 0' 0?'0A' \' I' <@ 10C<@1' C '1 ' A10' A' \' B&10' <A' & 8' A1@.-1\' I' 10 <# \$ H' @10' A'=\' & A'-<-B10' I' 10 < ? \' 0&'1-' 1- \' I' .< A1\' I' > 0' 1-' A?1' 1L1B?A&-' ' 0" <0B?-1'C0&-1$ A1' H?1@ 10 < '&?'B&-A'B'&-' H'@ 0&' $ <>10-1' &?' 1-+&'1' &?' =1B1' <>10-1 '&?'1- &'1 ' & '&?$ < .1-' 1-' >&-&'1'$+1001@ &?' 1-' C@< 1' D& 0' A?' A' ' &'<@'-1$ 0<-\' 10C<@1' B&-.'1' A?' & $ 0'-&-' C '010' 1LC1-010' <'0&-<#@10' B&>1' A100?'0' 10 ' A' $ <' ' B1@? ' H" @1' C? <' 1 C'1 $ 0? ' '10' C@1'-1' I' @&'<@1' R '='B<B'&D' 1-' <==<' 1' <0' < &-0' A1' @108' BD1H1" -=1' ' @1' & $ @<' '1 B1' C< '1' A1' '1@19BD&01' 1-A' 10C'11' C' 0&-' <'@G <A? 1 ' <-H<' CBD1'-' C@1>1-

1>' & A1'.-1\' 10 ' I' 10 <#@'\' H' @10' 1 BD1&? 0' 1-' BD?-' C& ' "1-.@1R 1' 0&'1-' BD< .'1\' I' ? 1\' H'@0' -1' @1001-' '<' =1 >1' @1? ' &==' B1' A1' 1 BD1 '1$ -1' @10' CBB?C'1-' C' A1C? 11G 1' H'@0' -1' .-1-' A10& 1-<+<-' A1' -?@@10' 10 10' A10' -'1=1$ C/' @1? ' &==' B1' A1' 1 BD1 '1' =A 1$ -?@ <.1-' -1' >&-&'1' C' @1? ' #-+1-?\' I' #-<@110@ -1' -?@ <? 1' BD&01' C/' B1@@ B&>1' '@ <A' 10 1' C @0' I' @1+1\' A1j +<-' B10' D1? 10$ <? 1>1-' H' -1' M <' & A1'.-1\' <' 1?L' C' @&? ' &==' B1' C' -=1' K ' @1' & ' ;' ' H' -?@ 1 BD1&? ' 0&' ' D&0 ' <' -?@ < BD<-' -1' < -1 ' ' 1-' B<0' H<0B?-' 1 BD1&? ' =<B1' @1' B&- <' 1' A1' B10 ' 0 < ? ' I' B1' A?1 ' >1-' C+11'/0&' ' >10>1' @1' 1 BD1&? ' &?0 1' A1' 0&-' &='B1$ C/' &? \' & 0' I' =<B1' = -' I' <-B1&-' <' @<' +&@?-11' A?' & 1>' B&>1' 0'#-' 1-' C@11' &'<@ B&>1' C0&-1@ ?!' ?..18' <1-' 1-A?\' 1-' @10' &? 10' -=1' = ' @1' & $ @10' C '10' 0&-' =1' \' +1-' ' 0? ' . '1=1' C1'-1' <' @<' =&' #' A1+<-' @1' & ' >10>10' <'@<' =&' D' A1+<-' @1' B&-01'@ A?' & ' I' <' @<' =&' #' 1-' C@1>1-' A1' 1-' 10C&-A 1 A1' -&+1@@ <'.W- ' <-'1-8' '01>1-$ A10' C< '10' 0?'0A' \' I' 1-' 0?#C0'&-' A1' @<' B&H' @&'1' A1' @<' R 1$ & A1'.-1\' 10' I' 10 <#D\' [?!' ?..1>1-' 1-A?' 1-' @10' &? 10' -=1' ='/' @1' & $ @10' C< '10' I' @1? ' D1' 0' 1-' 0&'1-' 1-' C110@ <-H' @1' ?..1>1-' 0&' ' <-'1-@\' C' < 1'-1' &?' C' 1 &? ' 0" 1 &? ' ' <A' B&'-1' ' ' <A' 10 1' ?01\' C' @<' &'1' 1-' 1>C0' A10' C.1-' & 0' -=1' A' ' I/' @1' & 1>' B&>1' 1-' @10 < ? ' =<' ' <-' 10\'0>1' @1' 8&' 'BD< A' 01B&-A' 1- 1' <? 10' BD&010' & A1'.-1\' 10 &' ' H' -?@ ?&? ' -1' & A1K<-1 ' A1?0 ' ?01 ' @1>'0 '1 ' A1' <--1 $ 1 ' H' B1@?" H" ='0 ' <' B& -=' 1$ =& 0=1 &' ' &? \' @10' H?' 0' 00'-' <--1\' I' &? 10' @10' #& 10' '00'-' &+01\' I' &? 1' B1' @1'-' <' @<' +&@1-11' A?' & G ' C& B1' H' -=1' A' ' ?' @1' & ' <A' 1-1-A?\' H' ./-' A<>< .1'9 I' A10B1' ' '<A' C' B&@&? ' A?' A' ' 10 < ? ' A' 01-'1-' $ B&>1' C' @<' C1 'B'&-$ A10' B&10' <' @? ' #<'@@1\' 1-' A' ' C@1>1-' 'C <@' <CC< &' $ >10>1' -=1' ='/' @1' & ' A1' @<001-' I' <A+ 0' A10' A' \' _35 I' <@ C '1 ' A1' >10>10' @10' B 10' +&1 ' I' <A' & A1'.-1\' H

K L

@10 ?&K0 I ' & A1K<-1 0 C?'001- ' <--1 ' H?' 0 B&>1 '@0 &- ' ?01\ 1-' 1>C0 C<001 -&-'&#0 <- ' <B?-' 10 < ? ' =1' ' <' &- 1 C' C'00'- ' H' @10 H?' 0 H" , &- ' <--1\ 1-' <CO0;0'#-' C' @10 <--1 0 B&>1' C' '10 ?&? 0 I ' & A1j K<-1 0 0?'0A' \ 0&'1- ' <00<'1\' I ' 0'. -1\' &+1' --' 0'. -R A1'=1 1' < B1' <00'. -11' C' @10 < ' &?' <'@@'=1' &-10 <#@10 &?' BD'1=' E< A1'-' A1' @<' '@@1' &?' '1@L' H?' 0 ,&- ' &, 1\ &?' C' <?B?-' @1? ' A1C? 1' < B1' =<' 1' C' 0&-' ,1>1- 0 A18 +<- ' H' '1@L' H?' 0 0&'1- ' +1-A?\' &?' > 0 < +1- ' &?' > 0 < <?B?-' & <'. -1 ' 0" <?B?-0 H?' 0 0&'1- ' +1-A?\' &?' > 0 < +1- ' &?' > 0 < <?B?-' & <'. -1' 1-8 B&- 1' @<' =& >1' 0?'0A11 H'@0 0&'1- ' =& 0=<' \' <?' & ' H' B10 ' 0 < ? ' 0&' ' > 0 1 - '<00<1' I ' A1. -1' @'1?' <-H< C0BD1'-' C< @1>1-

D1' D&1><a1 09<-A' & AK<'-1 0 >< ' <-' 1< D1 '<0 D1 ' .!1 E!")' D<+1' ?01A' '-' ' >1' C<0 -& K' D0 <-A'-.' <- ' < ? 1' 1< @ G ><A1' &' D1' B&- < '=' 0& D<' D1' 1< D1 ' KD'BD' 0D<@@ &['U !'-!%' 1' D1 1<= 1 ' <--1A 0 K1@@ # ' D1' <--1 0 <0 # ' D1' D&1><a1 0 <-A' & AK<'-1 0 <=& 10<'A 0 #1' <00< 1A' <-A' >< a1A' K' D' < a' &=' &-0 D1 1 &' &' #1' @' >' 1A' # ' D1' < & ' & ' <'@'==0 ` &-0 <#@1'& ' D'1=' F < A1-0 'P' &=' D1' &K-' KD1 1' 0?BD' 1< D1 ' 0D<@@ #1' K &?.D 0 & '# ' <- ' D1' ' "1C? ' &' A&' D1' 0<>1' # ' D'0 < D0 #1=& 1' D< '0?BD' 1< D1 ' #1' 0&@A' & ' 01 ' &' 0<@10 & ' 01 ' &' <- ' F & a><-0D'C -A' '=' <- ' 1< D1 ' #1' 0&@A' & ' 01 ' &' 0<@10 & ' 01 ' &' <- ' F & a><-0D'C' <.<'-0 ' D1' ! & >' <=& 10B?A0 D<' D1-' ' 0D<@@ #1' =& =1' ' &' D1'', ' - .; -A' D<' D'0' < ? 1' #1' C? ' '-' 00< 0 <-A' D&@A' @<B1' '@@ D1' -1L ' < @'<>1-

N' &-10 <#@10' & ' D'1=' F < A -' 'm '<

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-' "*&-!' 6. 0+&

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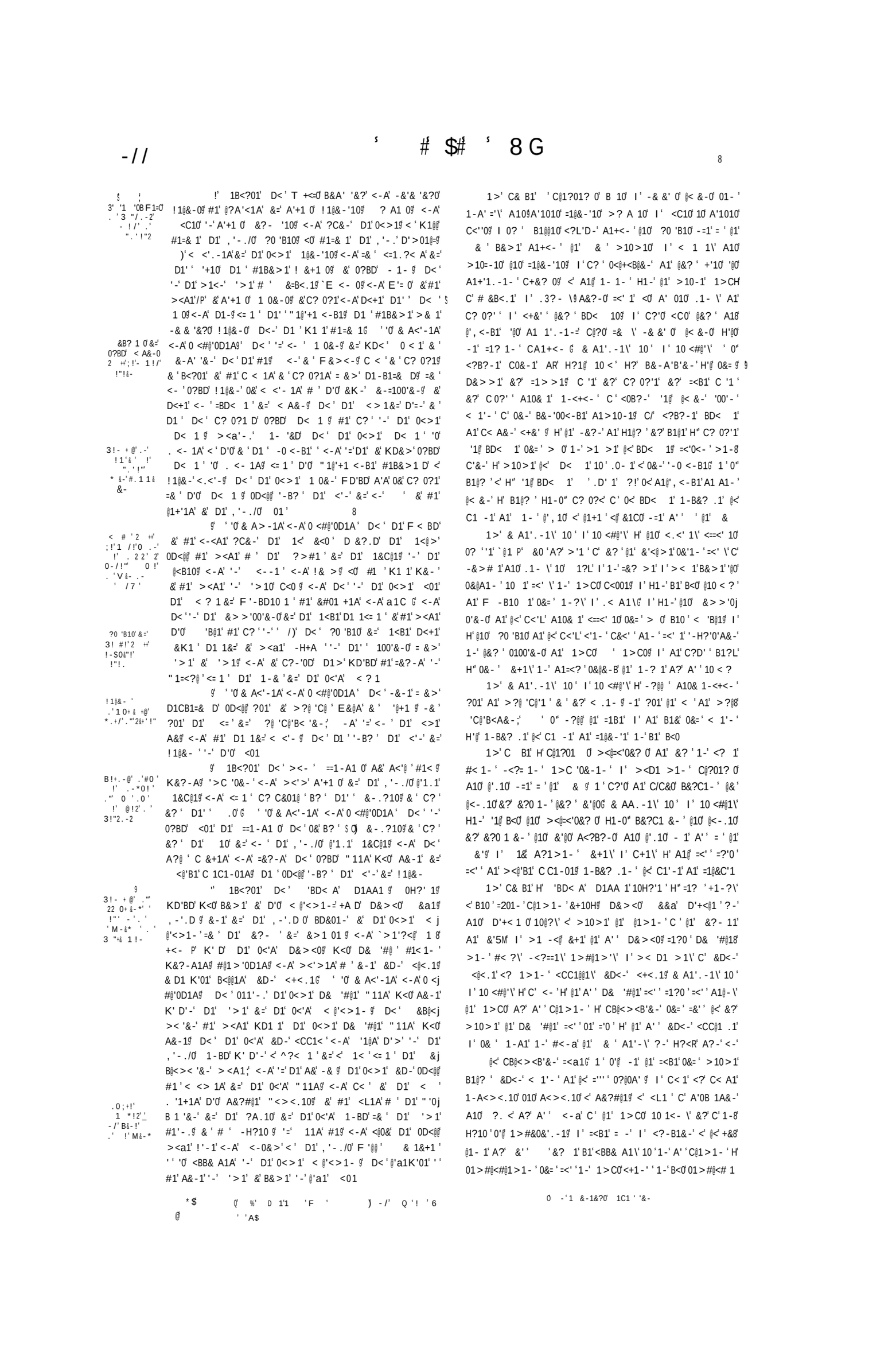
(' * 6' 4 ' D D ' E

ME' = ' ' 'G '6 #'HHH' '*%0 *4

) ' 1>1A'1 ' I ' 1B&1C' ' C@1?01? 0 >10BD'1=1' A<><.10 I ' . 1+<-Bh0 >&-0 =1a' <' -=A' &, <'. -1' @1' & ' 1-' !?G' C@1>1- ' 1-?\' <' F 10 >' @1-A1><'. -1' A1' 1'- ' '@@1 0 <-' A1' &-' 1. -1' H?' - 0 >10>1' -=1' @1' &" A1' @<A+'0 I ' <0 1- ' A10 0 10C'=' ?1@L' I ' 1>8 C& 1@L' I ' <' @<' 1H?10 ' A10 &10 A1' 0&-' &'<@>1' " 1-8 .@1 1' +1- ?\' <' A' ' C@1>1- 0 <A' & A1'. -1\' I ' 10 <#@'\' A'1010 10 < ? \' I ' & A'-<-B10 1-' @<' =&? >1' H1-01? 1 ' 1>1- ' H' -?@ A10 <-&' 0 10 &?' 1- \' A1 ' H?1?L' &-=' 1- ' 1 B ' &?' &-=' D&><0 1 B ' &- 1' A1' F 110 1@ & ' <? 10 <'@&? 0 H" =1? 1- ' <' #< <'@ A1' D &?10#? ' 1- &- 1' -=1' = ' @1' &" I ' @&? ' @@.1<-B1@ 10 A'1- '01'<\' &-' <?B?-' A1' 1?L' 10 &' '01 ' &' - ' &+10H@ <? 10' &?' 0&?@1>1- ' C' 1?L' >10>10@ A1@ =1&==18@ >1- ' A10 <? 10 <' <? " &1C0@ &?' C' @<' .D'A1' <==' <-B1' H' .1- \' H' 1?L' 1-=1#==1 A- ' <+&'1- ' <' 1?L' A1' =<' 1' I ' C=&? -' ' @&? '+&@1- 1@ I ' A&- ' '@0 1' =1? 1- ' 1-=1&==1m' A10 1' 1-D1 ' 1m' ''<'0 A1' C=&? -' ' \@<' +&@1- 1' A1' @&? ' =1&==&? G -1' -? 1' CB1@@=1' A'B1@@10 <-&' 0 10' &?' 1=' \@ B&>1#-' H' '1@L' =1&==1>1- \' 0&'1- ' =<' \' C' = -' #'" <? >-1- ' 0<-\' 'D&-0 1 ' =<' ' C+<- ' @<' B&-A'B'&-@ 0&'1- @ &?' 0&' ' <?B?-1>1- ' =& => \' <' -=1' A' ' ' @1' &' ' ' <@ <?B?-0' A&?-0' &?' .D' 10' 0&'1- ' =<' \' C' -=1' A' ' i' @1' &" A10' A' \' <-&' 0 10' &?' 1C \' &'" <?B?-' CB1@@1@ A'B1@@10' <' =1 >1' &?/ <? 1>1- @ H' A1@L' A&?-i' I ' . =' 1\' 0&'1- ' A1' &? ' +&'A10' I ' A1' -?@ +<@?1' <' &? \' &? 0;' ' H' -=1' A' ' 5A ' @1' &" <' ' @<' =& =1' ? 1' A10' 10' I ' 1- \' A10' A' \' &-=' 1- ' I ' &-=' D&><0@ A1' @10' <? 10' <' ? 10' 0?'0A' \@ A10' H?1?L' '@0' &?' <?B?-b' A1' 1?L' =1? 1- ' &?' =1?0 ' C' 1?L' >10>10' &?' 01 <@>1- @ 1-D' ' <#@10' &?' 1-D1 ' <#@1' C' A10B1- ' &?' C' A &' ' C? 8' BD<B1@ &?' A10' H?1?L'<? 10' =1? 1- '1-=1&==1\' &' - ' &+10T ' 1?L' &?' <? 10' &?@1>1- ' <' @1? ' &1C0' C' = -' &?' 1D' <? 1' >< 1' H?1@B&-H1

' &' 1>1A ' <-A' 1A 100' A'+1 0' '0BD'1=0@ "<><.10@ <-A' E '1+<-B10@ 0D1K1A' &' &?' & A' D1' , '-.' '-' D'0' < @'<>1- ' D&@A1-' <' F 10 >' -0 1 @ D1' & &K' <= 1 ' '@@< @ D1' ! '= D' 1< ' &=' D'0' 1' . -G D1' 0<>1' &?' & A' D1' , '-.@ # ' D1' A+'B1' <-A' >1- ' &=' D'0' & A0' C' ' ?<@ <-A' 1>C& <@@ <-A' <' D1' 1H?10 ' &=' D'0' & > >&-0' &=' D'0' 1<@>' &=' -.@<-A@ B&>1' &' D1' 0<>1' < @'<>1- @ D< D' & A<'-1A' <-A' 0 'A0@'0D1A' A'+1 0' < ? 10' <-A' A'-<-B10' '-' D1' ! & >' <0 =& &K1 D ! @ D< '-&-1' &=' D1' <-& 0@ <-A0@ & ' 1-18@ ' >1- 0@ KD1 1C=' ' ' 1- ' 1 B @ & ' ' ' D&><0' 1 B ' < @ &=' F & B10 1 @ & ' & D1 ' <' & 0@ KD'BD' K1 1' < ' D1' < @1' &=' D 1K0#? @ <.<'-0 ' &? ' &+1 1'. -' & A' 9J9*G - & ' D1' , '-.' <-A' D1' ' '1.1<-B1@ K1 1' 0>01A@ & ' <-' & =' =& =1' 1A@ D1>' K<0' 01'01A' &'- @ ' K' D' & D1 @ & ' &-@ ' # ' D1>j 01@+10' &=' D1' ! 1&==>1- ' &=' & D1 @ &' <-& D1 /0' 01@ & ' =& ' D1' . 1<' ?0 ' D<' 1&C@1' KD'BD' D1>' A'A' 1-=1&=' D<A' &' D1>' &' A&' <-A' C1 =& >' DA '/F '@@@ <-A' KD1 1&=' D1 ' K1 1' D& ' 1-=1&==1A' &' #1' '-D1 ' @ #?' &' C1 =& >' D1\F '@@ &=' D1' ' ! 1&==&? 0 `' - P' <- ' < B1@ &=' D1' 0<>1' <-& 0@ <-A0@ & ' 1-1>1- 0@ `D&K' K1@@U ' D<' 0 BD' ! 1&==>1- 0 #1' ><A1' # ' ! '-1' & ' & D1 K'01@ K' D&?' 0D1K' -.' <' " 11A' C &+'-.' D1' &-A' '&-@ 0D<@@ #1' '-' <- ' VK'01=& =1' ' &' &?' ' /)' &+1 1'. -' & A' D1', '-.' -A' '= <- ' E'= 0' & ' E <- 0' #1' ><A1' # ' &?' 0<'A' &+1 1'. -' & A' D1' , '-.@ &=" D1' 0<'A' <-& 0@ <-A0@ & ' 1''18@ >1 ' 0@ & ' <- ' < B1@ &=' D1' 0<>1@ S 0@ & ' & D1 K'01@ D<' 0?BD' E'= 0' & ' E <- 0' #1' KD&@@ ' +&'A' =& ' 1+1 ' <-A' &=' -&' <@?1;' -A' D<' &?' &+1 1'. -' & A' D1' , '-.' D<+1' D1' ! A =A ? 1' H=' D1' <-A0' <-A' 1-1>1- 0' &=' D1' 0<'A' ' ' 1- ' <-A' ' ' D&><0@ <-A' &=' D1' & D1 ' <'8 ' & 0' <=& 10<'A@ KD'BD' D1 ' & ' <- ' &=' D1>' K1 1' /)' K<0' # ' D1>01@+10' & ' +1 <@@ ' '-D1 ' <#@1' # ' " 10B1- ' ' # ' '. D =?@ ? BD<01@ & ' KD1 1&=' & D1 ' K1 1' 1-=1&==1A' &'- @ ' K' D' D1>@ & ' & D1 ' &-@ @ & D1' ' 01' # ' ! '-1' & ' <- ' & D1 ' <--1 @ #< 0&1+1 ' 'K1 1

$ " V 0<'A' " 'G
0 &' =1 >1' " G ('6



.2 2'2 +ǂ ; !' .&- !/' .' !"# - 2' +&!-2

- A' <@0&' ℊ'0' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' '-' 1+1 ' ' ℊ &K-ℊ <-A' & ' &=' D1' 1<' '-' -.@<-Aℊ KD1 1' D1' 0<'A' 1 BD<- 0' @'1-0' & ' <-.1 0' D1' & ' 0D<@@/ #1' 1C<' '-.ℊ0?==‘B'1-' &0 0' 0D<@@ #1' <00'.-1A' &' D1' 0<>1' 1 BD<- 0ℊ # ' D1' < & ' D1 '==0' & ' <'@'==0' &=' D1' 0<'A' ' '10' &K-0' <-A' & 0ℊ &=' D1' 1<Gʻ <-A' D<' D1' 0<'A' 1 BD<- 0' @'1-0' <-A' <-d61 0' 0D<@ℊ AK1@@ℊ '-' -&' & D1 ' @<B1ℊ #?' K' D' D1' ' 0<'A' &0 0' M 8 &' #1' 9 <00'.-1A6ʻ <-A' D<' D1' 0<>1' &0 0' 0&' &' #1' <00'.-1Aℊ 0D<@ℊ <a1'=& ' D1' ' <+1ℊ '-' D1' <--1 ' <0' K<0' <BB?0j &>1A' '-' &@A' ' > 1

W 02 &#!Z . 'N 3! #!' 2 ǂ & - "%2.-' &:' !'#.11.-' b .ǂ .-+@

ℊ 1B<?01' D<' A'+1 0' &-0 <#@10' &=' <0 @10' K' D>' D1' 1<@>' &=' -.@<-Aℊ #1' <00'.-1A' &' #1' ?0 'B10' &=' 1<B1'# ' &>>'00'&-' &=' &U ' & A' D1', '-.ℊ <-A' # ' &@&? ' &=' D1' 0<'A' &>>'00'&-0' D1 ' <a1' 1&C@1ℊ &' KD&>' D1 ' #1<' 1+'@ F '@@ℊ <-A' '>C '0&-' D1>' K' D'-' D1' 0<'A' <0 @10ℊ '@@ℊ D1 ' D<+1' ><A1' !'-1'<-A' <-0&>' K' D' D1' 0<'A' &-0 <#@10' =& ' D1' ' C1@'+1 <-B1ʻ ' '0' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' -&-1' D1' '>C '0&-1A' # ' <- ' ?0 'B1' &=' D1' C1<B1ℊ #?' &-@ ' '-' D1' &>>&-' E<&@'ʂ 0<+'-.' &' & A0' <-A' & D1 ' KD'BD' D<+1' E<&@0' D1' ' ! <-BD'01' '-' D'0' <01

W "1!"Z . ' Ł !' -/Z . ' +&!-Z 2 ǂ @' !&ǂ' ' & !Z' .' !' 3 "2.-2

ℊ ' '0' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' D1' ! 1 8' >& 0ℊ <-A' <@@' <--1 ' &=' BB?C'1 0' &=' D1' <-& 0ℊ <-A0ℊ 1-1>1- 0ℊ <-A' & D1 ' &00100'&-0' &=' @'1-0ℊ 0D<@@ C< ' <-A' #1' #&?-A' &' C< ℊ <@@' <--1 ' &="'0>10' D1 1&=' A?1' &' < 0&-0' <-A' 'B< 0' &=' &@ ' D? BDℊ '-' KD&01' < '0D10' D1' 0<>1' <-& 0ℊ <-A0ℊ 1-1>1- 0ℊ <-A' &00100'&-0' #1' 0&' <001001A' <-A' A?1ℊ <0' D1' <K' &=' &@ ' D? BD' 1H?' 1 Dℊ -& K' D0 <-A'-.' D<' D1' 0<'A' <-& 0ℊ <-A0ℊ 1-1>1- 0ℊ & ' & D1 ' &00100'&-0' #1' 01'\1A' '- &' D1', '-./0' <-A0ℊ Q& Pʻ -& K' D0 <-A'-.' <-' &D'#' '&-' ><A1' & ' &' #1' ><A1' &' ='1@B&- <

W %!#O &.-' ++.7!/'.-' ' 0 !' !"k # -'.-#!' 2 !7!/'&-' .0"

ℊ ' '0' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' KD1-' <- ' < ? 1' 1 BD<- ' '0' B1 '='1A' '- &' ='1' D<-B1 ℊ <-A' D1 1?C&-' < F ' ' <K< A1A' &' D1' D1 '==ℊ <-A' 1 ? -1A' '- &' '1' &>>&-' @<B1ℊ <-A' D1' < ? 1' D1 1' &-B1' 0D1K1Aℊ D<' `D&K0&1+1 '/P' D1' &B100' <= 1 ' D1' 0<>1' 0D1K'-.' #1' A'0B&- '-?1Aℊ D<' < ' KD<' '>1' D1' < ' 0?1 D' &' D<+1' D1' &B100' (8B&- '-?1Aℊ <-A' &' D<+1' L1B? '&-' &=' D1' < ? 1' 1 BD<- ' <=& 10<'Aℊ D<' D1' ?0 'B10' &=' D1' 1-BDℊ KD1 1' D1' < ? 1' K<0' &-B1' 0D1K1Aℊ >< ' ?C&-' D1' 0<>1' 1B& A' ><a1' <-A' <K< A' =?@@' L1B? '&-ℊ&=' D1' < ? 1' 1 BD<- ' <=& 10<'Aℊ K' Dj &? ' D<+'-.' D1' '.D ' & ' 0D1K'-.' D1 1&=' <-& D1 ' '>1' <= 1 G <-A' D<' D=1' < ? 1' D&@A' @<B1' &=' <@@' < ? 10' 1 BD<- ℊ -& ' =?@@ ' 1L1B? 1A' <' D'0' '>1

W V -*Z' 1 @;!' + 7' 7& ' @+'!'".'ǂ b .+/8' -/' 7 '-.

ℊ F D1 1<0' >< - ' = <?A?@1-' '='B1 0ℊ '><j .'-'-.' &' A1B1'+1' D1' B&>>&-' 1&C@1ℊ A&' A< ' ><a1' ` &Ba09hPʻ '-.0ℊ 1<A0ℊ <-A@10 'Ba0ℊ < -100' =& ' E' A@10ℊ ` '@ 0ℊ D<@'B10ℊ <-A' K& A8C&>1@09hPʻ &KA1 8' &L10ℊ <-A' h)' &+1 0' =& ' ?C0ℊ &=' &CC1 ' <-A' &=' < 1-ℊ <-A' D1' 0<>1' `&+1 .'@ ' <-A' 0'@+1 hPʻ @'a1' &' E&@A' & ' '@+1 ℊ <-A' D1' 0<>1' 01@@' <-A' C? ' '-' E<.1' &' ><- ' 1-ℊ -&' D<+'-.' =?@@', -&K@1A.1' D1 1&=ℊ =& ' KD&@1' E&@A' <-A' KD&@1' '@+1 ℊ &' D1' . 1<' "1B1' ' &00ℊ <-A' '-A1 <-B1' &=' D1' B&>>& "' 1&C@1ℊ <-A' D1' K<0 '-.' &=' E&@A' <-A' '@+1 G ' '0' & A<'-1A' <-A' 10 <j #@'0D1Aℊ D<' -&' '='B1 ' -& ' & D1 ' <-' KD< 0&1+1 ' D1' #1ℊ = &>' D1-B1=& D' 0D<@@ `.'@ ' h4 W =' 0'@+1 ' <- ' 0?BD' ` &Ba09hPʻ '-.0ℊ 1<A0ℊ <-A@180 'Ba0ℊ < -100' =& ' E' A@10ℊ D<@'B10ℊ '@ 0' -& ' &>1@0' &=' K& A0ℊ &KA1 8 &L10ℊ -& ' /)' &+1 0' =& ' ?C0ℊ ><A1' &=' &CC1 ' & ' < 1-ℊ ?C&-' <'-' &' =& =1' ' &' D1', '-.' 0 ' <' 1+1 ' '>1' D<' #1' 0D<@@ #1' =&?-A' .?'@ 9

* $"1 ' `.7# &2 ;"..# &2' 5
)'# +&#!2' &+ &2' C' .1!+Z. '27."/2' '!' '5
J. ' %')'%$'$2 1 *%' % /2
'1 *%' '' . ' $

' <?L" & A1'.-1\' 10' I' 10 <#@'\' H1-' BD10B?-' ' 11' +'@@1' I'C& 'A?' >11' A1-.@1R 1ℊ &?' @10' A' \' >< BD<- \' <@'1-0' I' 10 <-.10' 01-' &?' I &-' 1C<' <- \ℊ 0&'1-' <0<.-1\' <' >10>10' @10' >< BD<- \' 0?=='B'<- \' D&0 10' C' @10' <a10' '0B&- \&?' #<'@@'=1' A1' A' \' ' 110' '@@10' I' C& =\' A?' '-11 G 1' H' @10' A' \' >< BD<- \' <@'1-0' I' 10 <-.10' -1' 0&'1-' A1>? <- \' 1-' <? 1' @'1?ℊ 0'-H-' # 15 f'8@10' 9A' 10' D&0 10' 1-0 '<'<00'.-1 0G `1 H' >10>10' @10' D&0 10' 1-0" <00'.-1 0 P' C '1.-1-' C' @&' <+<'@@' =1-' >< 1' B&>1' =1?0' <BB h ?>1\' 1-'<?-B'1 " 1>C0 ' 1>' C 11&' H' A'1010' &-10 <#@10' A10' D< 1@L A1'-\' @1' &'<@>1' A1''.@1R 1' 0&-'<00'.-1\'9C' B&>>'00'&-0' - 1' Bℤ @1' &" ?0 'B10' A1' @<' C110ℊ I' C' A&@&?' A10' A' \' B&>>'00'&-0' C 1'.-1-' .1- \' <0' H?1?L' '@0' 0&-' ><@+1?@' a- \' '@10'1>C '0&-&- AA-\' @10'==‘@\' D<0 1 Lℊ <-H'@0' 1'1-' =<' ' = -' I' <+>B1&-' &+1' 10' A' \' &-10 <#@10' C' @&?' A1@', <-B1' <+&' G' & A1'.-1\' 10' I' 10 <#@'\' H' -? ' 0&'@' 1>C '0&-1\' C' <0B?-0' ?0 'B10' A1' @<' C110' 0'-&-' 1-' B&1' .<&@1ℊ 0<+<-' <0' = 0' 1' <? 10' H&-' .<&@10' @&-' '= <-BD'010' 1-' B1' B<0

1>'& A1'.-1\' 10' I' 10 <#@'\' H' @10' =1 >&? 0' I' BB?ℊ C'&? 0' H?1@B&-' 00' A10' <-&' 0' R 10' 1-\' I' <? 10' C&00100'&-0' A10' <@'1-0' C<'1-' I' 0&'1-' 8 1-?\' A18' C<'1' &? \' ><' ' A10' A'0>10' 1-' A?10ℊ <0 0&-10' I' 'B<' 0' A1' 1'-' 0.@'01' 10' H?1@L' C&BD10' ' 10>10' @10' <-=1' ' R 10' 1-\' &?' C&00100'&-0' 0&-' '00@-' <00'\' I' A?10ℊ B&>1' @<'@& 1' A1' 1'-1' 0.@'01' A1><-A1'G' -'1-' B&- 10 1<-' H' @10' A' \' <-&' 0', 10' 1-\' &-' <? 10' C&00100'&-0' 0&-' 01'0'\' 10' >< -0' -=1' A' ' K?' @1' & ℊ I' '@&-&#0 <- 1' <?B?-1' CD'#'B'&-' =1' 1' &?' <==<' 1' <' B&- <' 1

1>' & A1'.-1\' 10' I' 10 <#@'\' H' H<?-' <0B?-' 10 < ?' >< BD<-' 0&' ' , @='1' 1-' @<' D<?-11@@< '1ℊ I' 0' B1&' # '1=' <.< A1' <@' '0B&-' I' 1 &? -1' 1-' @1' B&1' #<-a' I' @10 < ?' '@@1&H10' --' =&' \' >&-0 1ℊ H' B&>#'1-' H' @1' CB1001' <C@0' B1@@1' A1>&-0 <-B1' 0&' ' A'0B&- '-?1ℊ H<' H?1@1' D1? 1' H' @<' C< '1' 0?1' A1' 1B&- '-?1 ' @1' CB1 0=1' I' A<+&' ' 1L1B?8' B'&-' A1@ 10 < ?' >< BD<- ℊ H' @10' ?0 'B10' A1@ <-a@ 1-' H?1@ @10 < ?' =1?0 '?-' =&' \' >&-0 1\ℊ C?'001-' 0' B1@@1' 1B& A' =<' 0' I' <.< A1' C@1'-' 1L1B?B'&<' A1@ 810 < ?' >< BD<-' <+0- A' ℊ 0<-\' <+&' ' A1' B1&' <? 1=&' \ +'1?' &-' A1>&-0 <-B1' 1-' <C00' G 1' H' B10' 10 < ?' '1.-1' @'1?' A1' &? \' 10 < ? \' >< BD<- \' <' B10' =&' \' -'1-' C@A-18' >1-' 1L1B- \

1>' C& B1' H' C@1?01? 0' A10@&'<@L' < '='B1 0' ><.'-<- \' <' A1B1' ' @1' B&1' C&1C@1ℊ =&-' A1' &? ' 1-' <? 1' =' ><@L' <-1@L' #1A10' BD<-A1@1 0' .'C001 -.10' BD<@'B10' D'@ 10' I' C&>1@L' A10C1'10' C&?A1 #&L10' @'1-10' I' #? 01@0' C' D<C<C10ℊ A1' B?C 1' I' A1' @< &-' I' @1 ' 0?'0& =1-' I' 0?'08@ 0< 1-=1-' 01>#@<#@10' <' &' I' < .1-ℊ I' @10' +1-A1-' I' >1 1-' <' .<.1' <0' C@?0&0' D&>>10' -'1-' 1'<- \' C@1'-1' B&>00<-B1' A1' B1' C' &' 1-'1' I' < .1-' 1-'1 ℊ <' .D' ' A1B1' ' `A1B1' /P' CA1' I' < 1 '001>1-' A1' B&1' C&1C@1ℊ I' <-'1- '001>1-' I' A10 ?BB'&-' A&' I' A< .1-G & A1'.-1\' 10' I' 10 <#@'\' H' -?@' < '='B1' -<? 1' D&>1' H1B&-H@' A10& 1' 1-<+<-' 0+''0& 1' -1' 0?'0< .1-1' -?@@10' A1@L' =' j ><@L' <-1@L' #1A10' BD<-A1@1 0' .'C001 -.10' BD<@'B10' D'@ 10' -1' C&>1@L' A10' 10C1'10' C&?A1 #&L10' @'1-10' -1'#? 01@0' C' D<-<C10ℊ =<' \' A1' B?C 1' &?' A1' @< &''ℊ 0? ' C1'-1' A1' =& 8' =<' 1' <?' & ' '0' < A'?-'=&' \' H'@' R <' &+1\' B&?C<#@1

Ů - !"+&-!/'.-' !' 6.++ ' -'!"".-!.02'6! ! & &.-

D1' &B@<>< '&-' &=' D'0' =& 10<'A' E <B1' <-A' < A&-' ><A1@ D1' ?' '&=' ` D1'/ ' 1<B1@ =& ' <@@ <--1 '&=' 0)' -0? 1 '&-0@ 1D1@@'&-0@ !1@&-'10@ 10C<0010@ <-A' '0 ' $ C '0'&-0 A&-1' <-A' C1 C1 < 1' # ' D1>@ & ' <- ' &=' D1>@ #1=& 1' D1' ' '1@A'-.' & ' B&>'-.' '- &' D1' ' '1.1<-B1@ -A' <@0&' D1' ? @<K '10@ '=' <- ' `&=' D1> h@ #1' C &j -&?-B1A' # ' D1' BB<0'&-' D1 1&=;' &' D< ' D1 ' &=' D1' &?- '&=' F <@10' A&' '1@A' D1>01@+10' &' &? ' &+1 1'.-' & A' D1' , '-.@ & ' &' D1' '-B1' &=' F <@10@ & ' &' D1' "?a1' &=' & a@ & ' &' D1' ' '1? 1-<- 0' & ' "1C? '10@ -A' D< ' D1 ' &=' D1' < BD10' &=' B& @<-A@ A&' '1@A' D1> 1@+ ' &' &? ' 0)' &+1 1'.-' & A' D1' , '-.@ & ' &' &D-@ &-' &' D1' 0<'A' , '-.@ F < A1-' &=' D1' <0 ' < BD10@ & ' &' D1' < @ &=' F 10 >& 1@ >A@ F < A1-' B=' D1' F 10 ' < BD10' &K< A0' B& @<-A@ & ' D1' ' '1? 18' -<- 0' & ' "1C? '10@ &+'A1A' <@K< 0@ D< ' F '@@'<>' 1 @1@ D&><0' F < A' &=' ?>C'-. &-@ KD'BD' A& D' C 10' 1-A' <-A' =1'.-' D'>01@=' &' #1' , '-.' 'BD< A@ 0D<@@' -&' D<+1' -& ' 1- & ' <- ' A+<- <.1' # ' D'0' E <B1' <-A' < A&-@ #? ' D< ' D1 '#1' 1LC 100@ '1LB1C 1A' &? ' &=' D1' 0<'A' E <B1' <-A' < A&-9

) &2' '! 'V' ` "! 2.-2' '! ' ' '$ ' '$ ' ' ' n' %%)' -/' 1@!' ./! ' '! 'W

@<' CB@<><B'&-' A1' B 0 10' .3B1' I ' CA&-' =1' \@ @<' 01? 1' A1' 0<' C110' C ' &? \' >< 0' A1' & 10&&0' '-0? 1BA&-0' 1#1@@ @'T>0 =1@&-'10' R0C<0010' I ' >1 '0'&-0' =1' \' &?' 'C1 1\' C' 1 'L' &?' <0B?-' A1' 1?L' <+J- ' @&? ' 1-A 1' &?' +1-?1' 1'-\'<9@&? '@'.1<-B1' ' '<?L'- ' @10' @<.< '10' 0" -?@@10' 1-' 1'>' &?' <?B?-' A1' 1?L' 0&'1- 'C-?-A1\'C' B1@@10' 1-8' BD<'0&-0@ - 0 '' 'B1?L' A?' C<'@0' A1' E<@10'01' 1-A1- '< - =1'A' ' =1' & ' &?' <' @1' '-B1' A1' E<@10' &?' <' "?=1' "1+F a' &-'<' @&? '@'1? 1-<- \' &-' A1C? 1\@@ 1 ' 'B1?L' A1' @10' >< BD10' "10B&B1' 01' 1-A1- '<' - 1' A' ' ' @1' &" &?' <' &D<-' =' \' A?' & ' E< A1 -' A1@ 0 >< BD1@ &?' < &?- ' A1' F 10 ='@<-A' E< A1 -' AA' F 10 >< BD1' ,0' 0B&B1' &?' <' @1? ' @'1? 1-<- \' &?' A1C? 1\@ ? +1?\' &? 10=&a\' H' F '@@'<>' 1 @1' D&><0' F < A1' A1' =C>8' C -. 1>' H" 01' = 1-A1' I ' =A.-1' A10 1' & ' 'BD< A' I ' > 1' "&-1 ' -<'1- ' -1- &'1- ' -?@' <+D' <.1' C' B<?01' A1' B10 <' .0B1' I ' CA&-G >10' H'@0' 0&'1- ' 1L C001>1- ' 1LB1C \' D& 0' A1' CA&-' I ' .0B1' <+<- A' \

)) '>c' ! # 0' -/,/

& 0 ' &!' D<--.' 2!<'.

' *6' 4 ' W ' A 6

-' "*&-!' 6.0

ME'= ' ' 'G '6 #'HHH' '*4

! 7' 3" &#!' . ' @&-*' .' ! .0"' . ' 6.1!' 1."!' ."' !' B&"2 L' B"0& 2' ' 4&2 . "&#2' -' 020 +

' D1' . '1+&?0' &>C@<'- 0' ><A1' &'&? ' &+1 1'.-' & A' D1' , '-.' # ' D'0' &>>&-0' &=' D'0' < @'<j >1-@ D&@A1-'<' &+1- @ D1' + ' "< ' &=' = &#1@ D1' + ' 1< ' &=' D'0' A.-@ &=' D1' D& '#@1' '0BD'1=0' <-A' A<>-<#@1' ?0 &>'KD'BD' '0' `'- &A?=' &=' -1K' '-' D1' &? ' &=' &>1@ D<' -&' ` < 0&-@ ##&9h@ -& ' & D1 @ 0D&?@A' D<+1' &+'<&-' &='<-' BD#'0D&C 'Ba' & ' '0D&C0 'Ba@ KD'BD' 0D<@@' #1'+&'A@ '@@' D<' D1' D< D' B&>C&?-A1A' K' D' D1' &C1/0' D<>#1 @ &' C<' . 1<' <-A' 1LB100'+1' ?>0' &=' &-1 @ <0' K1@@ =& ' D1' ! ' 0 ' ! ?' 0' &=' D1'0<>1' BD#'0D&C 'Ba' & ' '0D&C 'Ba@ <0' =& ' & D1 ' @100' 1 j +'B10' '-' D1' 0<>1' &? @ <-A' D<' D1' 0<>1' ?>0' & ' D1' . 1< 1 ' < ' D1 1&=' #1' C<'A' #1=& 1D<-A' : KD'BD' ?>0' C<00' D1' 1#@1@ & ' D1' "&?#@1' <' D1' @1<0 @ &=' D<' D<' K<0' <BB?0 &>1A' &='&@A' '>1' &' #1' C<'A' &' D1' 0<'A' D<>#1 ' <-A' & D1 K'01' # ' D1' BB<0'&-' &=' 0?BD' &+'0'&-0@ KD1 1# ' <' . 1<' < ' &=' D1' 1<0? 1' &=' D'0' 1<@>' D<' D' #11-' # &?.D ' <-A'B< '1A' &' D1' 0<'B &? @ <-A' <@0&' 0D<@@ #1' '-' '>1' &' B&>1@ &' D1' . 1<' '>j C&+1 '0D'-.' &=' D1' BD#'0D&C0' <-A' '0D&C0' K' D'-' D1' 0<>1' 1<@>@ <-A' 1@01KD1 1' K' D'-' D1' ,'-./0' "&>'j -'&-0' h)' '=' B&-+1-'1-' 1>1A '#1' -& ' =& ' D1' 0<>1' C &+'A1AJ ? ' 0<'A' &+1 1'.-' & A' D1' , '-.@ &' D1' &-&? ' &=' E&A@ <0' K1@@ &' 10BD1K' D1' " <><.1' &=' D'0' 1<@>@<0' D1' 1 '@0' &=' D1' ' &?@0' `KD'BD' &K1-' &' #1'/P

' ;".0* '&-' '! 'V']'3!"2.-!' ;+!' '! 'V '$ ($ ' 'N * ' '$" $' '

@<' . 1+&?01' B&>C@1'-' =<' 1' <' -' f' _' @1' & ' C' 0<' B&1' 1-'0&-' C@1>1-' 1-?\' <' &+1- 1@ @1' + J ' &? ' "&E&# ' <-' A1' 0&-' 1.-1' <0>1@ A1@ D& '#@1' ><@8 + '01' I ' A<>C-<#@1' B?0 ?>1' H10 ' 1- &A?B1' A1' -&+1@@ 1-' @<' &? ' A1' &>1@ H' -?@@1' C0&-1' D<#@1' -<?_1'<,< C+'<&-' A<?B?-1' BD1+10BD'1' -1' +10BD'1' H' 01' +&'A1 <' ?0H?10' <' <-' ' 1@1' <'=' B&>C&01' &+1B' @<' D<># 1' A1' #CC&0 &'@ A1C<'1 ' . -A10' I ' &C' 1LB100'+10' = <>10' A1' >&-&'1@ <-' 'C/' @10' C ?5O' = ?' \' A1' B1@@1' B1+10BD'1' ?' +10BD'1' B&>1' C ' <? 10' >1'-A 10' M+'B10' 1-' @<' A11' &? 1G' 1 ' H' >10>10' @10' 0&>==@10' &?' @<' C@?'0' . -A1' 'C '1' A'B1@@10' 0&'1-' C<'1\' A1+ ' @<' >< -G' H?1@@='0' 0&>>10' C<001-' @<' 1' &?' @1' A&?#@1' <?8>A-0' A1' B1' H' 10 &' ' <B?0 ?>1' A<?-A1<' 1>C0' A10 1' C>1'<' @<' AA1' BD<>#1' I ' <? 1>1-' <' B<?01' A1' '1@@10' C+'0'&-@ C&-' . -A1' C '1' A1' 10& 1' A1' &'<@>1' <' 10 1' <>10-1\' ' I ' 1>C& 1\' <' @<' AQ1' &? 1' I ' <'-0" VM <' 1-' 1>C0' <+1-=@ 1-' R0.<-A1' 1-C& 001>1-' A1' @10' B1+10BD'10' I ' +10BD'10' A1'-\' >10>1' @1' &'<@>1' I ' <'@@&? 0' A1'-\' @10' =@10' A1' &" CA1D& 0@ 0" 0' BA)' A1' B& 1-<#@1' 1>1A1' -1' &' ' C? +1?G =1' A' ' 2' @1' &" <' @&-?' A1' A'1'@ 0'#'1-' C' 10BD?1' @1' A<><.1' A1' 0&-' &'<@>1' B&>1' @10' C'@0' A10' <@>10' A1' B1?L' H" A1?001-' 1 1

ʼ<+<-B1\' ʼ <?B''-0ʻ B1+10BD'10ʻ I ʼ +10BD'10ʻ A1'-\'@1ʼ &'<@>1ʼ "1-.@1R 1ʼ I ʼ<'@@&? 0ʻ A1'-\'@10ʻ_'10ʻ >10>1ʼ-=1ʼ = ʼ@1ʼ &@ʻ CA1D& 0ʻ >10>1ʼ@1ʼ &'<@>1ʻ@ A1ʼ@<A+'0ʻ I ʼ<001-ʼ A10ʻ .0?-\' A1ʼ 0&-ʼ &'<@>1ʼ1-ʼ >10>1ʼ @1ʼ C@1> -ʼ <A' A A1'-1\' I ʼ10 <#@'\ʻ H' B1?L' I ʼ BD10B?-ʼ A1ʼ1?L' H" C<'1-ʼ &?ʼ C<'1ʼ<ʻ @<ʻ A11ʼ ='<>#1ʼ &?ʼ<? 1>1-ʼC ʼ '1@L' = ?' \' I ʼ,+'B10ʻ. 1'-A 10'0&> >10'A1ʼ>&-&'1'H'-&-ʼ10 1'<B?0 ?ʻ >1\'A10 1ʼC<'1\'A<?-B'=ʻ 1>C0ʻ C< 01\ʻ@\' I ʼBD10B?-ʼ A1ʼ1?L'1-B&? .1-ʼ I ʼ1-B&? .1ʼ@<ʻC1'-1ʼA1ʼ=& =1' ? 1ʼA1ʼ H/-ʼ H'@0ʻ C? &-ʼ=& =<' 1ʼ1-,0ʻ >10>1ʼ- 1ʼ ʼ@1ʼ &

1>ʼ B&>1ʼ 1-ʼ @1ʼ C@1>1-ʼ 1-?\' <ʻ F 10 '-ʼ <-ʼ C ʼ 1ʼ- 1ʼ ʼ@1ʼ &" H& 10ʼ1- 1ʼ<?=1ʼ BD&01ʻ & A1@.-1ʼ =?'0ʼ I ʼ 10 <#@'\ʻ H' &? \' B1?L' H' A10@& 0ʻ 1-<+D'ʼ A1><-A1 &'1-ʼ A?ʼ & ʼ R 10ʻ 1-1>1-\' 1-10ʻ && B1ʼ <--?' 11'0 &?ʼ <? 10ʻ C=' \' H?1B&-H 0ʻ =1 &'1-ʼ 1LC001ʼ >1-B'&-ʼ 1-ʼ@&? ʼC1 'B'&-0ʻ A1ʼ @<ʼ+<@?1ʼ A1ʼ @<ʼ BD&01ʼ1-0" <A1><-A1ʼ I ʼ <?L" A1ʼ B1&' '@0ʻ &?-ʼ 1K1ʼ A1ʼ A&?-ʼ A ʼ &"&?ʼ A10ʻ<? 10'010'C.1-ʼ &? 0ʻ&?ʼ CA1B100&? 0ʻCA1+D'ʼ G ʼ 1D' B<0ʻ H'@0ʻ -1ʼ =ʼ 1-ʼ '1@1ʼ >1-B'&-ʼ 1D' @&? ʼ A' \' C1 'B'&-0ʻ I ʼ B1&' A?1>1D ʼC+1ʻ , &'1-ʼ @10ʻ 10ʻC< 1-R' A1ʼ & ʼ 1-ʼ =<' \' -'1-ʼ +<'@@<#@10ʻ -1ʼ A1ʼ -?@@1ʼ =& B1ʼ -1==1 1' >< 0ʻ A1ʼ &?ʼ 1+&a10ʻ 1C1@@1\' I ʼ<A-?@@1\' =ʼ' &? \' &? 0' `&+1 P' C?-'001>1-ʼ A1ʼ B1?L' H1-0" < &'1-ʼ =1' ʼ '1' A10B1' ʼ <?' & ʼ B&>1ʼ B1?L' H" -i' &'1 ʼ C<0ʻ A'.-10ʻ A1-&'1ʼ @1==1 ʼ I ʼ #1-1=ʼB1' A10ʻ ʼ 10ʻ C< 1-11ʼ < 1?L' .W?-1\' B1@@1' C '1' -=1' TQʼ @1ʼ & ʼ A1ʼ @<A+ 0ʻ I ʼ <001-ʼ0?'0A' \'<A' & A1'.-1\' I ʼA1B@< 1R' 1-ʼ>10>1ʼ B10 1ʼ C@1>1-' H' @< & .-1ʼ-1'/@10ʻ =' \' AD' &" -1ʼ -?@@? ʼ A1ʼ 1?L' 0&'1-ʼ -1ʼ 0&'@ B&- 1-?\' 1-ʼ @<ʼ A' ʼ 10 < ? ' -1ʼ 18' 0 1'-\' C' B1 ʼ<A1><-A1ʼ I ʼ 1B1'+1ʼA1' A&?-ʼA1ʼ & ʼ R 10ʻ 1-1>1-\' I ʼ<? 10ʻ C&00100'&-0ʻ H?1@B&-H10ʻ G 1'-0ʻ H'@0ʻ I ʼ BD10B?-ʼ A1ʼ1?L' 1'1-ʼ I ʼ1-&'1-ʼ I ʼ<'ʼ I ʼ1-&'1ʼ &?ʼ B1ʼ H'@0ʻ &?ʼ <?B?-ʼ A1ʼ1?]ʼ &-ʼ &?ʼ <A' A1ʼ A&?-ʼ ? .D>ʼA?ʼ &"<?ʼ C01-ʼ I ʼH'@0ʻ A1><-A1 &-ʼ&?ʼ 1B1'+18' &-ʼ&?ʼ<0B?-ʼA1ʼ1?L' A1><-A1 <ʼ &D' 1B1'+1 <ʼA1ʼ A&?-ʼ &?ʼ . >1ʼ A1ʼ &" 1-ʼ 1>C0ʻ <A+1-ʼ 0<-\' 1-ʼ 10 1ʼ >&@10 1\' &?ʼ . 1+1\' C' , ?1ʼ A1ʼ @10 < ?ʼ< - A'

1>ʼ C& B1&ʼ H' C@1?0&? 0ʻ A10ʻ '0B&?-ʼ\' 0BD1 &?'0ʻ @- &? 0ʻ ?0?>1 0ʻ &?- &@@1 0ʻ I ʼ<? 10ʻ ='B1 0ʻ-=1ʼ K ʼ@1ʼ & 9<B&>C <#@1\' 1-ʼ C@1?01? 0ʻC '10ʻA1@ &'<@>12' A1= <?A1-ʼ I A10B1 +1-ʼ -=1ʼ A' ʼ ʼ@1ʼ &" <--?1@1>1-ʼ 0ʼ @&? ʼA10@&'<@L' I ʼ -'1-ʼ, &'1ʻ <B&>C \9 B&-B1@<-ʼ\' I ʼ 1 1-<-ʼ\' <ʼ @&? ʼ CC 10ʻ &1C0ʻ @<ʼ. 1'-A 1ʼC '1' A1ʼ B1&' H' A &' ? 1@>1-ʼ <C 1-1ʼ A1 &D' <ʼ -=1ʼ ʼ@1ʼ &" <+W-A' ʼ ' 0&-ʼ R0.<?-ʼ A<><.1ʼ I ʼ CA1'G =1ʼ A' ʼ _ʼ@1@ &" A1ʼ @<A+ 0ʻ =' ʼ<001-ʼ 0?'0A' \' <A' & A1'.-1\@ H' >1 - 1-W-ʼ <C0ʻ B '?-'=ʼ-<@<B&>C ʼ 1-A?\' I ʼ=' ʼ \' C' @10ʻ ='B1 0ʻ I ʼ ?0j ?>1 0ʻ <+J-A' \' A1+/-ʼ @10ʻ < &-0ʻ A1ʼ @1 BD1H1 ʼ -=1ʼ A' ʼ + ź é &'@@1' 1-?1ʼ A1ʼ @<B&>C ʼ A1ʼ BD?-ʼA10ʻ A' \' =' 08' A1ʼ -'& 1ʼ 1-ʼ >& 1ʼ 0&' ʼ 1-+&'1ʼ <0ʻ &?- 110ʻ 1-ʼ@10ʻ H?1?]ʼ @10ʻ A' \' <B&>C <- \' 10 &'1-ʼ ='B1 0@ 1-01>##@1'D1-ʼ& 1ʼ B&> 00@&-0ʻ A' 1 \' <ʼ@10ʻ C@?0ʻ @&'<@L' I ʼ A'0B 1 10ʻC0&-10ʻC ʼ 1-H?1 1ʼ I ʼ 1B '=ʼ1 ʼA1ʼ@10ʻ C=' \' H?1?L'@1 ʼ<BB&>C <- \' <+ - A' \' &?-ʼ 1B1?\' A1'-\' @10ʻ &?- 110ʻ 0?'0A' \' 1-ʼ -&?-ʼ I ʼ<@ &1C0ʻ C=1ʼ A' ʼ ʼ'1ʼ &'@ C' 1?L' 1-ʼ >< 1ʼ<+D @ A' ʼ 0ʼ @&?ʼ A' \' <BB&>C \' <ʼ @&?ʼ CC 10ʻ &1C0ʻ I ʼ C=1ʼ A10B1'+<#@1>1-ʼ B&-B1@1\' I ʼ 1 1-?\' ʼ 1-ʼB<0ʻ H' @10ʻ A' \' <BB& -C <- \9O&'h ʼ < <- \' A1ʼ @&? ʼ A' \' = <?A10

0<?ʼ ʼ'= Z ʼ ʼ(

<A+<-B1A' &'<-ʼ BD#'0D&C 'Ba0ʻ<-A' '0D&C 'Ba0ʻ K' D'-ʼ D1ʼ 1<@>ʼ&=ʼ -.@<-A@<-A' 1@01KD1 1ʼK' D'-ʼ D1ʼ,'-./0ʻ "&>'-'&-0ʻ&?ʼ&=ʼ D1'0<>1ʼ 1<@>@ # ʼ D1ʼ A+'B1'<-A' 001-ʼ&=ʼ D1'E 1<ʼ 1-ʼ&='D'0ʻ 1<@>@'-ʼ D1ʼ)ʼ < @'<j >1-@D<D'& A<'-1A'<-A'0 <#@'0D1A' D<ʼ D1 ʼ<-A'1+1 ʼ &=ʼ D1>ʼ D<ʼ 0D<@@ C<ʼ &ʼ D1'0<'A' D<>#1@&ʼ& D1 j K'01@ =& ʼ 0?BD' ! ?' 0ʻ <-A' 1 +'B10ʻ. 1< 1ʼ ?>0ʻ &=ʼ &-1@ D<-ʼD<D'#11-ʼ <BB?0 &>1A' &' #1ʼ C<'A' '-ʼ &@A' '>1ʼC<001A@ D1 ʼ <-A' 1+1 ʼ &=ʼ D1>ʼ 0D<@@ >1?ʼ D1ʼ <'-ʼ&=ʼ D1'! & =1'> 1ʼ&=ʼ<0ʻ >?BD' <0ʻ D1 ʼ >< ʼ =& =1'ʼ &K< A0ʻ D1'0<>1ʼ&?ʼ &+1 1'.-ʼ & A' D1ʼ,'-.

@ F D1 1<0ʻ'-ʼ D1ʼ < @'<>1-ʼ D&@A1-ʼ<ʼ F 10 8' >'-0 1@'-ʼ D1'!'0ʼ 1<ʼ&=ʼ D1ʼ 1'.-'&=ʼ&<ʼ &+1 1'.-ʼ & A' D1ʼ,'-.ʼ D<ʼ -&K' '0@ <>&-.0ʼ& D1ʼ D'-.0ʻ'ʼ K<0ʻ & A<'-1A' <-A' 0 <#@'0D1A' D<ʼ <@@ D&01ʼ KD'BD' = &>ʼ D<ʼ ʼ>1ʼ=& D' 0D&?@A' A1><-A' &=ʼ D1ʼ,'-.ʼ <-A0@ 1-1>1-0@ 1-0@ ==B10@ --?'10@ &ʼ <-ʼ & D1ʼ &=ʼ 0@ 0D&?@A' ><a1ʼ 1LC 100ʻ >1-ʼ&-ʼ'-ʼ D1'ʼ 1ʼ'&-ʼ &=ʼ D1ʼ <@?1ʼ &=ʼ D1ʼ D'-.ʼ 0&' &ʼ #1ʼ A1><-A1A@ <-A' <@0&' &=ʼ D<ʼ D<ʼ D1ʼ D<+1ʼ D<A' &=ʼ D1ʼ,'-./0ʻ E'=@&ʼ &=ʼ<-ʼ&=ʼD'0ʻ &.1-ʼ&0ʻ<-A' 1A1B100& 0ʻ#1=&1ʼD'>G <-A' '-ʼB<01ʼ D1ʼ ><A1ʼ-&ʼ 0?BD' >1-ʼ&-ʼ 'C' D1'ʼ 0<'A' 1ʼ'&-0@ <-A' D<ʼ A?@ʼC &+1A@ D1ʼ,'-.ʻ0ʼ 1 1 0ʻ <8 1-0ʻ D1 1&=ʼ><A1ʼ 0D&?@A' -&ʼ#1ʼ <+<'@<#@1@ -&ʼ&=ʼ-&' !& B1ʼ -&ʼ ==1=@#?ʼ KD&@@ ʼ 1+&a1A@ 1C1<@1A@ <-A' <A-?@@1A' =& ʼ 1+1@'-ʼ ?-'0D>1-ʼ&=ʼ D&01ʼ KD'BD' D<A' A&-1'0 'BD' "1B1'ʼ ʼ D1ʼ,'D.@<0ʻ D1 ʼ1D'BD' `0D<@@ -&ʼ #1ʼ K& D ʼ C' 1-&ʼ D1ʼ ==1=ʼ<-A' 1-1='ʼ&=ʼ D1ʼ,'-./0ʻ 1 1 0ʻ <1-0ʻ &ʼ D1>ʼ.<-1A' '-ʼ D'0ʻ 1D<@=;ʼ ?ʼ 0<'A' &+1 1'.-ʼ & A' D1ʼ,'-.@ # ʼ D1ʼ A+'B1'<-A' 0j 01-ʼ<=& 10<'A@ D< D' & A<'-1A' <-A' A1B@< 1A' -ʼ D1ʼ <>1ʼ < @'<>1-@ D<ʼ D1ʼ^? 1-ʼ-& ʼ D1ʼ,'-./0ʻ &-(ʼ-&ʼ -&-1'&=ʼ D1>ʼ#1'B&-<'-1A' '-ʼ D1'0<'A' <?1@-&ʼ 1j 0 <'-1A' # ʼ D1'0<>1ʼ &ʼ A1><-A' <-A' 1B1'+1ʼ&=ʼ D1ʼ ,'-./0ʻ E'=@<-ʼ 0-A0@ 1-1>1-0@&ʼ& D1ʼC&0010j 0'&-0ʻ#?ʼ D<ʼ D1ʼ<-A'1+1 ʼ&=ʼ D1>ʼD<+1'<-A'1-&ʼ <@@ D<ʼ D1ʼ ʼ<-ʼ&=ʼ D1>ʼ D<1'&=ʼ D1'E'=ʼ&ʼE <-ʼ &=ʼ D1ʼ,'-.ʼ<ʼ D'0'C 101-@ʼ<-A' D<ʼ D1ʼ<-A'1+1 ʼ&=ʼ D1>ʼ><ʼ A1><-A@<-A' 1B1'+1ʼ&=ʼ D1ʼ,'-./0ʻE'=ʼ&ʼ E <-ʼ D1 1<=1@K' D&?ʼ#1'-.ʼ S V) >&@10 1A' &ʼ. '1+1A' # ʼ+' ?1ʼ&=ʼ D1'=& 10<'A' <?1

@ F D1 1<0ʻ A'+1 0ʻ &=ʼ D1ʼ D1 '==0@ 0BD1< & 0@ ?@-1.1 0@ ?0 &>1 0@ &>C &@@1 0@ <-A' & D1ʼ D1ʼ ,'-./0ʻ ='B1 0@ <BB&>C <##@1ʼ '-ʼ ><-ʼ <ʼ 0ʻ &=ʼ D1ʼ 1<@>@ A&ʼ A1= <?A' <-A' A1B1'+1ʼ&?ʼ 0<'A' & A' D1ʼ,'-.ʼ 1< @ @'-ʼ D1'ʼ?-@<K=?@ <-A' ?C ?1ʼ` BB&>C 9O ʼB&-j B1<@'-.'<-A'` 1B1'+'-.'U ʼ &ʼ D1ʼ'&K-ʼ 01ʼ D1ʼ. 1< 1ʼ< @ &=ʼ D<ʼ KD'BD' '.D =?@@ ʼ &?.D ʼ &ʼ C1 <'-ʼ &ʼ D1ʼ,'-.ʼ &ʼ D'0ʻ. 1<ʼ "<>.1ʼ<-A' &00ʻG ? ʼ0<'A' & A' D1ʼ ,'-.@ # ʼ D1ʼ A+'B1'<-A' 001-ʼ <=& 10<'A@ D< D' & @ A< 1A' D<ʼ C 101-@ʼ<= 1ʼ1+1 ʼ='-<@ 1B&>C ʼ.'+1-ʼ <-A' - <A1ʼ # ʼ D1ʼ ='B1 0ʻ <-A' ?0 &>1 0ʻ <=& 10<'A' #1=& 1ʼ D1ʼ < &-0ʻ &=ʼ D1ʼ LBD1H?1ʼ &=ʼ&?ʼ & A' D1ʼ ,'-.@ D1ʼ 1-&?ʼ&=ʼ D1ʼ 1B&>C ʼ&=ʼ1+1 ʼ&=ʼ D1ʼ0<'A' ='B1 0ʻ `=';&>ʼ ʼ>1ʼ &ʼ ʼ>1ʼ(ʼ 0D<@@ #1ʼ 01-ʼ ʼ-&ʼ D1@ &?- '10ʻ KD1 1ʼ D1ʼ0<>1ʼ BB >C <-0ʻ#1ʼ ='B1 0@ &j .1 D1ʼ K' D' &>>'00'&-0ʻ A' 1I1A' &ʼ D1''>&0ʼ@<K=?@ <-A'A'0B 11ʼ 1 0&-0@ &''-H?' 1ʼ<-A'B1 '=ʼ 0)ʼ D1ʼ &=ʼ 0ʻ KD'BD' D1ʼ0<'A' BB&>C <-0ʻ D<+1ʼ 1B1'+1A' K' D -ʼ D1ʼ 0<'A' &?- '10@ '-ʼ D1ʼ <>1ʼ<-A' &ʼ D1ʼ 01ʼ&=ʼ&?ʼ0<'A' & A' D1ʼ,'-.@ # ʼ D1>ʼ '-ʼ D1ʼ <--1ʼ<=& 10<'A' ?C&-ʼ D1ʼ '0<'A' BB&>C ʼA1B1'=?@@ 'B&-B1<@1A'<-A' ` 1B 1A/ X &ʼ D1ʼ ʼ &K-ʼC & '1ʼ 01ʼ<-A' &='ʼ DA' '-ʼ B<01ʼ D<ʼ D1ʼ0 A' BB&>C <-0ʻD1'< <'-1A' &=ʼ D1ʼ ʼ0<'A' ! <?A0

ʼ0<>1ʼ" ('G ʼ\ 8O '$ &#'

4' 3 ' @ !". ' 8'! +ʼj ʼ

N<6 $" ʼ ʼ 1 ʼ0$ %'$ 'KO$ %

Q. ʼ L -& ʼ Q ;' % ł X Q

.!' 3!- +@ .'" ʼ/.&-*

ʼ';

!' 0 !' ʼ !-ʼ ʼ # !'" \' "!2 ! -*' 3! &&.-2' .' !' M&-*' :'" -/2'C#' 2 +ł -. ʼ !% !-/' .' !' 90!!-'-.'" !' 3"%-#!2

-;!jj+!L 1!- ';@ !"& 2 0BD10 08 02.1!"2 C#

&>>'00'&-0ʻ 2 +ł#1'A'Z 1A1A' &'<'+' H?' 1'&=ʼ #1'' ' BB&>C

<-A' "1BA 0 D('A'<@@'-B? ' &'#? ')' & A' D1' , '-.' 1' 1-<@ ' &=' $ ' 1#@1' &=' 1' 0<>1 KD1 1&=' 1 ' 0D<@@ #1' 0& B&- ' ' <-A' DA ' C 10' &' '0&-? -A 1 ' D<+1' ><A1' ! 0'1' <-A' <-0&>' &' &? ' 0<'A' & A' 1', '-.' <BB& A'-.' &' D1' "'0B 1 '&-' &='D'0' ?A.10

1' < ? 1' 7 ' <|' ' ' A' 1B 0' U2 BD<- 0' @@1-0' &'01@@ D1' ' 1 BD<-A'01 K' D'-<^?< 0 1 'A='<' 1< ' 1C1<@1A

' F D1 1<0''-' 1' 0)' @'<-' ''D&@A1 '<'F 10 j >'-0 1 ' <>&-.0 ' & 1 ' D'-.0' ' ' K<0' & A<'-1A ' D<' D1' 1 BD<- 0' @'1-0' <-A' <-.1 0' 0D&?@A' 01@@ A ' 1 BD<-A'010' K' D'-'<' ^?< 1 ' &='<' 1< ' -1 B ' <= 1 ' D1' B&>'-.' 1 1&=' > &' 1' 1<@>';' ? ' & A' 1', '-.' 01A-.' 1'0<'A' A'-<-B1' /)' D? =?@ <-A' C H? A<@@ <0' K1@@ =& ' D'>01@=' <-A$D'0' 1<@>' <0' =& ' D1' 0<'A' 1 j BD<- 0' @'1-0' <-A' <?.1 0@ # ' D1' A+'B1' <-A' 001-' <=& 10<'A' D< D' & A<'-1A' <-A' 0 <##@'0D1A ' D< ' D1' 0<'A' A'-<-B1' #1' ? 1 @ ' +#'A' <-A' <A-?@@1A' =& ' 1+1 ' <-A' D<' D1' 0<>1' 1 BD<- 0' @'1-0' <-A' <-.1 0' #1' <' D1' '= 11' " 0C&A '&-9' &' 01@@ 1' ' 1 BD<-A'010' '-' 1' <--1 '<0' D1 ' A' #1=& 1@ D1' ><a'-.' &=' D1' 0<'A' 8' -<-B1;' <+'-.' <@K< 0' D1' ! <-BD'010' <-A' '#1 '10' &=' D1' a '&=' &-A&-G <-A'=? D1 ' &+'A1A' <@K< 0' D<' D1' 0<'A' 1 BD<- 0' @'1-0' <-A' <-.1 0' 0D<@@ -&'B< ' & ' R ' B<?01' &' #1' B< '1A' &?' &=' 1' 1<@>9' <-' 1 8' BD<- 010' # &?.D ' +' ' D'-' 1' 1<@>' # ' 1' 1 BD<- 0' @'1-0' <-A' <-.1 0' <= 10<' ' S' 0<'A' Z ' '6' 0@<0' A= '6 +K ' \' <-' 'K'01' " 'G '6

I ' A10BA 10' H'@0' 1-B&? . > ' '<' -''1' ' ! '@1' &" @<' C1 0' A1' @<' 1#@1' A1' B ' A&-' '@0' , &-' B&-+'='\' I ' @&? ' C0&-10' <' C '0&-1' <-H' '@0' 1-' =>' = -1' I ' <?-11&'" <' UR1' ! ' 1' &"'<+ '0& -B @<'A'0B 1 '&-' A1' 01\' ?.1\ 1>' B&>1' 1-' @1' A< 1'-' C@1>1-' 1-?\' <' F 10 -" 1- 1' <? 0' BD&01\' & A1'.-1\' 10 &=' H' @10' 1 BD<- 0' <@'>'0' I ' 10 <-.10' +1-A1 &'1-' @1 K' <- 01\'A1'-\' ?-' H?< R' A?-' <-' C0BD -' 4' @&? ' +1-?1' #-' 11@@1' &? -1;' =1' =18 ' +1<-' @<' A=1' & A'-<-B1' >&@ ' A<><.1&?01' I ' >10BD1+&?0' >#'1-' C ' @? ' - 10>10' I ' -' &'<@>1' B&>1' C ' @10' \'='BD<- \' <@'1-0' I ' 10 <-.10' @<A+ 1' AB' <001- ' 0 ?0AB10' <A' & A1'-1\' ' 10 <# \' H' @<' A 1' & A'-<-B1' 0&' ' A1' &? ' +&'A1' I ' <A-?@@1\' C ' &? \' &? 0' 1 ' H' >10>10' @10' ' BD<- \' <@'1-0' 5' 10 <-.10' 0&'1- ' <' @&? ' @'#<@1' A'0C&0'B'&-' <' +1- 1' @1? ' AR10' I D<- 010' 1-' >< 1' B&>1' '@0' =1? 1- ' A1+ '@<' =<'0<-B1' A?' A11' & A'-<-B1' ;' <?+1\' &? 10=&' \' @10' = <-BD'010' I ' @'# 110' A1' @<' 11' A1' &-A 10' I ' C? +1?L' <?L" &? 10=&' \' H' @10' \' < BD<- \' <@'1-0' I ' 10 <-.10' -<>10-1-' -1' =1B1-' <>10-1' <?B?-1>1-' D& 0' A?' &'<@>1' <?B?-10' <- 010' <>10- \' A1'-\' >10>1'@1' &'<@>1' C' @10' BD<- \' <@'1-0' I ' 10 <-.10' < - \

)) ' ! # 0 ' ' -/,;<>

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(' D ' ' E

' & A' D1' , '-.' < ' D'0' < @'<>1-' D&@A1-' < ' F 10 >'-0 1 ' D1'!' 0 '" < ' &=' < BD' 1' 1+1- ' 1< ' &=' D'0' 1'.-' # ' D1' A+'B1' <-A' 001-' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@@ <-A' <' 1' 1H?10 ' &=' D1' &>>&-0' '-' D1' 0<>1' < @'<>1-' D< D' & A<'-1A' <-A' 10 <##@'0D1A' A'+1 0' A'-<-B10' <-A' < ? 10' '-' 1' !& >' <0' =&@@&K1 D

D<a </<-A' < ? 10' B&-=' >1A

! ' @' D< ' &@ ' D? BD' D<+1' <@@' D1 ' '#1 '10 ! <-BD'010G <-A' D<' ' D1' & A0' C' ' ?<@ <-A 1>C& <@@' <-A' <@@' D1' ' '10@ & &?.D0@' <-A' &K-0' = <-BD'01A@ D<+1' <-A' 1-&' <@@' D1' ' '#1 '10' <-A' ! <-j BD'010@ KD'BD' D1 ' D<+1' &=' D1' E <-' &=' 1', '-./0' &j .1-' & 0@' <-A' &=' 1' &-=' >< '&-' <-A' E <-' &=' &? ' & A' D1', '-.' D<' '-&K' '0' -A' D<' D1' E 1<' D< j 1 @' <-A' D1' D< 1 ' &=' 1' ! & 10 @' <-A' @' D1' A'j -<-B10' < 'A' < ? 10' ><A1' '-' D1' '>1' &='&? ' & A' 1' , '-.@' <-A' '-' D1' '>1' &='D'0' &.1> & 0@-&' 1C1<@1A@ #1' =' >@ ' D&@A1-' <-A' a1C @' <-A' A?@ ' 1L1B? 1A' '-' <@@ &'- 0;' -A' D<' D1' 1<B1' K' D'-' D1' 1 -' #1' D&@A1-' <-A' a1C @' 0@' D<' ' D1' , '-./0' @'1.1' 1&C@1' <-A' ?# 1=0' >< ' = &>' D1-B1=& D' 0<=1@ ' <-A' C1<B1<#@ ' .@' B&>1@ <-A' <#'A1@ <BB& A'-.' &' D1' <K0' <-A' 0<.10' &=' D1' 0<>1' 1<@>';' -A' D<' .&&A' ?0 'B1' <-A' `1+1-P' ' .D ' #1' A&-1' &' 1+1 ' 1 0&-G 0<+'-.' &' D1' 0<>1' &? ' & A' D1' '-.' D'0' 1.<@@ ' <-A' 1 &.< '+1

C1<B1' 0D<@@ D1' a1C @' <-A' ?0 'B1' A&-1

([!

ME' = ' ' G '6 # 'HHH '

=1' ' @1' & ' <' 0&-' C@1>1-' 1-?\' <' F 10 &' @1' C ='1' & 'A1' < B1' <-' A1' 0&-' 1.-1' +' 3' A1' @<A+'0' I ' <001-' A10' ' 0' 0C?1@L' I ' 1>C& 1@L' I ' <' @<' 1H?10 ' A10' B&10' 1-' >10>1' @1' C@1>1-' <A' & A1'.-1\' I ' 10 <#@'\' C010@' & A'-<-B10@' I ' 10 < ? \' 1-' @<' =& >1' H1-01? 1 '='1>1-' H' 1'-' 0.@'01' 1' ' &? \' 01\' @'# 110' I ' = <?-BD'010' 1 ' H' &? \@@10' ! 0 0C?1@L' I ' 1>C& 1'L' I ' &? \' @10' ' 110' ? .D0' 1' '@@10' 1- ?-BD'010' 1-' I ' 1-&'1-' &? \' @10' @'# 110' I ' = <-BD'010' H?1?L' '@0' &-' A?' .0?- 1' A10' C.1-' &? 0' -=1' ' ' @1' & ' I ' A1' @<' &&-8' =' ><B'&-' I ' A?' .3?- 1/>1<-1' -=1' _ ' @1' & ' ' H' D" .D'A1' = 1' IV @<' @' 1' A1' @<' ! & 10 ' I ' &? \' @10' & A'8' -/-B10' I ' 10 < ? \' =<' \' 1-' 1>C0' -=1' ' _ ' @1' & ' I ' 1-' 1>C0' A1' 010' A' \' C.1> &? 0' >1-' 1C1@@1\' 0#'1-' =1 >1>1-' 1-?\' .< A1\' I ' A?1>1-' 1L1B? \' 1-' &? \' C&'- \ G 1' H' @<' C<'L' A1'-\' @1;' &' >1' 0&' ' 1-?\' I ' .< A1\@' 00'-' H' &? \' @10' @&'<@L' @' 10' I ' 0?#.' \' >10>1' -=1' =0' @1' & ' C? &-' A10& 1' 0<?+1>1-' I ' C<'0'#@1>1-' <@1 @' +1-' @' I ' A1>? 1' 0&@&-B8@10' @& 10' I ' ?0<.10 A1' >10>1' @1' &'<@>1' ' 1 ' H' #&-1' ?0 'B1' I ' &?1@' A &' ' 0 ' = ' <' BD10B?- @' 0<?+3-' <' >10>1' -=1' = ' @1' & ' 010' 1.<@'1' I ' 1.< '+1 '

V

1>' A1' @<' 1H?10 ' I ' A1' @< 01- ' A10 A' \' =0 ' 0 &10 1? A' ' C@1>1-@ & A1' . -1\' 10 ' I ' 10 <#@'\9 H' @1-D1 ' 18 >1- ' A1' @<' & &-1' I ' A1' @10 &'<@>10 " 1 - .@1R 1' I ' A1' ! <?-B19 I ' A1' &? \' @10 <?R0 _ '10 - 1' A' ' @1' & ' CA1@1<' @<' >11 ' &+1HH' &? \' @10 <CC 1-WDB109 0&' ' -@ 0 I ' A1>&1 .1' 1-' @<' C0&-1' >10>1' - 1' ?' @1' & ' I ' 1-' @10 D1' 0 A1' 0&-' B& C0 '00<- \' ' I ' 1-' 10C<@ `<' @<' 1H?10 ' I ' A1' @<001 - ' 0?'0A' \' & A1' . -1\' 10 ' I ' 10 <#@'\'04 C -&DB'1\' A10B1>1\' I ' A1B@< 1\9 H' >&-' ' @1' '-B1' 1- '1'0-1' =' \' - 1' A' ' @1' & ' 0&' ' D1'' <CC< <- ' >10>1' - 1'

@1' & 9 C ' @? ' 0?BB1A1 ' 1-' @10 0?'0A' \' & &-1' &'<@>10 I ' _ '109 C ' @10 <+&' ' &+1' &? \' @10 <CC 1 '<-B10 <C20 @1' A1B10 A'B1_' - 1' ?' @1' & ' <' @? ' ' <' 010 D1' 10 A1' 0#-' B& C0 '00<- \G 1 ' 0'@ A1+'1' 0<-\' D1' ' A1' 0&-' B& C0 '00<- 9 H?<A&-H10 &? 1\' @10 0?'0A' \' & &-1' &'<@>10 I ' = '10 &+1' &? \' @10 <CC? 1-<-B10 1><'.-1-' <' >&-' I D& ><0 01B?-A1' =' \' - 1' A' ' ?' @1' & ' I ' <' @10 D1' 0 A1' 0&-' B& C0 '00<- \; 1 ' 0'@ A1+'1' 0<-\' '00?1' A1' 0&-' B& C0 '00<- 9 H<A&-H10 & \' @10 0?'0A' \' A &- ' &'<@>10 I ' I '10 &+1' & =\' @1 ' <CC? 1-<-B10 1><'.j -1- ' <' >&-'5?' &D-' '1 B1' =' \' >10>1' - 1' ' @1' & ' I ' <' 010 D1' 0 A1 '0&-' B& C0 '00<- \G 1 ' 0'@ A1+'1' 0<-\' D1' ' A1' 0&-' B& C0 '00<- ' H<A&-H10 &? \' @10 0?'0A' \' & &-1' &'<@>10 I ' = '10 &+1' &? \' @10 <CC? 1-<-B10 1><' . ' -1- ' <' >&-' ?' >= 1 ' H?< ' =' \' - 1' A' ' ?' @1' & ' I ' <' 010 D1' 0 A1' 0&-' B& C0 '00<- \

1>' C? B13 H' C@?0&? 0 .1- \' A1' &'<@>1' CA&- ' '00?10 ='-10 I ' < I '<>1- \' 1-' @<' &? ' - 1' R ' @1' & 0' <' @<' 0? 1' A<0B?-1' C '19 1 ' <?L" '00?10 I ' <' B'<>1- \' 1-' 1-H?10 10 I ' ? 10 10 H?1?L' '@0 0&- ' 1-C<-1@@10 C1> 1' C '1' I ' C '1' 1-' @<' &? ' <+>A' 16 ' H?& ' @108 #<'@@'=0 A10 '0B&?- \' I ' @&? ' 10B1'+& 09 I ' <@@@'=1' A10 ! <-BD'010 I '@&? 0 10B1'+& 09 H?" B&'@@1- ' @<' +1 1' B1 19 @1+&- ' @10 '00?10 ='-10 I '<;='B'<>1- \' <+0- A' m C' 10 1 10 <' 1?L' ><?='A10 I ' , 1\' D& 0 A1' @<' @<B1' &?' '@0 = ' 1- ' =& =1' \9 C' &#0B? 10 I ' A& '=0 C#@0 B&- 1-W- \' @<' 0&>1' '00' - ' CA?19 -'1- ' =10<- \' >1-B'&D C'1LC2001 C&@ A1' B<?01' A1' @<' CA1' -1' A1@ &? ' A1@ >1' -1- ' H?1@L' C '10 -1' @<' -< ? 1' A1@ # '1='10 H?1?L' B1@@10 '00?10 = -10 I '<='B'<8' >1- 08 =? 1- ' CA?m9 '00'-' H' @10 '-'0 10 <+/- A' \' @1+&- '@<' 0&>1' A1?L' =&' \' & &'0 =&' \' I '<?B?-1'=&' \' @<' A&?#@1' 0&>1' B&- 1-?1' 1-' @1? 0 10 1 10 9 <' .0-A' 2 . 1+<-B1' I '1>C&, '001>1-' A1' &? '@1' C&1C@1;' A1' . -1\' 10 ' I ' 10 <#@'\9 H' @10 ?0 'B10 I ' ?..10 A1+#' ' H?1?L' '00?10 I ' <='B'<>1- \' 0&- ' I ' , &- ' =& =1' \9 1-' 1>C0 <A+1-' ' BD< .1- ' @10 B@1 B" A10 10 1 10 1-' @10 C@<B10 1-' 5 @10 H?1?L' @10 '00?10 I ' <='B' >1- \' 0&- ' &?' R &- ' =& =<' \9 C/@1? ' 1-'1- \' A1' =<' 1' I ' H'@0 =<B1- ' @10 &@@10 A10 10 1 10 A10 A' \' '00?10 I ' < I '<>1- \' A'0 '-='@1>1- 9 C' ' 1L 001' C&@ A1@ B<?01' A1@ CA1' A1@ R>1' A1@ <-' I ' A1' @<' -< ? 1' A1@ '1='9 I ' C1- 1' H?1?L' C '10 '1@L' '00?10 I ' < B'<>1- \' 0&- ' &?' M &- ' CA?\90'# -' 1-' @<' `M+'B1 h 4' A?' & 'B&>1' 1-' @<' 0?' 1' A1' C '1;' 1 ' H' @10 < ? '=1' ' 1-' 1>C0 '1' & ' '1 B1' <-' A1' 80&-' 1. -1' L@' 9 A1' B&'@@1 ' A1' +1 1' B1 1' 0&' ' 1-?\' I ' .< A10 1-' &? \' C&'- \

1>' C ' B(&' H' HD' - ' A'1010 8.1- \' A1 &? 0 0&- ' B&-8 A1>C-10 <' @1? 0 1A' &? 0 C' A?1' C110 A?' &' I ' B& > 0 <' C '0&-19 ^10 <00<,' <0 E<&@10' A1' < 10BD<@1'1' <-a' A?' & ' !@1 1' I ' <'@@&- 0 <0 <? 10 C '0&-10 1-

) - !"+&-!/' . -' !' 6 .++
0 0?' 1' = ' '$ k0/' 5 '

9 ' D1' 1H?10 ' <-A' &=' D1' 001- ' &=' D1' 0<'A' & A0 <-A' &>>&-09 '-' D1' 0>A' < @'<>1- 9 ' '0' & 8' A 1A' <-A' 10 <#@'0D1A' D<' D1' -D1 ' <-B1' &=' D1' =&L>9 <-A' &=' D1' 1<@>0 &=' -.@<-A' <-A' ! <-B19 <-A' &='<@@ D1' & D1 ' "&>'-'&-0 &=' &? ')' & A' D1' , '-.' #1j &-A' D1' 1<9 K' D' <@@ D1' CC? 1-<-B109 0D<@@ #1' 01 @1A' <-A' 1><'-' '-' D1' 1 0&-' &=' D1' 0<>1' &? ' & A' D1' , '-.9 <-A' '-' D1' 1' 0 &=' D'0 &A '#1.& 1-9 <-A' 10C1B'<@@ ' <' D1' 1H?10 ' <-A' &=' D1' 001-' <=& 10<'A' ' '0 & A<'-1A' <-A' 10 <#@'0D1A9 C &-&?-B1A9 A1B 11A9 <-A' A1B@< 1A ' D<' D1' & A' D1' '-B1' 1- ' 1@A10 ' &-' &' &? ') ' & A' D1' , '-.9 #1' 1' ' CC< 1-' &' D1' 0<>1' &? ' & A' D1' , '-.9 &' 0?BB11A' D'>' '-' D1' 0<'A' &K-9 1<@>0 <-A' "&>'-'&-09 &' D<+1' D1>' ' D' <@@ D1' CC? 1-<-B10 <= 1 ' D1' "1B1<01' &=' D1' 0<>1' &? ' & A' D1' , '-.G' &' D'>' <-A' D'0 1' 0' &=' D'0 &A ' #1j .& 1-';' -A' ' =' D1' A'1' K' D&? ' 1' ' &=' D'0 &A '#1.& 1-9 D1-' <@@ D1' 0<'A' &K-9 1<@>0 <-A' "&>'-'&-09 K' D' <@@ D1' CC? 1-<-B10 9 0D<@@ 1><'-' &' D1' & A' D&><0 9 1B&-A' &-' &='&? '0<'A' & A' D1' , '-.9 <-A' &' D1' 1' 0 &=' D'0 &A '#1.& 1-';' -A' '=' D1' A'1' K' D&? ' 00?1' &=' D'0 &A 9 D<' D1-' <@@ D1' 0<'A' &K-9 1<@>0 <-A' "&>'-'&-09 K' D' <@@ D1' CC? 1-<-B10 9 0D<@@ 1><'-' &' D1 & A' &D-9 D1' D' A' &-' &=' &? ' 0<'A' & A' D1' , '-.9 <-A' &' D1' ' 0 &=' D'0 &A '#1.& 1-';' -A' '=' D1' A'1' K' D&? ' 1' 9 &=' D'0 &A '#1.& 1-9 D<' D1-' <@@ D1' =# 10<'A' &K-9 1<@>0 <-A' "&>'-'&-09 K' D' <@@ D1' CC? 1-<-B10 9 0D<@@ 1><'-' &' D1' & A' ?>= 1 9 D1' !&? D' &-'&='&? ' 0<'A' & A' D1' , '-.9 <-A' D1' 1' 0' &=' D'0 &A '#1.& 1-

9 F D1 1<0' A'+1 0 ' !1&C@1' &=' D1' 1<@>'A&' @&01' 00?109 !'-109 <-A' >1 B'<>1- 0 '-' D1' &? '&='&? ' & A' D1' , '-.9 <' = 1' ?' '&=' P<-) ' < 9 <-A' <@0&' 00?10 <-A' '?< B'<>1- 0 '-' -H?10 0 <-A' ? '109 KD1 1'-' D1 ' #1' '>C<--1@@1A' #1 K'L ' < ' <-A' < ' '-' D1' 0<'A' &? ' ' KD1 1?C&-' D1' <'@'==0' &=' D1 '==0' <-A' D1' ' 1j B1'+1 09 <-A' D1' <'@'==0' &=' ! <-BD'010 <-A' D1' ' 1j B1'+1 09 KD'BD' .< D1 ' D1' . 11-' F <L9 A&' @1+ ' D1' 0<>1' 00?109 !'-109 <-A' >1 B'<>1- 0 '# ' 0 1< 0 01- ' & D1>9 <-A' A1@'+1 1A' &? ' &=' D1' @<B1' KD1 1' D1 ' K1 1' =& =1' 9 # ' &#0B? 1' <-A' <>#'.?&?0 F & A09 B&- <'-'-.' D1' ?>'0&'@&0 9 -& ' ><a'-.' >1- '&-'# ' 1LC 100 F & A0 &=' D1' <?01' &=' D1' &009 -& ' D1' "< ' &=' D1' 1 >9 -& ' #1 K'L ' KD<' < '109 -& ' D1' < ? 1' &=' D1' F ' ' '-' KD'BD' D1' 0<>1' 00?109 !'-10 <-A' >1 B'<>1- 0 ' K1 1' @&0 9 0&' D<' D1' 0<'A' ==' B1 0' A&' @1+ ' D1' ?>' K&' & ' D 11' '>109 <-A' 0&>1 '>1' D1' A&?#@1' ?>'/'4 B&- <'-1A' '-' D1' ' 0 1< 0 9 &' D1' . 1<' E '1=' <-A' >j C&+1 '0D>1-' &=' <@@ D1' 1&C@1';' ' '0 # A<'-1A' <-A' 10 <j #@'0D1A9 D<' D1' ?0 'B10 <-A' ?A.109 #1=& 1' KD&>' 0?BD' 00?10 & ' >1 B'<>1- 0 #1' & ' 0D<@@ #1' =& =1' 9 ' -' '>1' &' B&>1' 0D<@@ BD< .1' D1' @1 a0' &=' D1' 0 1< 0 ' -' D1' @<B10 KD1 1' 0?BD' 00?10 <-A' >1 B'<>1- 0 #1' & ' 0D<@@ #1' =& =1' 9 # ' D1' ' < D' &'#1' ><A19 0)' D<' D1 ' ><a1' D1' &@@0' &=' D1' 0 1< 0 &=' 0?BD' 00?10 <-A' >1 B'<>1- 0 A@0 '-=a@ '# ' 1LC 100 F & A9 &=' D1' <?01' &=' D1' &009 '&=' D1' 1 >9 &=' D1' 1< 9 <-A' D1' < ? 1' &=' D1' F '98 '< 'A' #1 K'L ' KD<' < '10 0?BD' 00?10 <-A' >1 B'<>1- 0 #1' & ' 0D<@@ #1' @&0 9 <0 K1@@ '-' D1' , ''-./0 ?' 9 <0' '-' D1' ?' '&=' D1' < ';' -A' D<' D1' < ? 1' ><A1' '-' D1' '>1' &=' , '-.' AK< A' D1' D' A9 D1' K & <-A' =& '1 D' 1< ' &=' D'0 1' .-9 =&'0.< D1 '-.' &=' E 11-' F <L' #1' D&@A1-' <-A' a1C ' '-' <@@ &' - 0

' @'@9 1B<?01' D<' KD1-' A'+1 0 1 0&-09 #1' -.' "1# & 09 #1' B '-A1>-1A' &' D1' ' 1A' & 0' # ' A?1' &B100 &=' D1' <K9 <-A' B& >>' 1A' &' '0&-9 D<' '0' &' 0< 9 &' D1' E<&@0' &=' D1' < 0D<@01<9 , '-./0' 1-BD9 !@11 9 <-A' /)' 9

¿' % h " '5'8' 6 <%$"M* ' "
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!' 6.+#' . ' 2 "! 2' 220!2' B&-!2' C#'2 +# #.- &-'3 "k &#0+ "2' . ' !' 02!' . ' B." !& 0"!

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+K!' 0 !' 5' ^/7 ' ' # ' .0# &-*' * !"&-*' . ' *"!!-' #.- &"1!/

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& D1 ' '0&-0 '-' A'+1 0 F 10 & &?.D <-A &K 0 K' D'-' D1 1<> D1 F< A1-0 &=' D1 E<&0 <-A 'j 0&-0 <=& 10<'A &=' D1' ' &K-' ? D& ' A&' 1 D1 0<'A 1# & 0 &' .&'< ' <.1'< ' D I ' F ' -A' F D1 1<0'# ' < < ? 1' ' ' F<0 & A<'-1A ' D< ' '=' <- ' E<&1 ' A&' a ' 0?BD '0&-1 ' &' .&'# ' <'-C '01 & ' '-' <' D< ' D1-' D1 1 0&-' &' F D&>' D1 '0&-1 ' '0 B&-A1>-1A ' D< D<+1' D'0 = '&-'<-A' 1B&+1 '<.<'-0 ' D1' 0<'A' E<&1 D1' 0<>1' F < A1-0' A&' C? BD<01 &' D1>' D1' , '- . 0' & 1= &D KD1 1# ' D1' 0<'A' 1A' & 0'# ' D1' 0<>1' &' 1=' &-'#1' A1 <-A' A1=1 1A' = &>' D1' ' ` " ? '0 <-A' '.D =? 1B&+1 0 <0 K1 <.<'-0 ' D1' 0<'A' F < A1-0' &=' D1' 0<'A' E<&0 <0' <.<'-0 ' 0<'A' '0&-1 0 &' D1' 1< ' " <>.1' <-A' 1 ? I 1' &=' D1' B&>>&-' 1&C1 <-A' " 1 &.< '&-' &=' D1' &>>&-' <K ;' '0' & A<'-1A' <-A' 10 <#'0D1A D< ' -&' & 1= &-' #1' <+<'<#1 -& ' # ' <- ' 1<-0' <&&K1A' '-' ?BD' <01

' 0 & A<'-1A' <-A' 10 <#'0D1A ' D< ' D&-1' ' D1' <0 10 <-& 0 <-A0 1-1>1-0 ! 110 A+&K8 0&-0 -& ' -&' C< B1 &=' D1' 0<>1 KD1 1&=' 1- ' 1 B=1 <' < &=' & D?>#1 <-A <-A' D&><0' <' & A' &=' < A&=K1 1' 0 '01A' & ' ' &=' D1>' K<0' 01'01A' &'- ' K' D' & D1 & ' &-& ' # ' D1>01&+10 & ' `&=' <- P' &=' D1>&-& ' # ' D'>01&= &=' D1' !1&==>1-' &=' & D1 ' &' <-& D1 /0' 01 & ' =& ' D1' . 1< ?0 ' D< ' D1' ' !1&==&? 0' D<A' &' D1>' &' A&' & ' C1 =& >' D1' ' F '0 <-A' KD1 1&=' D1 ' K1 1' -& ' '-=1&==1A' &' #1' '-D1 ' ' &' D1' ' &K-' 01 #? ' &' C1 =& >' D1' F '0 <-A' D1' !1&==&? 0 & ' D1' F '0 <-A' D1' &=' D1' !1&==&? 0' &=' D1' ' !1&==&? 0 `D&K0&1+1 /P' 0?BD' !1&==>1-0 #1' ><A1' # ' !'-1' & ' & D1 K'01 K' D&? '0D1Kj '-.'<- ' " 11A' C &+'-.' D1' &-A'A&-0D<0 #1' '-' <- ' K'01' 01'01A' '- &' D1' <-A0 &=' &? ' S) &+1 1'.-' & A' D1' , '-.' -& ' =& =1' ' &' D' >;' -A' '=' <- ' E' = 0' & ' E <- 0 #1' ><A1' # '&? '0<'A' &+1 1'.-' & A' D1' , '-.0 &=' D1' 0<'A' <0 10 <-& 0 <-A0 1-1>1-0 ! 110 <-A' A+&K0&-0 &=' KD'BD' D1' 0<'A' < A&=K1 1' & ' `&=' D1 /P' 0<'A' & A' &=' < A&=K1 1' & ' <- '&=' D1>K1 1' & ' K<0' # ' D1>01&+10 & ' 01+1 <0 ' '-D1 ' <#1' # " 10B1- 0 & ' # ' '.D =? ? j BD<01 & '&=' KD'BD' <- ' & D1 ' K1 1' '-=1&==1A' &' - ' K' D' D1>' & ' & D1 ' &-' &' D1' ' 01 # ' !'-1' & ' '-' <- ' & D1 ' <--1

' 0 & A<'-1A' <-A' 10 <#'0D1A ' D< ' -&' 1 j 0&-' 1' .'&?0' -& ' 01B? 0 &=' KD<' 0 < 1' & ' &-A' '&-' D<' D1' #1 # ' &&? '&=' <- ' ?0 0' B&- <'-'-.' 0?BD' 'j +'1.1' &' #1' A'0BD< .1A' &=' " '0>10 C1 '-'-.' &' < '0D' D? BD10 1#1-A0 &0C' <0 & ' 'B< <.10 C? j BD<01A' #1=& 1' D1' !' 0' 1< ' &=' , '-.' 'BD< A' D1' 1j B&-A' <= 1 ' D1' &-H?10 ' & ' 0' D1-B1 -& ' 1L1B? 1A 0D<0 C? ' '-' L1B? '&-' <- ' 0?BD' ?0 0' 0& C? BD<01A & ' <- ' 0?BD' ?0 0' &' #1'C? BD<01A' '-' '>1' &' B&>1' -A')' '=' <- ' 0?BD' 1' .'&?0' & ' 01B? <' 1 0&- &=' KD< ' 0 < 1' & ' &-A' '&-' D1' #1 = &>' D1-B1=& D' # ' &&? ' &=' 0?BD' ?0 0' A& &?#1' <- ' 1 0&-' &=' & D? BD 1#1-j A< 10 F < A1-0' &=' &0C' <0 & ' 'B< 0 0& D< ' D1 ' B<--&' <a1' & ' 1- & ' D1' " '0>10 A?1' & ' C1 <'-'-.' & D1>' &=' D1' ' 0<'A' ' 1-1='B10 D< ' D1-' 0?BD' " '0 ? #1 ' 0D<0 '-B? ' ' a1' &B100' <-A' <'-' <0 '0 & A<'-1A' # ' D1' < ? 1' ><A1' <.<'-0 ' D1>' &=' D1' A1 ' &=' '0 1<?L '-' D1' 1B&-A' 1< ' &=' D1' 1'.-' &=' &? ' 0<'A' & A' D1' , '-.' D< ' -&K ' 0

0#7) 8 * $"1 ' #

0 D1)

A' /010' ' 110' '0 1 ' P' ? .='0' K 0 ' 1' &a >1 10' E< A& a' A10' E<&0 10' I ' C '0&-10' 0?'0A' \' A1' 1? ' CC 1' <?=0& ' 1' 1001- ' 10' A1 &? 0' 0?'0A' \' <1 ' <' <.1' <' 1? ' +&?- 1 1 ' <' &?' C' 10 < ? ' 10 ' & A '.-1' H' 0" <?B?-1' E<& 1 ' 1001 &' ' '1e C '0&-1 ' <1 ' <' <.1' C' ><'-C '01' &?' 1-' #<'1 H<A&-H10 <' C0&-1' 1-, 0' H" 1' A' ' C '0&-1 ' 10 &' ' B&-A1>C-1' < #' ' 0<' <BB&-1' I ' 1B&+1 ' 1-C0 1' A' ' >10>10 B1?L' E < A 10' C? BD<B1-' <' 1?L >10>10 C 1BB'&D' A?' & C1-B ' H' 10 1A' &? 0' 0'?0 A' \' C' B1 10 C 1BB'&-0' 0&-' A1 <'1\' I ' < '1\' A1' 1? ' A?1 # I ' A &' ? 1 1' CB&1 1 0'#-' 10' A' \' E< A1'-0' A10' E-&10' B&>1' 10' C '0&-0' 0?'0A' \' <' R0' .3-A' C ?A'B1' I ' A<><.1' A1 &1' C&1C1' I ' A1 &.<B'&-' A1' <' B&1' & ' ; A1'.-1\' 10 ' I ' 10 <#'\' H' -? C 1BB'&-' 0&' +<?<#1' -1' <&&?<#1' -<B?-1>1-' <&&?1' 1-' '1 B<0

1>' # A1'.-1\' 10 ' ' 10 <#='\' H' -?0 A10' ED<0 1 L ><-&' 0 R 10 1- 0 =110 <A+&K10&-0' -1' -?1' CB1 A'B1 10' A10' H?1?L' 1- ' 1 B ' <A 0' &-' A# & D ?>#=' #-' D&><0' <A 0' ' 1' A1' < A& =' 10 &'1-' 01'01\ &?' <0E?-' A1' 1?L' 10 &' ' 01'0" &'- 1>1-' &+10H <? 10' &?' 0&?1>1-' C' 1?L' >10>10' &?' <?B?-1' A1' 1?L' 0&?1>1-' C' 1' >10>10' A1' =1==1>1-' A10' <? 10' <' <? " &1C0 &?' C' <' .-A' <=='<-B1' '.1- \' H' 1?L' 1-=1&==1 1-' <+&'1-' <' 1?L' A1' =<' 1' &?' C=&?>=' &? 0' +&1?- 110 1' A&-' '0' -1' =? 1-' 1-=1&==1\' A10 1' 1-F 1\' <' 1? ' CC 1' &1C0 >10' A1' C=&?>' ' <' +&?C 1' A1' &? 0' =1&==&? 0 &?' <' +&1?- 1' A10' =1&==&? 0' A1' &? 0' =1&==&? 0 B&>=1-' H' '1 L' =1&==18 >1- \' 0&'1-' =1' \' C' = -' &?' <? 1>1-' 0<-\' >&-0 1' =<' ' C+ &' <' B&-A'B'&-0 0&'1-' &?' &' '<0B?-1>1C' 01'01\' 1-' 1' ><'-0 -=1' `A' P' 1' 1' &' '-1' <? '=& =<' \;' ' <0B?-0 A&-0' &?' .?-10 0&'1-' =?10 C' -=1' A' ' B' 1' & ' A10 A' \' D<0 1 L 0 <-&' 0 R 10 1' 0 =110 ?' <A+&K10&-0' &?' A<0B?-' CB1 A'B#10 <' =1 >1' &?' <?R >1-0 H' '1 L' A&-0' &?' .0-10 0&'1-' A1' &?' &'A10 I ' A1' -?1' +<?1' <' &?\' &? 0' ? +1?L' &? 10=&' 1' H' -=1' A' ' ' 1' & ' <' ' <' =& =1' 1' A1 ' D<0 1 L 0 <-&' 0 R 10 1-\0 =110 I ' <A+&K10&-0' A10' H?1 L' 10' A' \' -<A.<' 0' &-' A1' & D?>#=0 &?' 1' A' ' 1' A1' < A&=-0 &?' <0B?-' A1' 1?L'=? 1-' &?' =?' ' C' 1?L' >10>10' ?' 01, <8 >1-' 1-D1 ' <#10 `&?' 1-D1 ' <#1 P' C' A10B1-' &?' C' A &' ' C BD<B1 &?' A10' H?1]' <? 10' =? 1-' 1-=1&==1\' &'-' &+10H 1?L' & ' <? 0' 0&?1>1-' <' 1?' &1C0 C' B> ' &?' 1-' <? 1' >< 1' H?1 B&-H

1>' & A1'.-1\' 10 ' I ' 10 <#'\' H' -?1' C0&-1' 1' '.&?01' &?' 01B?1 ' A1' H?1 10 <1' &?' B&-A'B'&-' H' 0&' ` H ' P' C' B& &?' A<0B?-1' ?a0' B&-1-<-\' 1 C '+'1.1' A10 1' H?' 1' A10' " '0>10' <CC/1-<-B10' <0' 0.'010' C< &BD'1 L C#1-'10 &0C' <0' &?' 'B< '10 A1F-' <-' A?' 1.-1' 1' & ' 'BD< A' 01B&-A' C?'0' 1' &-H?10 ' C ' 1' &?' A1C?'0' C? BD<B10' -'1-' 1L1B? \' >1 1' 1-' 1L1B?B'&-1' <?B?-0' '1 L' #?a0' 1-0" C? BD<B10' &?' <0B?-0' '1 L' ?a0' <CC?'8' BD<R0' 1-' 1-'C0' <A+1-' ' ' H' 0" A10& 1' -?1' 1 C0&-1' 1' .'&?01' &?' 01B?1 ' A1' H?1 10 <1' &?' B&-A'B'&-' H' 0&' ' C' B& &?' A1' '1 0' ?a0' A10 &? #1' <0B?-0' C0&-0' A1' <-' 0.'01 C#1-A1 0 E< A1'-0' A10' &0C' <0' &?' 'B<' 10 C1-0 H' 0' -1' C? &-' P A 1' -1' 1-&'1' 10' " '0>10' < 1?L' A?1\' &?' 1.<A<-\' A1' & 0' A' \' #-='110 H' A1 A10 &? #&?' 1-B&? .1' <? '1 L' C110' I ' C1'-1' B&>1' 10' & A1'.-1\' C' 10 < ? ' '<' ' , 0' B1?L' A1' & A 1' A1' '0 1?L' <-' 01A1' -=1' B? 1' & ' H& 10

-!'+&-!/'.-' !' 6.+ ↑S&# # ? ! (

1 >' C? ' B1&' H' @1Ø &?0 > D1Ø =&- ' C@ 0&? Ø 10 1Ø A1' 01 1Ø I ' H?< 1@L' A1==1A'=Ø -'1- ' #-' -1' @&'<@>1- ' -1' A1==1-0<#@1>1- ' < . ' C'@@ I ' A10B1' ' AC' C&1C@1' I ' A1' &? ' @1' &'<@>1'G A1' . -1\' 10 ' I ' 10 <#@'\' H' &? \' @1Ø 10 1Ø A1' 01 1Ø I ' H?< 1@Ø A10& 1' 1-<+0- ' <==<' Ø 0&'1-=' #&'@@1Ø &?' # <01Ø I ' A? 1Ø' < @<' C&' - ' A<001 ' ' 1 ' 0" <0B?-' A1Ø A' \' &?0 > D1Ø @1Ø =<B1- ' < B& - = '1' H'@Ø =& 0@ =<B1- ' &? 1Ø =1@L' 10 1Ø I ' H?< 1@Ø <?' & ⁋ I ' 0&'1- ' 1-C '0&-1\' ' ' 1- ' =<B1- ' @ -' < @<' +&@?>1' A?' & ;' ' H' BD?-' 10 1' A1Ø 01 1Ø I ' H?< 1@Ø 0&' ' 01' . -1' A?-1' 0' . -1' A1' B1@? ' H ' @1' ='0 G 1 ' 1'1- ' @1Ø ?0 'B1Ø A1' @< 11Ø 1-' B , ?-' &?- 1' " 1 - . @1R 1⁋ I ' <?L" @1Ø <' Ø '0B&- 1Ø I ' <'@@'=Ø A1Ø ' 11Ø I ' ? . DØ⁋ A1' -\' >10>1Ø @1Ø ' 11Ø I ' ? . DØ⁋ C&<' ' A1-H?1 ' A1Ø &? \' '1?L' =<?L' =10&? Ø A1Ø 10 1Ø I ' H?< 1@Ø I V AH' @1Ø C?-' ' C' >< 1' B&>1' A100?'Ø 10 ' A'

1 >' C ' 10BD?' ' C@?0&? Ø A'0B1-B'&-Ø A'0B A1\' S f A1#< 10⁋ I ' A'1010Ø <? Ø >10BD'1=Ø < 01>#@<#@1Ø < 0&? A 1' I ' <+1-' ' < B<?01' A1Ø C@?0&? Ø C+'0'&-Ø =<' \' I ' <==<' 1' C' @<C&0 &''=⁋ I ' <?L" < B<?01' A1Ø @'B1-B1Ø 0? ' B1' .0- 1\' C' @1' &" -=1' & <' . -1' ' A1' . -1\' 10 ' I ' 10 <#@'\' H' -?@' '1é @'B1-B1' &?' CA&-' <'-0" . ?- 1' A1+D' ' 01Ø D1'' 10⁋ -1'< .0- '1 ' 1-' 1>CØ <A+1-' ⁋ -1' 0&' ' +<'@<#@1' < <0B?-1' #-='B1' C@1'-' A<?B?-' '-B?>#1- ' < &? ' A1' @< A< 1' A1' '1@ @'B1-B1' &?' CA&-1' .0- 1

1 >' B&>1' < @< . 1+&?01' B&>C@1'- ' A1Ø A' \' &1Ø =<' ' 1-' C@1>1- ⁋ 0&' ' >&-0 1\' B&>1- ' A<-B'1-' 1>CØ ?01\' 10 &' ' I ' <B&?0 ?>1\' H' 0'#-' @1Ø " <CØ' I ' 1-A& ' A1Ø A <CO⁋ A1' H?1B&-H ' @'1?' A1' &'<?>1' 1C<' <- \' I ' B&-=@?<- \' <@ 9 ' 11' A1' &?-A 10' B&>1' <?RØ' ' BD<- \' &+1' A'C01Ø I D<-A'010' B&>1' A1' -1⁋ =11 ⁋ &'@1⁋ I ' B1 1' I ' <? 10' BD&010' <CC? 1-0- Ø <Ø ' BD<-A'010⁋ 1L I 1<- \' I ' 1C<' <- \' I ' B&-=@?<- \' <@ A' 1' ' 11⁋ &- ' <BD< ?\' I ' +1-A?\' 1-' . &Ø 0'#-' &+1' <@'1-Ø B&>1' A1'-⁋ \1'-Ø A1' @1Ø A <CØ' I ' <?0 ' I D<-A'010' i?'0A' \' < &? ' +&@?>1' I ' C@1'01 ⁋ C<'<- \' 1-' B1@@1' C '1' <- 0&?@1>1- ' B?0 ?>10' I ' <? 10' A1+&' Ø 1- ' 10&-<#@1>1- ' A?1\G I ' -HØ C' >10>10' @1' 1>CØ -1' =? &- ' A10 &? #1\' &?' 1-' <0B?-1' >< 1' ' >C1A1\' A1' +1-A 1' &?' <BD< 1 ' 1-' . &Ø &+1' BD< \'<@'1-Ø &?' A1-\1'-0⁋ A1' A1@L' A <CØ' I ' '5BD<-⁋ A'010' < @&? ' '+&@?- 1' I ' C@1'01 ' >10' 0&?@>1- ' < 1 <'@@;' ' < 0&'1- ' 0'#-' @1Ø A \' " <CO' B&>1' @1Ø <? 1 Ø @,BD<- \' 0?'0A' \⁋ C' @1Ø <' ' '0B&?- Ø @A1 >< '>10' " <CØ' I ' < BD<- \' A1' &?-A 10⁋ A10 &? #1\' A1' &? ' 1-' <? 1' A1' +1-A 1' I ' <BD< 1 ' 1-' *< ><51' 0?'0A' ' 0'#-1 1-' . &Ø B&>1' < 1 <'@@⁋ I ' . 1+&?01>1- ' I ' B&- '-?1@1⁋ =-1- ' B&-0 1'- \' A1' +1-A 1' @&? ' A <CO' I ' ' BD<-A'010' 0?'0A' \' <>0H?@1>1- ' <Ø I D<- \' I ' <? 10' 1-D<#' <- \P @< A' 1' ' 11⁋ < 0'-.?@1 ' <+D <.1' I ' C=' A1?L' A1' &?-j A 10' I ' 0'#-' B&1' A<><.1' I ' CA1' A1Ø !' 10C?1@L' I d 1>C& 1@L' I ' @1Ø &10' A?' &'<?>1' B&>1' A1' @1Ø A \' " <CO' I ' BD<- \' 1-0" . 1+1\⁋ I ' 1+'A1- ' 1-0<>C@1' I e &BB<0'&-' <Ø A1@L' " <CO' I ' ='BD<- \' 1-0" . 1+1\' A1'@&? ' 1 <'D1 ' A1' @< A' 1' ' 11' 1-<+Ð' ⁋ 0" =1>1A1' -1' " ' C? +1?' @1' C@?'Ø &Ø ' 1-' B(0 ' C '1;' A1' . -1\' 10 ' I ' 10 <#@'\' H' 0'#-' @1Ø " <CO' I ' 1-A& Ø A1Ø " <CO⁋ B&>1' <? 10' ='BD<- \' &+1' @&? ' A'1010' ='BD<-A'010' B&>1' A1' + -1⁋ =1 1⁋ 011@⁋ I ' B1 1' I ' <? 10' BD&010' <CC 1-0- \' <Ø ' BD<-A'010⁋ 0&'1- ' = <- m' A1'+1-A 1' ' . &Ø @& ' A <CO⁋

⁋ 1B<?01' D1' & F 0>' DØ' A&' ><a1' >< - ' =<?@ ' 1<AØ'=& ' &KØ'<-A' ^?< 1@⁋ A1=1= '+1⁋ -& ' K1@@⁋ -& ' `P@<K=?@ ' -& ' `A 1=1-0 '#@1⁹ &' D1' . 1<' 1&C< A ' <-A' " 1B1' ' &=' D1' 1&C@1⁋ <-A' &=' D1' KD&@1' 1<@>G ' 'Ø & A<'-1A' <-A' 10 <#@'0D1A ' D< ' <@@ D1' 1<AØ' =& ' &KØ' <-A' ^?< 1@Ø' <= 1 ' D'Ø ' >1' &' #1' ><A1⁋ 0D<@@ #1' `K 1@@ #&'@1A'/P' & ' # <01A⁋ <-A' D< A1-1A' < ' D1' &'- Ø K' D' 11@G <-A' '=' <- ' &=' D1' 0<'A' >' DØ' A&' ><a1' D1' B&- < ⁋ D1 ' 0D<@@ =& =1' ' <@@ 0?BD' 1<AØ' <-A' ^?< 1@Ø' &' D1' , '- .⁋ <-A' 0D<@@ #1' <@0&' '>C '0&-1A⁋ <-A' ><a1' < ! ' -1' < ' D1' , '- ./Ø F ' @@G -A' D< ' 1+1 ' &KD1<A' <-A' ^?< 1⁋ #1' >< a1A' K' D' D1' < a' &=' D' >' D< ' ><A1' D1' 0<>1' G -A' D1' ?0 'B1Ø &=' 1<B1' ' -' 1+1 ' &?- ' &=' -.@<-A⁋ <-A' <@0&' D1' ` < & < - A' D1 '=0⁋ <-A' <'j @'=Ø &=' ' '1Ø' <-A' & &?.DO⁋ K' D' -' D1' 0<>1' ' '1Ø' <-A' & &?.DO⁋ 0D<@@ D<+1' &K1 ' &' 1-H?' 1' &=' <@@ 0?BD' A1B1' =?@ <a1 Ø &=' 1<AØ' <-A' ^?< 1@0⁋ <-A' &' C?-'0D' D1>' <Ø <=& 1' '0 0<'A

⁋ &' 10BD1K' ><- ' " '001-0'&-0⁋ " '0B& AØ' <-A' " 1#< 10⁋ <-A' A'+1 Ø & D1 ' '0BD'1=Ø +1 ' @'a1' &' '01' <-A' . &K' #1B<?01' &=' ><- ' &+'0'&-Ø ><A1⁋ <-A' &' #1' ><A1' # ' D1' &C1⁋ <-A' <@0&' '-' 10C1=' &=' 'B1-B1Ø . <- 1A' C&-' D1' 0<>1'# ' D1' , '- .'&? ' &+1 1' .-' & A'G ' 'Ø & A<'-1A' <-A' 10 <#@'0D1A ' D< ' -&' 'B1-B1' & ' < j A&-' 0&' . <- 1A' #1=& 1' D'Ø ' >1⁋ '& ' &' #1' . <- 1A' '-' ' >1' &' B&>1⁋ 0D<@@ #1' <+<'@<#@1' &' <- ' 1-1='B1' =?@@ &='<- ' -B?>#1- ⁋ < ' D1' " < ' &=' D1' " < 1' &=' 0?BD' 'j B1-B1' & ' < A&-' . <- 1A

⁋ F D1 1<Ø' < ' D1' . '1+&?0' &>C@<'- ' ><A1' # ' D1' &> >&-Ø '-' D1' 0<'A' < @'<>1- ⁋ ' ' 'Ø 0D1K1A⁋ D&K' D< ' '-' &@A' ' >1' ' ' K<Ø ?01A' <-A' <BB?0 &> 1A⁋ D< ' <Ø K1@@ D1' @& D8><a1 Ø <-A' " <C1 R' &=' KD< 0&1+1 ' @<B1' &=' D1' 1<@>⁋ 1C<' '-.' <-A' D<+'-.' 1B&? 01' &' D1' ' '&=' &-A&-⁋ <Ø & D1 ' 1 BD<- 0⁋ K' D' A'+1 Ø 1 j BD<-A'010⁋ <Ø F ' -1⁋ &-⁋ '@⁋ <-A' F<L ' <-A' & D1 ' D'-.Ø C1 <'-'-.' & 1 BD<-A'01⁋ 1L1 B'0'-.⁋ 1C<' '-.⁋ <-A' D<+'-.' 1B&? 01' &' D1' 0<'A' ' ⁋ D<+1'#&?.D ' <-A' 0&@A' '-' E &00⁋ <Ø F1@@ K' D' @'1-Ø' DØ K' D' " 1-'\1-0⁋ &=' D1' @& DØ' <-A' & D1 ' 1 BD<-A'010' <=& 10<'A⁋ < ' D1' ' F '@@ <-A' @1<0? 1⁋ C< '-.' '-' D'Ø 1D<@=' &-@ ' D1' ?0j &>Ø <-A' & D1 ' ` " 1+&' 0OP' D1 1&=' 1<0&-<#@ 'A?1G <-A' -1+1 ' '-' <@@ D1' 0<'A' '>1' K1 1' A'0 ? #1A' ' '-' <- ' <--1 ' D'-A1 1A' &' 01@@ & ' #? ' '-' E &0Ø' K' D' 1 j BD<- 0⁋ @'1-0⁋ & ' " 1-'\1-0⁋ &=' 0?BD' @& DØ' <-A' 1 j BD<-A'010⁋ < ' D1' ' F '@@ <-A' @1<0? 1⁋ #? ' &-@ ' &' 1 <@1' ' -A' -&K' &=' @< 1' <Ø K1@@ D1' 0<>1' @& D8><a1 0 '<Ø' & D1 ' D1' 1 BD<- Ø <=& 10<'A⁋ # ' D1' < & ⁋ D1 '==0⁋ 'A1 8' >1-⁋ " <C1 0⁋ <-A' 1 BD<- Ø' &=' &-A&-⁋ #1' A<'@ ' A'0 ? #1A' <-A' @1 ⁋ &' 01@@ <-A' #? ' '-' D1' <--1 ' <=& 1j 0<'A⁋ <Ø K1@@ '-' E &0Ø' <Ø' '-' 1 <@1⁋ <-A' . '1+&?0@ ' <-A' B&- '-?<@@ ' B&-0 <'-1A' &' 01@@ D1' ' 0<'A' @& DØ' <-A' 1 BD<-A'010' &-@ ' &' D1' 1 BD<- Ø' <-A' A+<- <.1' &=' D1>' &=' &-A&-⁋ <-A' <@0&' &' D1' 5 -' "<><.1' <-A' &00' \&=' D1' & AØ' C' ' ?<@ <-A' 1>C& <@⁋ <-A' D1' &>j >&-Ø' C=' D'Ø 1<@>⁋ <Ø' &=' D1' 0<'A' @& D8><a1 Ø' <-A' 1 BD<- Ø' 0&' . '1 1A⁋ <-A' <' C@<'-' -0<>C@1' <-A' BB<0'&-' &' 0?BD' @& D8><a1 Ø' <-A' 1 BD<- Ø' 0&' . '1+1A⁋ &' K' DA <K' D1>01@+10' = &'- D1' 0''A' ' ' = &>' D1-B1=& D⁋ '=' 1>1A '#1' -& ' ` < D1 0P' C &+'A1A' '-' D'Ø 1D<@=;' =' '0' & A<'-1A' <-A' 10 <#@'0D1A' D< ' <Ø K1@@ D1' " <C1 Ø' <-A' @& D01@@1 0R' <Ø & D1 ' 1 BD<- 0⁋ K' D' A'A ' 0?-A ' 1 BD<-A'010⁋ <Ø &=' F '-1⁋ &-⁋ ` '@:(' <-A3 F <L⁋ <-A' & D1 ' D'-.Ø C1 <'-'-.' & 1 8' BD<-B , 10⁋ 0D<@@ #1' = 11' &' 01@@ '-' E &0Ø' D1' ' @& D0⁹

U "! 7+@' ' ! ' 5 ' '#? @1A' ' ! ' 6 K , # ħ D1 ' ' "'5

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W +. &!"2' -/' . !"2' 1 @' 2!+' !&" V "!2' &-' b". 2 2' .' +' 3!"2. -2 -. k 7& 2 -/&-*' -@ " -L' # 2!$. ' &- &-"5 B

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&-ł <-A’ F <Lł <-A’ & D1 ’ DA ’ 1 BD<-A’010ł <0’ K1@@ Q ’ <@ ’ D1’ , ’- ./0 @’1.1’ 1&C@1ł <0’ &’ D1’ ’ ’\1-0’ &=’ &CA&Cł -& K’ D0 <-A’-.’ <- ’ ! <-BD’01’ & ’ ’#1 ’ . <- 1A’ &’ D1’ BC- <

’ F D1 1<0’ ’-’ A’+1 0’ < @’<>1- 0’ &=’ , ’- .’ A8’ K A’ A’1’’ D’ A9’ E <-A=< D1 ’ &=’ &? ’ &+1 1’. -’ & A’ D1’ , ’- .’ D< ’ -&K’ ’09’ ’ ’ K<0’ & A<’ -1A ’ D< ’ D1’ @& D’ &=’ < ’ 0D&?@A’ #1’ ’-’ 1-. D’ LL+’’ ’ < A09’ <-A’ ’-’ 1<A D’ + ’ ^?< 1 09’ <-A’ D1’ KD&@1’ B&@&? 1A’ @& D’ ’-’ 1-. D’ LL+ ’ < A0’ >1<0? 1A’ # ’ D1’ ` 1<0 ł WP’ <-A’ ’-’ 1<A D’ + ’ ^?< 1 0’ <-A’ <’ <@=ł &’ D1’ - 1- ’ D< ’ D1’ -1’ KD&@1’ @& D’ <-A’ D1’ & D1 ’ K< 1 1A’ <-A’ &K1A’ 0D&?@A’ #1’ ’-’ 1-. D’ LL’’’ ’ < A0@ <-A’ -&K’ D1’ <a1 0’ &=’ D1’ 0<’A’ @& D0 ’ A&’ ><a1’ D1>’ 0?# ’@@ ł 0&’ D< ’ D1’ @& D’ ? - -1 D’ B&- <’ -1 D’ LL ’ & ’ LL’ ’ A09’ <-A’ &=’ @100’ 1<A D’ # ’ >?BD’ D<-’ ’ ’ 0D&?@A’ D1ł ’-’ ’’1B1’ ’ <-A’ . 1< ’ ’’ < > <. 1’ &=’ D1’ B& > > &-’ 1&C@1’ &=’ D1’ 1<@ >’; ’ ’0’ # A 1A’ <-A’ 0 <#@’0D1A ’ D< ’ D1’ KD#@1’ B&@&? 1A’ @& D’ 0D<@@ B&- <’-’ ’-’ 1-. D’ LL+’’ ’ < A0ł <-A’ D1’ @& D’ &=’ < ’ <0’ > ?BD’ >1<0? 1A’ K’ D&? ’ ` A1=&’@’-.’0P’ D1’ @& D0ł <-A’ ’-’ 1<A D’ <0’ #1=& 1’ ’0’ & A<’-1A’ # ’ D1’ < ? 1 ’ -A’ ’=’ D1’ @& D > <a1 0’ = &>’ D1-B1=& D’ > <a1’ D1’ ’ @& D0’ &=’ @100’ 1-. D’ & ’ 1<A Dł D< ’ D1-’ D1’ 0<>1’ <a1 0’ 0D<@@ =& =1’ ’ D1’ @& D0ł KD’BD’ # ’ D1’ ?@-1.1 ’0D<@@ #1’=&?-A’ &=’@100’ 1-. D’ & ’ 1<A D’G <-A’ D< ’ D1’ ?@-1.1 ’ <a1’ D1’0<>1ł <-A’ A1@’+1 ’ D1>’ &’ D1’ F< A &#1ł &’ D1’ 01’ &=’&? ’ &+1 1’. -’ & A’ D1’ , ’- .

ł F D1 1<0ł ><- ’ &=’ D1’ , ’- ./0’ @’1.1’ 1&C@1’ #1’ <00’. -1A’ # ’ D’0’ &> > ’00’&-0’ &’ A&’ <-A’ C1 =& >’ D1’ &- 1- ’ &=’ D1’ 0<>1ł 0&>1’ &’ D1< ’ <-A’ A1 1 >’-1ł 0&>1’ &’ 1-H?’ 1’ <-A’ B1 ’= ł <-A’ & D1 K’01ł KD1 1# ’ D1’ 0<>1’ &> > ’00’&-1 0’ #1’. ’1+&?0@ ’ A’0 <’-1A’ # ’ &B100’ &? ’ &=’ D1’ LBD1H?1 ł # ’ 1<0&-’ &=’ D1’ 0<’A’ &> > ’00’&-0ł <-A’ # ’ D< ’ BB<0’&-’ A&’ @&01’ . 1< ’ 00?10ł KD1 1’ D1’ 0<’A’ &> > ’00’&-1 0’ A’A’-1+1 ’a-&K’&=’0?BD &> > ’0<&-0ł -& ’ D1’ 0<>1’ &> > ’00’&-0’ 1+1 ’ B<>1’ &’ D1’ ’ <-A0ł &’ D1’ . 1< ’ ’’ < > <. 1’ <-A’ ’-A1 <-B1’ &=’ >< - ’ &=’ D1’ , ’- ./0’ ?# 1= 0;’ ’’0’ & A<’-1A’ <-A’10 <#@’0D1A ’ D< ’ D1’ < &-0’ &=’ D1’ LBD1H?1 ’ 0D<@@ D<+1’ &K1 ’ &’ 1B1’+1’ D1’ < D’ &=’ 0?BD’ &> > ’00’&-1 0’ &=’ D1’ ’ LB?01’ <-A’ ’’0BD< .1’ &=’ D1’ 1B1’C ’ & ’ BB?C< ’&-’ &=’ D1’ 0<’A’ &> > ’00’&-0;’ -A’ <@0&’ D< ’ D1’ 0<>1’ < & ’0’ &=’ D1’ LBD1H?1 ł <-A’ D1’ ?0 ’B10’ &=’ D1’ &-1’ 1-BD’ <-A’ D1’ & D1 ł 0D<@@ D<+1’ &K1 ł # ’ F ’ ’ &=’ ’’1A’ > ?0’ & 108’ < 1>ł &’ 1B1’+1’ 0?BD’ < D0’ ’-’ D1’ &?- G’ <-A’ D< ’ D1’ 0<>1’ ?0 ’B10’ 0D<@@ D1 1&=’B1 ’= ’ D1’ 0<’A’ < &-0’ ’-’ D1’ LBD1H?1 ’= &>’ ’>1’ &’ ’>1G’ <-A’ D< ’ ?C&-’ D1’ 0<>1’ D1’ 0<’A’ < &-0’ 0D<@@ A’0BD< .1’ D1’0<’A’ &> > ’0j 0’&-1 0’G <-A’ ’-’@’a1’ K’01’ ’ ’ 0D<@@ #1’ A&-1’=& ’ D1’ 1’ 09’ L1B? & 09’& ’ <-A’ 1-<- 0’&=’ D1’0<’A’ &> > =B0’&-1 0;’ &+’A1A’<@K< 0 ’ D< ’0?BD’ < D0’ #1’ D& ’ <a1-’ #? ’ ’-’ <01’ &=’ &> > ’00’&-0’ &=’ 1 ’ <-A’ ’’1 1 >’-1 ł <-A’ &=’ -H?’ ’ <-A’ 1 ’’= ’-.’ &-@

ł ’’0’ A<’-1A’ <-A’ 0 <#@’0D1A ’ D< ł -&-1’ &=’ D1’ <-& 09’ <-A09’ & ’ 1-1>1- 09’ KD1 1&=’ &D-’ < @’ &=’ <@’0#? ’ KD’BD’ K<0’ #1D1<A1A’ <’ ’ B10 1 ł & ’ ’ ’ D&><0’ @&? - ł <-A’ <@@ & D1 ’ KD’BD’ K1 1’ <a1-’<’ ’ j B10 1 ł <-A’ # &?. D 9 &’ L=& A9’ & ’ & D1 ’ D< ’ K1 1’ ?A.1A’ <’ & 0’ ’-’ <- ’ & D1 ’ @<B1’ K’ D’-’ D1’ 1<@>’ &=’ -.@<-A9’ <= 1 ’ D1’ B& > ’-.’ &=’ &? ’ 0<’A’ &+1 1’. -’ & A’ D1’ , ’- .’ ’- &’ D1’ 0<’A’ 1<@>ł K1 1’ 01’01A’ & ’ <- ’ &=’ D1>’ K<0’ 01’01A’ &’- @ ’ K’ D’ & D1 ł & ’&-@ ’ # ’ D1>01@+10’ &=’ D1’ !1&==>1- ’ &=’& D1 ł &’ <-& D1 /0’ 01ł & ’ =& ’ D1’ . 1< ’ &-=’A1-B1’ D< ’ D1’ ’ !1&==C? 0’ D<A’ ’-’ D1>ł &’ A&’ <-A’ C1 =& >’ D1’ ’ F ’@@ł <-A’ KD1 1&=’ D1 ’ K1 1’ -&

) *’ ’; #E

’ ’ V’ !!’ ’ ’Q ’C4 ’ ’\’

=1 1ł `011@O@’ I ’ B1 1’ I ’ <? 10’ @& 0’ ='BD<-A’010’ 0= 0-’ <0’ H?1@LB&-H10’ @’1.10’ A?’ & ’ B&>1’ <’ @10’ ’ 1\1 -0’ A1’ &-A 10ł `-&-&#0 <- F ’ <@’B?-1’ = <-BD’01’ &?’ ’’=’ 110’ .W?- 1\’ <’ B&- 0 ’1

1>’ B&>1’10’A’, 010’C@1>1- \’A1’ ?’ ’-<A.<’ 0’ & ’ "1-.@1 1’ ’1A’ -=1’ = ’ @1’ & ’ H& 10 ’ 10 &’ ’ A<.-1\’ H’ @1’ A <C’ A1’ < ’ &’ ’ 1-’ @&-.? 1’ A1’ LL+’’ ’ ?@-10’ I ’ 1-’ @<1? 1’ + ’ H?< 09’ I ’ @1’ 1- ’1 ’ A <C1’ A1’ B&@&? 1’ 1?’ @&-.? 1’ A1’]L+’ ?@-10’ >10? 1’ C’ @1’ A& 01’ I b1<’ @<1? 1’ A1’ + ’ H?< C0’ I ’ A’9’ <?’ = -1 H’ @?-1’ A <C1’ I ’ @<? 1’ 1’’ ’1 ’1K1’ I ’ &-A?1’ &’ ’ 1-’ @&-.? 1’ A1’ LL’’’ ’ ?@-10’G’ ’ & 1’ @10’ =1’0&? 0’ A10’ A’ \’ A <C0’ =&- ’ @1? 0’ A <C0’ 0?#8’ ’@1>1- 9’ ’00’- ’ H<C1 -1’@1’ A <C1’ B&- ’1- ’ LL ’ ?@-10’ &?’ LL’ ’ ?@-10ł I ’ A1’ >1’-A 1’ @<1? 1’ H’ -1’ M &’ ’ C’ .W- ’ C ’1ł 1-’ A10B1’ ’ I ’ <’ . A’ A<>.<.1’ A?’ B&1’ C&1C@1’ A?’ &’<’ >1G’ A 1’. -1\’ 10 ’ I ’ 10 <#@’\’ H’ @1’ A <C1’ A1’ B&@&? ’ B&- 1’. -1’ 1-’ @&-.? 1’ LL+’’ ’ ?@-10’ I ’ @1’ A <C1’ A1’ < ’ < <-’ >10? 1\’ 0<-\’ A1==&@1 ’ @10’ A <C0’ I ’ 1-’ @<1? 1’ B& > 1’ A1+/-=’ 10 ’ & A1’. -1\’ C’ 0 < ? ’ ’ 0’’ @10’ =10&? 0’ A10’ A <C0’ =<B1- ’ A10& 1’ @1? 0’ A <C0’ A1’ >1’-A 1’ @&-.? 1’ &?’ @<1? 1’ H’ >10>10’ @10’ =<’0&? 0’ =& 0=1B1- ’ @10’ A <C0’ H’ &- ’ &+1\’ C’ @<?@-1&? ’ A1’ >1’-A 1’ @&-.? 1’ &?’ @<1? 1G’ 1 ’ H’ @<?@-1&? ’ @10’ . - 1’ I ’ @10’ A1@’ 1’ <@ E< A1 &#1’ <@ &1C0’ A1’ >10>1’ -=1’ ’ @1’ &

1>’ B&>1’ C@?01? 0’ A10’ @’1.10’ -=1’ ’ @1’ C ’0&’1- ’ <00’. -1\’ C’ @10’B&>’00’&-0’ 2’ =<’ 1’ I ’ C=&?>’ ’ @<’B&- 1-?1’ A’B1@@10ł <?B?-0’A&’1 ’ I ’ >’-1 ’ I ’ <?B?-0’ AA@H’’1 1’ I ’ ’=’1 ’ I ’ <? >1- 9’ C1- ’ >10>10’ @10’ &>’00’&-1 0’ 0&- ’ . 1+&?01>1- ’ B&-0 1’- \’ C’ C110’ D& 0’ A1’ @10BD1H1 ’ C’ B<?01’ A10’ A’ \’ B&-’’00’&-0ł 1 ’ C’ B1@@1’ B<? 1’ CA&- ’ .0-A10’ ’00?10’ @<’ &?’ @10’ A’ \’ &>’00’&-1 0’ ?-H10’ -R’ =? 1- ’ 0<BD<- \’ A1’ ’1@L’ &>’00’&-0ł -1’ ?-H10’ >10>10’ @10’ &>’00’&-0’ A1+’1-A &- ’ 1-’ @&? 0’ ><’-0’ <’ . -A’ A<>.<.1’ I ’ A’01<01’ A10’ C@?0&? 0’ A10’ @1’.10’ A?’ & ’ A1’ 1\’ 10 ’ I ’ 10 <#@’\’ H’ @10’ < &-0’ A1’ @10BD1H1 ’ <’1- ’C&<’ ’ A1’ 10B1’+1 ’ @10’ >1- \’ A1’ ’1@L’ &>’00’& 0’ A1’ @1? 0’ 1LB?0<B’&-’ I ’ A’0BD< .1’ A1’@<’ 10B1’ ’ &?’ &BB?C<B’&-’ A1’ ’1@L’ B& > ’00’&-0;’ ’ <?L’’ H’ >10>10’ @10’ < &-0’ I ’ @10’ ?0 ’B10’ A1’@?-’ <-B’ I ’ A1’@<? 1’ <’1- ’ C&<’ ’ C’ =11’ A1’ A1A’ > ?0’ C& 10 < 1>’ A1’ 10B1’C’ ’1@L’ 1>1 \’ 1-’ C<@’09ł a ’ H’ >10>10’ @10’ ?0 ’B10’ 1- ’ ’=’1- ’ @10’ A’ \’ < &-0’ 1-’ @10BD1H1 ’ A1’ 1>C0’ 1-’ 1>C0G ’ H’ 0? ’ B1’ >10>10’ @10’ < &-0’ A’0BD< .1- ’ @10’ A’ \’ & > ’00’& 0G 1 ’ 01>#@<#@18’ >1’’ ’ 0&’ ’ =<’ ’ C/’ @10’ D1’ 0’ 1L1B? &? 0’ &?’ 1’ 1-<- \’ A’B1@@=10’ & > ’00’& 0;’ ? +1?L’ &? 10=&’ \’H’ ’1@L’ 1>1- \’ -1’ 0&’1- ’ C ’010’ >10’ 1-’ B<0’ A1’ & > ’00’&-0’ A&’1 ’ I ’ >’-1 ’ I ’ A1-H?1 ’ I ’ ’=’1 ’ <- 0&?@1>1-

1>’ & A1’. -1\’ 10 ’ I ’ 10 <#@’\’ H’ -?@@ A10’ <-&’ 0’ 10’ &?’ 1- \’ A10’ H?1?L’ &D-’ -<A.<’ 0’ &?- ’ A1’ <@10ł #’ 0’ H’’ =?’0 ’ A1B&@@1\’ <’ ’ B10 1ł &?’ > . -=’ D& > <0’ @&?- ’ I ’ &? \’ <? 1 0’ H’’ =? 1- ’ C ’010’ <’ ’ B10 1’ I ’ <>10-1\’ <’ L1-=& A9’ &?’ <? 0’ H’’ =? 1- ’ < ?. . ’1\’ <’ & 0’ <’@@&? 0’ A1’-\’ @1’ &’<’ >1’ ’’ 1-.@1 1’ C?’0’ @1’ +1-?1’ -=1’ A’ ’ ’@1’ & ’ 1-’ @<’ A’ ’ &’<’ >1ł 10 &’1- ’ 01’01\’ &?’ <0B?D’ A1’ 1?L’ 10 &’ ’ 01’0’’ &’- ’ &+10H9’ <? 0’ &?’ 0&?@1>1- ’ C’ 1?L’ >10>10ł A1’ =1&==<>1- ’ A10’ <? 10’ <’ <? ’’ &1C0ł &?’ C ’ @<’ .3-A’ <=’<-B1’ H’ .1- \’ H’’ 1?L’ 1-=1&==1 1- ’ <+C’1- ’ <’ 1?L’ A1’ =<’ 1’ I ’ C=&? -’ ’ @1? 0’ +&@?>1ł I ’ A&- ’ ’@0’ -1

) &!+’ !!+’ ’ ’ ,’ ; ’ ’ "’

<’ - !"+&-!/’. -’ !’6. ++

'' 1- ' 1-=1&==1\' A10 1' 1-D1 ' 1\' >1Ơ A1' C=&?-? ' ⇙ +&@?- 1' A1' @&? ' =1&==&? ℊ -1' -? ' CB1@ℊ A'B1@@1Ơ <-&' Ơ Ṡ R1Ơ &?' 1- \ℊ B& > -' Hʻ '1?L' =1&==1>1- 1Ơ 0&'1- ' =<' \' C' = -' &?' <?. >1- ' 0<?-\' >&-0 1 ' I ' ' C+<- ' @⇙ B&-A'ℊ B'&-ℊ 0&'1- ' &?' 0&' ' <?B?-1>1- ' =& 0=<' \' ⇙ - 1' A' ' '@1' & ;' '0" <?B?-Ơ A&-Ơ &?' .3?- 1Ơ 0&'1- ' =<' \' C' -=1' A' ' = ' @1' & ' A1Ơ A' \' <-&' Ơ R 1Ơ &?' 1- \ℊ &?' <?B?-Ơ CB1@@1Ơ A'B1@@1Ơ ⇙ =1 >1' &?' <?R1>1- ℊ Hʻ '1@L' A&-0' I' .0- 1Ơ 0&'1- ' A1' &? ' +&'A1Ơ I' A1' -? ' +<@?1' ⇙ &? ' &? 0 ' &? +1?L' &? 10=&' \' Hʻ -=1' A' ' ↓' @1' & ' <' ' @⇙ =& =1' 1' A1Ơ <-&' Ơ R 1Ơ I' 1- \' A1Ơ H?1?L' @1' A' ' -<A.<' Ơ &?- ' A1' 1@10#' 0ℊ &?' @1' A' ' > &-=' D&><0' I' @1Ơ <?,Ơ A100?'0A' \' &?' <?B?-' A1' 1?L' =? 1- ' &?' =''' 0 ' C' 1?L' >10>1Ơ &?' 01, <@>1- '1-D1 ' <#@1\' &?' 1-8 D1 ' <#@1' C' A10B1- ' &?' C' A &' ' C BD<B1ℊ &?' A1Ơ H?1?L' <?RƠ =? 1- ' 1-=1&==1\' &'- ' &+10Hℊ 1?L' &?' <? Ơ 0&?@1ℊ >1- ' ⇙ @1? ' &1CƠ C' = -' &?' 1-' <? 1' >< 1' H?1B&-Hℊ 1-" C? ' B1&' Hʻ C@?0&? Ơ A1Ơ @'1.1Ơ A?' & ' 0&-' @<.1Ơ I' C@?0&? Ơ K<'+'1\' C' C11Ơ 1 &@-1' A?' @& 1ℊ I' 0&-' 0" '>C& 1- Ơ A1' @1? Ơ B& CƠ C' A'101Ơ ><@<A'1Ơ I' '-=' >' 11Ơ H'@Ơ -1' C? &-' 1-' @1? Ơ CC 1Ơ C0&-1Ơ +1 ' A1+<-' @1' & ' 1-' 0&-' <-Bℊ '@@1&H1Ơ <==<' 1' @1? ' 01? 1' C? ' '1ℊ C11Ơ 1 &'-1' 1'01 'Ꞓ A1'. -1\' 10 ' I' 10 <#@'\' Hʻ BD?-' ?0 'B1' A1' @?-' <-Bʻ I' A1' @<? 1ℊ I' <?L" @1' D'1=' < &-' A1' 10BD1H?1 ℊ <' ' C&<' ' A1L<>'-1 ' B1@@1Ơ C0&-1Ơ <<-Ơ A1@Ơ ><@<A'1Ơ I' '-=' >' 11Ơ & >1-' B&-?\ℊ 1 ' 0? ' B1' C? &-' >10>1Ơ @1Ơ ?0A11Ơ I' < &-' I' BD?-' A1' 1?L' C' @&? Ơ A@0B 1B'&-Ơ 1B& A1 ' < &? -1' 1-' B10 ' B<0 ' &? +1?L' &? 10=&' \' H1-' @1' =1 1' A1' <C'<Ơ <A' 0<A0=<B'1-A' B&? .1' @⇙ B&1' @<

1>' B&>1' 'ℊ &' ' & A1--1' C' 10 < ? ' =<' ' <-' A?' 1.-1' -=1' K ' @1' & ' H& 10 ' C ' 1ℊ Hʻ -?@@1' B1+10Hℊ +10Hℊ ##1' -1' '&? ℊ -1' -?=@ <? 1' =0&>1' A1' 1'- ' 0.@'01' -1' 1>C& 1 ' A1' H?1@1' 10 < 1' &?' BC-A@B'&-' H'ℊ 0&' ' A1' -\' @1' A' ' &'<@>1ℊ A&'. -1' <?B?-1' @' 1' A1' A <C' ⇙ -?@@ ' -1Ơ 0&?@>1- ' ⇙ 01Ơ >< -<@L' I' ='B1 Ơ I' ⇙ B1?L' H &-' A1' @&? ' B&-0<'@@ 0' -' 10C?1@L' B&>1' 1>C& 1@L' <CC '01\' A1' @?-1' &?' @<? 1' @& 1ℊ 0? ' C1 -1' A1' =<' 1' = -1' I <?-B1 -' ⇙ @⇙ +&@?- 1' A?' & ' Ꞓ A1' .-1\' 10 ' I' 10 <#@'\' Hʻ 0'#-' B1@@ 10 < ? ' B&>1' @10 <'? ' A1' @' 1' A1Ơ D<C&-Ơ I' ' 1-' 1 -CƠ A?' & ' 'BD< A' 01B&-Aℊ 0&'1- ' =1 >1>1- ' 1-?\' I' .< A1\' I' > Ơ 1-' A?'1' 1L1B?B'&-'Ꞓ <A &?0 1'⇙ B1=' Hʻ 0" <0B?-1' D'+<@1 ' &?' <?B?-1' <? 1' C0&-1' A1' <1'-A 1' 10 < 1' A&--1'<?B?-1' '1@ @', 1' A1' A <C' &?' A1Ơ D<C&-0ℊ B&- 1' @⇙ =& >1' A1Ơ A' \' 10 < ? \ℊ H'@ 1-B&? .1' @⇙ C1'-1' A1' '0' C? ' B=1?-' '1@ @', 1' A1' A <C' $&?' A1Ơ D<C&-0ℊ <CC<'1 Ơ <?' & ' < <-' A1Ơ =&' \' H'@ =1 ⇙ @⇙ &-0 '1' A1' B10 1' 10 < ? ' &?' & A'-='' B1,' ' Hʻ B1@? ' Hʻ 10B1'+1' <?B?-1' '1ℊ D+01' A1' A <C' &?' A1Ơ D<C&-Ơ 1-B&? .1' 01>#@<#@1>1- ' @⇙ C1 -1' A1' L@' 0' <C<'1 Ơ <?' & 'B&>1' A100?'0' 10 ' A' Ꞓ 1 ' 1 ' ' B1@? ' Hʻ +& ⇙ 0?' ' 1-' B1&' B<Ơ @⇙ >&' 1' A1' '1@L' C<-0' C ' 0&-' +<' @Ꞓ 1 ' -1' 0&'1- ' @1Ơ A' \' C1'-Ơ <?B?-1>1- ' CA&-1\' ' &? 1' B1' <BB& A1\' 10 ' Hʻ -?@@1' B&-. 1.< '&-' -1' B&>ℊ C<'. -'1' 01' =<B1' A1' '1ℊ 1' A1' A <C' &?' A1Ơ D<C&-Ơ' <Ơ B&0 <.1Ơ CC'1Ơ' A'B1=' B&-. 1.<B'&-' &?' B&>C<'. -'1ℊ 0? ' C1'-1'Hʻ BD?-' D&>1' A'B1 'B&-. 1.< '&-' `H?' B&>C<'. -'1\' Hʻ =1B1' @⇙ B&-= '1' A1' B10 1' & A'-D'B1' &?' 10 < ? ' C<'1

- !"+&-!/'.-' !' 6 .++

1-=1&==1A' &' #1' 1-D1 ' 1Aℊ #?' &' C1 =& >' D1' F '@ℊ &=' D1' ' !1&==&? 0ℊ -& ' -&' < ' &=' D1'0<>1' <-& 0ℊ <-A0ℊ & ' 1-1>1- 0ℊ `D&K0&1+1 ' 0?BD' !1&==>1- Ơ#1' >'<A1'# ' !'-1' & ' & D1 K'01ℊ K' D&?' 0D1K'-.' < " 11A' C &+'-.' D1' &-A' '&-ℊ 0D<@@ #1' '-' <- ' K'01' =& =1' ' &' &?' 0<'A' &+1j 1'. -' & A' D1' , '-.;' -A' '=' <- ' E'= Ơ & ' E <- Ơ #1' ><A1'# ' & ' 0<'A' &+1 1'. -' & A' D1' , '-.' &=' D1' 0<'A' <-& 0ℊ <-A0ℊ & ' 1-1>1- 0ℊ & ' &=' <- ' < B1@ D1 1&=ℊ &' =1 >' & ' & D1 K'01ℊ 0?BD' E'= Ơ & ' E <- Ơ 0D<@@ #1' ? 1 @ ' +&'A' =& ' 1+1 ℊ <-A' &=' -&-1' ==1B ' &+'A1A' <@K< 0' D< '&? ' J)' &+1 1'. -' & A' D1' , '-.' D<+1' D1' !& =1' ? 1'&=' D1' <-& 0ℊ <-A0ℊ <-A' 1-1>1- 0ℊ KD1 1&=' D1' 0<'A' @< 1' < @ &=' <@'0#? ℊ & ' D1' 0<'A' ' ' D&><0ℊ <-A' D1' & D1 ' <=& 10<'Aℊ & ' <- ' &=' D1>ℊ K1 1' & ' K<Ơ # ' D1>01@+1Ơ & ' 01+1 <@@ ' '-D1 ' <#@1' # ' "10B1- ' & ' # ' '.D =?@ ? BD<01ℊ & ' KD1 1&=' & D1 ' K1 1' 1-=1&==1A' &'- @ ' K' D' D1>' & ' & D1 ' &-@ ' &' D1' ' 01' # ' ! '-1' & ' '-' & D1 ' <--1

ℊ F D1 1<Ơ' ><- ' &=' D1' , '-./Ơ'@'1.1' 1&C@1' #1' &? @<K1Aℊ 8<-A' ><- ' K<+1Aℊ # ' 1 &-1&?Ơ &B100' '-' <Kℊ < 'A' #1' 0&' '>C& 1- ' '-' D1' ' &A'10ℊ # ' A'+1 Ơ <@<A'1Ơ <-A' -=' >' '10ℊ D<' D1 ' B<--& ' B&>1' '-' D< ' C &C1 ' 1 0&-Ơ #1=& 1' D1' , '-.' '-' D'Ơ 1-BDℊ D1 1' &' ><a1' D1' ' ?' ' &' 1+1 01' 0?BD' 1 &-1&?Ơ &B100Ꞓ ' 'Ơ & A<'-1A' <-A' 10 <#@'0D1A ' D< ' 1+1 ' ?0 'B1' &=' D1' &-1' 1-BD' <-A' &=' D1' & D1 ℊ <-A' <@0&' D1' D'1=' < &-' &=' D1' LBD1H?1 ' 0D<@@ D<+1' &K1 ' &' 1L<>'-1' D1' 0<>1' 1 0&-0ℊ D<+'-.' 0?BD' <@<A ' <-A' "'01<010Ơ &C1-@ ' a-&K-ℊ <-A' D1 1?C&-' >< ' D1'0<>1' ?0 'B1Ơ <-A' < &-ℊ <-A' 1+1 ' &=' D1>ℊ # ' D1' ' "'0B 1 '&-ℊ 1B&=A' D1' ' & -1 ' '-' D'Ơ <01 ' &+'A1A' <@K< 0 ' D< ' '-' D1' F ' ' &=' <C'<Ơ <A' 0< '0=<B'1-A?>ℊ D1' B&> >&-' <K' 0D<@@ D&@A' @<B1

ℊ F D1 1<Ơ' ' 'Ơ & A<>1A' # ' D1' < ? 1' ><A1ℊ D1' ! ' 0 ' 1< ' &=' D1' 1'. -' &=' &? ' &+1 1'. -' & A' D1' , '-.' D< ' -&K' '0 ' D< ' -&' BD#'0D&Cℊ '0D&Cℊ ###& ℊ -& ' '& ℊ -& ' -&-1' & D1 ' <-' &=' &@ ' D? BDℊ -& ' 1>C& <@' 1 0&-ℊ &=' KD< ' 0 < 1' & ' &-A' '&-' D< ' D1' #1ℊ K' D'-' D1' 1<@>' &=' -.@<-Aℊ .'+1' -&' '+1 '1Ơ &=' @& D' &'<- ℊ#? '&-@ ' &' `D'Ơ 1-'<@Ơ<-A' ='B1 0ℊ<-A' &' D&01' D< ' #1' &=' D1' ' &?-B'@ℊ <Ơ K1@@ C' ' ?<@' <Ơ 1>C& <@ℊ @1< -1A' &=' D1' &-1' <K' & ' D1' & D1 ℊ ?C&-' <'-' &' ><a1' !'-1' <-A' <-0&>' < ' D1' , '-./Ơ F '@@Ꞓ ' 'Ơ & A<'-1A' <-A' 0 <#@'0D1A ' D< ' <Ơ K1@@ D< ' < ? 1ℊ <Ơ D1' < ? 1' &=' '+1 ' &=' < 0ℊ ><A1' '-' D1' '>1' &=' ,' '.' 'BD< A' D1' 1B&-Aℊ #1' D&@A1 ' <-A' =' >@ ' a1C ℊ <-A' C? ' '-' A?1' L1B? '&-Ꞓ &'-1A' & D1'0<>1ℊ D< ' '=' <- ' , -'. D ℊ & '<- ' & D1 ' 1 0&-' &='@100Ơ 0 < 1ℊ A&' .'+1' <- ' 0?BD' '+1 ' &=' @& Dℊ & '&=' < 0ℊ <.<'-0 ' D1' ! & >' &=' D1' 0<'A' < ? 10ℊ D< ' D1' 0D<@@ '-B? ' D1' <'-' &=' <' '0' =& ' 1+1 '0 BD' '+1 ' &=' @& D' & ' &=' < 0ℊ &' #18ℊ C<'A' &' D1' , '-.' <Ơ &= 1-' <Ơ D1'0D<@@ A&'B&- < ' &' D'Ơ < ? 1' & ' A'-<-B1,' -A' D< ' D1ℊ KD'BD' 1B1'+1 D' <- ' 0?BD' '+1 ' &=' @& D' & ' &=' < 0ℊ 0D<@@ @'a1K'01' '-B? ' D1' <'-' &=' L@0 ' &' #1' C<'A' &' D1' , '-.' <Ơ <=& 1' 'Ơ 0<'A' Ꞓ <-A' D1' D< ' K'@@ 0?1' '-' D'Ơ <01ℊ 0D<@@ D<+1' D1' -18D<@=' &=' 0?BD' ` <'-00P' =& ' D'Ơ <#&? Ꞓ <-A' D< ' D1' 0<>1' ` <'-0 P' #1' '-' -&' K'01' C< A&-1A' & 1&+1 ' ' 'Ơ & A ?-1A' D< ' -&' &-. 1.< '&-' -& ' &>C<- ' #1' ><A1' &=' 0?BD' '+1 ' &=' @& D' -& ' &=' < Ơ <' D1' C &C1 ' &0 Ơ &=' D1' &-. 1 '&-'& ' &>C<- ℊ?C&-' <''" &=' 1+1 ' <-' &=' D1' 0<>1' &-. 1.< '&-' & ' &>C<- ℊℊ D< 'A& D' B&- < ' &' D'Ơ A'-<-B1' & ' < ? 1ℊ &' C<

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D1' , '- .'0 '' 8 D1' E?'@A0' R-A' ! < 1 -' '10@ <-A' <@0& D1' 1&C@1'&=' 0 1 '10' (=' ' '10' <-A' & &?.D0' 8K' D'-' D1' 1<@- @ D<' #1' =&?-A1A' & ' & A<'-1A' &' <' .&&A'8 - 1-' & ' ? C&01@ &-@ ' 1LB1C ' -A' D1' ?0 'B10' <00'. -1A' &' B '1' 00'010@ 0D-@@ D<+1' &K1 ' &' 1-H?' 1' = &>' '>1' &' '>1@ '-' D1' ' 100'&-0' &=' D1' < 1 0' <=& 10<'A@ <-A' D1' 0<>1' &' B1 '= ' '-' D1' , '- ./0' 1-BD ' &+'A1A' <@K< 0@ D< ' '-' D1' '>1' &=' F < @ ' ' 0D<@@ #1'@<K=?@ &' & A0@ , -'.D 0@ <-A' 0H?' 10@ KD'BD' <+1@'-' ?BD' F < @ &' .'+1' D1' ' '+1 '&=' @& D'-.' & ' &=' < 0@ 0?BD' <-A' '-'0?BD' K '01' <0' #10 ' &' D1>' 0D<@@ 011>'=& ' D1' '>1' &=' 0?BD' F < @ K' D& ? ' # '-.' <- ' K'01' +1L1A' &=' ?-H?'1 1A' '-' D'0' 1D<@=' # ' =& B1' & ' +' ?1' &=' D'0' < ? 1

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@ F D1 1<0' @<1' `?C&-'<' ?..10 '&-' ><A1'/'P' &' &?' &+1 '.- & A' D1' , '-.''-'` D'0OP' < @'<>1- 'D&@A1-' <' F 10 >'-0 1 @ '-' D1' <0' &=' <'-' '@@< @ D1' !&? D' 1<'&=' D'0' 1'.-@ # ' D1' &>>&-0' D1-'#1'-.''-' D1' 0<'A' < @'<>1- @ D<' KD1 1<0' A'+1 0' 1 0&-0' `KD'BD' D<A/P' '-' &-0'A1 < '&-' &=' D1' ' .&&A' 1 +'B1@ <0' K1@@ &=' D1' E <-' &=' &? ' &+1 1'.-' & A' D1' , '-.' D<' -&K' '0@ <0' &=' D1' E <-0' &=' , '-.' A+ <' A@ E <-A='' D1 ' &' &? '0<'A' &+1 1'.-' & A' D1' , '-.@ <-A' &=' , '-.' 'BD< A' D'0 @<0 ' 1A1B10 0& 'B1 <'-' --?' '10' &' #1' <a1-' =& ' 1 >' &=' D1' ' '+10@ &=' D1' 00?10' <-A' 1+1-?10' &=' A'+1 0' &?- '10' &=' -.@<-A@ # ' D1' <-A0' &=' D1' D1 '==0' &=' D1' 0<'A' &?- '10' =< ' D1' '>1' #1'-.@ <-A' D<' & D1 ' 1 0&-0' &=' <' @< 1 ' '>1@ # ' +' ?1' &=' 1 1 0' < 1- 0

<' H ' `L@' 0 P' =10' .@'A10' I ' = <R-' H10' I ' <?L" @10' .1'@ \' A1' >10 1B1' A10' ' 110' I ' ? .=B0@ A1'-\' @1' &'<@>1' H' 01-' =&-A?\' &?' & A1'. -1\' <' #&-' 1- 1-' I ' C CC0@ <- 0& @1>1-' 1LB1C 1\' ' <'1-' @10' ?0 'B10' <0' 00'010' A 1'C&<' 'A1-H?1 1' A1' 1>C0' <'' 1>C0' 1-' @1? 0' 0100'&-0' A1' @10' >< '1 0' A100?'0AB10@ I ' A1' B1&' I '1 ' 1-' @1' <-B' A?' & @ &? +1?L' &? 10=&' \' H1-' 1>C0' A1' .?1 1' #-' 01' <0' ?!' D'+<'1 0' ' 0H?'1 0' H" <+<' 1 &-' 1-' '1@ .?1 1' A1' A&-1 ' a? ' ,1' A1' +10 ? 1' &?' A10' D<C&-0' A1#B' I ' 1-' '1@1' .? 01' B&>1' >'1?@ \' @1? ' 01>#@1 <' `C? ' 1>C0/P' A1' '1@ .?1 1@ 0<?-\' <?B?-1>1-' 10 1' >&@10 1\' &?' 1 H?'1 1\' B1@@1' C '1' C' =& B1' &?' , ?1' A1' B10 ' 10 < ?

' 1>' -=1' = ' @1' & ' <@ . 1+&?01' B&>C@1'-' A1' 0<' &1' A1@ -&-' A1K1' 1@1BB'&-' A10' =' 10' A10' &?- 110' C? ' @1' C@1>1-@ H?1?L' <?B?-1' =&' \' 01-' =<' \' A1' <==1BB'&-' A10' '0 &?- \@ I ' <? 1>1-' 1-B&?- 1' @<' =& >1' A10' # '1=0' <0' A' \' '0B&?- \' A' 1 1@ <' .0-A' 10B@<?-A 1' A10' &?- 110' I ' 1 < A<B@&-' A10' #?0&'. -10' A1@ &>?-<@ 1' A?' A' ' &?- 11G' -=1' 0&, 1'-' = ' @1' & ' +?'@@<-' <' B1&' C? +1'1 ' A1' 1>1A'1@ A1' @<0 1-' A10' = /0' 10C?1@L' I ' 1 ?@ C& 1@L' I ' A1' &?' @<' &1' 1-' B10 ' C01-' C@1>1-@ <A' & A1'. -1\' I ' 10 <#@'\' H' A10& 1' 1-<+3-' @10' 1@1BA&-0' A10' '1@L' =1 0' 0C'1-' =<' \' 1-' @<' =& >1' H1-01? 1;' 10 <00<, ' H' <@ C0BD1'-' &?- 11' <' 1-' ' <C20 @<' @'C1' A?' # '1=' A?' C@1>1-@ CB@<><B'&-' 0&=' =<' ' 1-' C@1'-' &?- 11' A1' @1' &' I ' 1?' A1' C@1>1-@ I ' ' &? \' B1?L' H' '@@1&H0' 0&-' C001- \@ 0'#-' 0? ? 1\' A?1>1-' 0&>&'-10' C' B1a' B<?01@ B&>1' <? 0@ < 1-A1-' @<' 1@1BA&-' A1' @&? 0' # 0' C' @1' C@1>1-@ G 1' <A&-H10' 1-' C@1'D' &?- 1' <'@@1-' <@ 1@1BA&-' #<@>1-' ' 1-A'==1 1- 1>1D' -&-' &#0 <-' <?B?-1' C ' 1 ' &?' B&><?-A1>1-' <?' B&- / '1G 1' <C0' H'@0' 0&'1-' 10@?\@ 0&'1-' @10' C0&-10' 10@?\' C01- \' &?' <D01- \@ 0&'1-' @&?' -&?-0' 10B 'C \' 1-' 1-A1- 1' A100&? \' @10' 01<@L' A1' &? \ B1?L' H' 1?L' 10 01-' ` 8 8 0P' I ' <BBD1\' <? A' ' # 1' A?' C< @1>1-G H' 1@1' 1 A1- ? 1' '00'-' 1-01<@1\' I ' <BBD1\' 0&=' 1-?\' C?' 1 &?>1' A?' A' ' # '1=' H<-' '@@0 <0' # 0' A10' &?- 110;' 1' H' 1-' # '1=1' A1' C@1>1-' <=@<' 0' 1-' 1>C0' <A+1-' ' 0&=' > 0' B10 @ B@<?01;' ' 1@1BJ 1>' ?<>' '-' C@1-&' &>' ?&' =&<>' A'0 '-= 1' I ' <C 1'0?# 0' .'@@&' ?&' I ' 0' .'@@'0' 1& 'H?" 1@1BB&" ' @" ' -R= '- ' `-&0' OP' '-' <-8' B1@@< '-=<' <A' A'1>' I ' @&B?>' '-' # " B&- 1-" '='B1@' '-A'@< 1

1>' B&>1' -<A.<' 0' 0?..10 '&-' k)' =<' ' <' -=1' A' ' = ' @1' & '1-' 0&-' C< @1>1-' 1-?\' <' F 10 ='" 1-' @10' 1 <+10' A1' 1'-' '@@< ' <-' A1' 0&-' 1. -1' H?< @ 0 C' @10' &10' <A&-H10' 10 1<- \' 1-' @1' A' ' C@1>1-@ H' C< ' @<' &?' CD' ' 0&? 0' C0&-10' < &'1-' 1-' 1.< A1' A1' @1? ' #&-' +'B1' 0'#-' A?' .0-' -=1' = ' @1' & ' H& 10' B&>1' A10' .#' 1\' A?' & ' AK< A' '1@ >10>1' -=1' = ' @1' & ' I ' A1' & ' 'BD< A' 0&-' A< 1'-' =2A1B100&? @ 1'-0' <--?' 110' <' C-A 1\' C ' 1 >1' A1' @&? '+'10' A10' '00?10' I ' 1+1-?\' A1' A'1010' &?- 110' " 1-.@1R 1' C' @10' ><'-0' A10' '0B&?-\' A10' A' \' &?- 110' C? ' @1' 1>C0' 10 1<- \@ 1' H' <? 10' C0&-10' A1' C@?'0' C?'0-1' 1>C0' C', ?1' A10' =10' C< 1- 11

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D1' @1<0 ℊ #? ' D1 ' 0D<@@ #1' C? ') ' &'& D1 ' <#&? 0ℊ <0ℓ D1' ' 0 < 1ℓ A& D' 1H?' 1ℊ ?C&<' <'-' &-' -1' 1< /ℓ >C '0&- >1- ℊ <-A' &' ><a1' !'-1' <-A' <-0& >' <' D1' , '- ./ℓ F '@@ ' -A' '=' <- ' &+1-<- ' #1' ><A1' &=' <- ' 0?BD' -=<- ℊ &=' KD<' 0 < 1' D<' D1' #1ℊ &' D1'B&- < ℊ ' ' 0D<@@ #1' D&@A1-' =& ' -&-1' &+'A1A' <@K< 0 ' D<' 1+1 ' <-' & ' F & > <-ℊ &=' KD<' 0 1 1' & ' &-A' '&-' @' < ' D1' #1ℊ 0D<@@ #1' = 11' &' 01 ' D1' ' &-' ' " <?. D 1 ' &' 1 '@1 ' > .' < ' <- ' >< --1 ' BD&&@ D< ' C@1<01 D' D1 >' K' D' -' D1' 1<@ > ' -A' D<' = & >' D1-B1=& D' 1+1 ' 1 j 0&-' D<' K '@@ ><a1' D'0' &-' & ' " <?. D 1 ' CC 1- 'B1' &' <- ' <= ' K' D' -' ' ' & ' & &?. Dℊ D< '=11' # '- .' &' D1' < & ' & ' <'@'==0' &=' D1' 0<'A' ' ' & ' & &?. D' <' '@@ 01<@1A' ? - A1 ' D1' 1<@0' &=' K&' ?0 'B10' &=' 1<B1' &=' D1' &? - 'KD1 1' 0 - BD' ` -=<- /P' '0' #& -ℊ 10 '= '- .' D1'+<@& ' &=' D1' <- A0' & ' 1- 0' &=' D'0' 0<'A' ! < D1 ' <-A' & D1 ℊ <0ℓ <=& 1' '0' 0<'A' -A' D<' -&' <-' -& ' F & > <-' 1B1'+1' <- ' CC 1- 'B1' B&- < ' &' D'0 A' - <-B1ℊ ?C&-' <'-' &' C< ' &' D1' , '- .' ' D'@@' - .0ℊ <0' K1@@' <' D1' , '- ./ℓ ?' '<0' &=' 1+1 ' 1 0&-' D< ' K '@@ B& > C@<'-ℊ <0' K1@@ #1=& 1' D1' ?0 'B1ℓ &=' 1<B1ℊ <0' '-' <- ' & D1 ' &? '&=' D1' , '- . ' -A' D1' D< ' K '@@ 0?1' '-' D'0' 1D<@=' 0D<@@ D<+1' D1' -1' <@=' =& ' D'0' <#&? ℊ > A' D1' , '- .' D1ℓ & D1 ' <@=' -A' D< ' '-' 1+1 ' 11 ' #1' ' '-' D1' , '- ./0' <-A ℊ & '&=' <- '& D1 ' D1' , '- ./0' '1.1' <-ℊ & -B1' '-' D1' 1< '<@@ D1' <#&? 1 0' <-A' '='B1 0' AK1@@' - .' '-' D1' 0<>1' 11 ' 0D<@@ #1' 0K& -ℊ &' 01 +1' <-A' <a1' =& ' D1' ' 1 +'B1' <= 1 ' D1' ! & >' &=' D1' 0<'A' < ? 10ℭ -A' '=' D1 ' 1=?01' D< ' ' A&ℊ D1 ' 0D<@@ #1' C? ' '-' D1' &Ba0' K' D'-' D1' &K -' KD1 1' D1 ' #1' <a1-' # ' D 11' " < 0' K' D&? ' <'@' & ' <'-C '01ℊ '@@ D1 ' K @@' ><a1' E 11ℊ <-A' = & >' D1-B1' D1 ' 0D<@@ #1' 01 -' &' D1' -1L ' E<&@ ' -A' D< ' 1+1 ' &K -' & ' 1' . -& ' D< ' =1'@1 D' &=' D1' ' &Ba0ℊ 0&' D< ' D1 '#1' -& ' > <A1'#1=& 1' D1' ! 1<0 ' &=' <0 1 ' -1L ' B& > ' - .ℊ 0D<@@ ' -B? ' <.<' -0 ' D1' , '- .' D1' <'-'&=' '0 ' &' #1' @1+'1A' <-A'C<'A' '-' 'A' &=' D1' ^ ?' - \ ' > 1' &' #1' . <- 1A' D1 1<= 1 ℊ ' '0' & A<'-1A' <-A' 0 <#@'0D1A ' D< ' -&-1' &=' D1' & A0' C' ' ?<@ -& ' 1 > C& <@ , -'. D 0' -& ' 0H?' 10' &=' D1' 1<@ > ℊ -& ' -&-1' & D1 ' 1 0&-ℊ &=' KD<' 0 < 1' & ' &-A' '&-' D< ' D1' #1ℊ 0D<@@ -& ' #1' '-' <- ' K'01' . '1+1Aℊ > &@10 1Aℊ '-H?'1 1Aℊ -& ' 1-A<><.1Aℊ =& ' /)' <- ' &=' D1>9' & ' =& ' D1' ' &? -1 '-.' & ' ? j 0?' ' ><A1' K' D' D1' , '- .')' < ' D'0' & > ><-A>1- ℊ =& ' &' BD<0 '01' <-A' C?-'0D' D1' '& 0' <-A' -0? 1=@'&-0ℊ KD'BD' D< D' #11-' = +1 0@ ' ><A1' /)' < ' 0?-A ' 1<0&-0' K' D'-' D1' 1<@ > ℊ <= 1 ' D1' B& > '-.' &=' &? ' 0<'A' &j +1 1' . -' & A' D1' , '-.' '- &' D1' 0<>1' 1<@ > ' #? ' D< ' D1 ' <-A' 1+1 ' &=' D1 > ' #1' D1 1&=' ? 1 @ ' H?' ℊ 1@1<01Aℊ C< A&-1Aℊ <-A' A'0BD< .1A' =& ' 1+1

' .'$ '&#!' .' 20# '+ ; .0'" ; !' & ' 7 & ; @ -' & &#' 4 0 "* ' .'" 7 & .0 ' 2' &2' 2 &/' /!'" .'" 1 . / !'" 02! / ' ." +' ! +' 5 ' &+/' 7 2' +' ! +' 5 ' <' 1'%$ 'M ' '$)' ." +' ! +' 5 ' ℓ' -/' +' ! +' 5

>1'-0ℊ >1ℓ H'ℊ 0&=' '- 0' A1' M+' ' <' <- '1@ @<#&? ℊ 0&=' 'ℊ A1'-\' ' 1' &?' ? . ' &?' A1D& 0ℊ B& > 1' 01ℓ A' \' '1 1' &?' > '1 1' ?01- ℊ &?' <? 10' @<#&? 0' B& > 1' @1- ' 10 < 1ℓ 1H?'1 .1- ℊ 0? ' C1 -' A1-C '0&-1 > 1'2 ' A?-' <-' I ' A1' =<' 1' = -' I ' <?-B1&-' <' @<' +&@? > 1' A?' & ' ' 0" <?B -1' B&+1-0- ' 0B<' = A ' A<01 >' '1@ 1-=1?- ' A1' H?1'1' 10 < ' H'ℊ 0&=' <' B&- ' 1' 0&=' 1-?\' C/' -?@ ' ? +1?L' &? 10=&' \' H' BD?-' D& > 1' &?' =1 > 1' A1' H?1'1' 10 < 1' &?' B&-A'A&-' H ℊ 0&= ℊ 0&=' =D > B' A1' > 1 1' 0&-'=' \' &?' ='@1' A<CC-A 1' @1 1 1? 1' <' H?1@B&-Hℊ 10B&@1' H' @1? ' C@10 ' A1'-\' @1' &'<@ > 1 ' ' H' A10& 1' 1-<+0- ' B@?-' H' +&1 ' =<' 1' 0&-' =' 6' &?' ='@1' <CC- 'B1' <' <0B?-1' >10 1' A1'-\' 1= 11' ?' ? .Dℊ H'ℊ C& 1'<?' <' ' &?' <'@@'=' A1' '1@ ' 11' ' &?' ? .D' ?-1' #'@@1' 1-01<@@1ℊ A100&? \' @10' 01<@L' A1' A1?L' ?0 'B10' A?' 110' A1@ &?- 11' 1-' H?1'1' '1@ 1-=<- ' 10 ' -11ℊ 10 > &'. -<- ' @<' +<@?1' A1' R 1' &?' A1' 1- ' A1' 01\' A' \' C'1 ' &-' > '1 ' B& > 1' A1 0?'0' 10 ' A' ' ' H' -?@@ D& > 1' &?' =1 > 1' 10B1 +1' <0B?-' <CCA 'B1' <B&< =' 1' A1' B10 ' & A'ℊ -/-B1' 0? ' C<'-1' A1' C<'1 ' <?' & ' ' 0 ' 0'D-' <@ 0? 1' A1' & ' B& > 1' A1' BD?-' H' +&1 ' C@1'-A 1' 0'D-' A1+0- ' @10' ?0 'B10' A1' 110' B& > 1' 1-' <? 1' B&? ' A?' & ' ' 1' ' B1@? ' H" +& <' 0?' ' B1@@1' C '1' @?-1' >&' 11' C ' 0&-' @<#&? ' I ' @1' & ' @<? 1' > & 1' ' = '1-' BD?-' @1 1' 0&=' @ 1-' >< -' A?' & ' &?' A<? 1' H?'B&-Hℊ @'1.1' A?' & ' 0&'1- ' ? -' =&' \' C' <-' &? \' @10' @<#& 1 0' I ' < '='RO' A1 > <- \' A1A1'-\' @1' A' ' @1 1' M1 > 1- 1a' A1' M+' ' I ' CD'A 1' C? ' @&? ' M+'B1' 0&@&-B' @<' =& > 1' A10' A' \' 10 < ? \G ' 0'@0' 1=?01- ' A1' B1' =<' 1' 0&'1- ' '@0' > 0' < '\ B1CC10' A1'-\' @<' '@@1' &?' '@0' 0&- ' C '0' C' &'0' &? 0' 0<?-\' #<'@'1' & -' ><'-C '01ℊ <-H '@0' @1' +?'@@1- ' =<' 1'0A1' . 11' I ' A'@8' @1&H10' 0&'1- ' > 0' <' C0BD1'-' .<&@1 ' ' H' BD?-' '@@1' &?' = '1' H' ='A@@1' A1' @1? ' B1CC 0@ C1-B ' H'@0' -1' 0&'<' ' ='' ' \' A1+W- ' @1' =10 ' A1' <0Hℊ C0BD1'-' <A+1-' ℊ 1 - ' B&? .1' A1, 0' @1' & ' @<' C1'-1' A1' / ' 0' A10 1' @1+1\' I ' C<'1\' 1-' 1'A1' A1' @<' a+3 ' <' .=' ' 1 ' 1-' 1 > C0' <A+1-' 1 > ' & A1' . -1\' 10 ' I ' 10 <#@ \' H' -?@ A10' 0' 10C?1@L' &?' 1 > C& 1@Lℊ D'+<@1 0' &?' 0H?'1 0' A?' &'<@ > 1ℊ -1' -? ' <? 1' C0&-1' A1' H?1B&-Hℊ 10 < 1' &?' B&-A'B'&-1' ' 0&= ℊ -1' 0&=' <?B?-1 > 1-' . 1+1\' > &@10 1\' 1-H?'1 1\' &?' 1-A<><.1\' C? ' <?1?-1' BD&01'='A 1' C' 1?L' &?' C' <?B?-1' A1?\ℊ &?' C ' @&? ' D'+<BD1' &?' C 01? 1' =<' ' &+10H ' @1' & ' &?' <' 0&-' B& > <-A1 > 1-' C/' BD<0 10' ' I ' C?-' ' @10' -& 10' I ' '-0- 1BB'&-0' H&-' 10 1' =<' \' A'C01 > 1-' I ' <0' A'+ 01 0 =&' \' A1'-\' @1' &'<@ > 1ℊ A1C?'0' @1' +1-?1' E ' A' ' = ' @1' & ' 1-' B1@ &'<@ > 1ℭ >10' H'@0' I ' BD?-' A1?L' 1-' 0&'1-' I ' 0&=' &? 1 > 1-' H?' \' 1@1001\' CA&-1\' I ' A'0A<><.1\' <' &?\' &? 0

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1>' & A1'. -1\' 10 ' I ' 10 <#@'\@ H' &? \' ><50@ A10@ =& 1'-0@ <<- \' R 10@ 1-1>1- \' #10 10@ #'1-0@ &?' BD< 1?L' A1'-0@ <?B?-0@ '@@10@ <@ &? ' A1@ .0?-'= A<0B?-1' A'0>1' &?' H?'-\'0>1' &?' A<? 1' <L1' H?1B&-H9@ B&>1#'1-' H'@0@ <>10@ -1- ' @&? ' #10 10@ &?' B>C& 1- ' @& 0@ #'1-0@ I ' BD< 1?L' D& 0@ A'B1 ' +'@@1' <C0@ @1' &? ' A1' .0?-' 0?'0A' @ H' >10>10@ @10@ =& 1'-0@ I ' B#?-' A1' 1?L' 0&'1-' I ' &'@ B&- '#? &? 0

P' I ' B&- '#? &' ' &+10H ' B1?L' A1> <- \ 1-' '1@L' +'@@10@ < BD?-' A1@ A'0>1' L+3 ' &?' <L1' H?1B&-H ' ' H@10@ &'@@&? 0@ A1' >10>1' @< A'0>1' H?'-\'0>1' &?' <L1' C ' @1' 1>C0@ 10 1<- \' A1'-0@ 1'@L' +'@@10@ 1'1- ' C&<' ' C@ <?= & ' 1' A1' @&? ' &=EB1' A1' <L1 ' I ' <001001 ' '1@L' =&j 1'-0@ 0&@&-B' @&? ' H?<- ' 1' A1' @1? ' #'1-0@ BD< 1?L' I ' C&00100'&-0'10 1<- \' 10@ A' \' +'@@10@ < @10@ &? 0@ A10@ .W?- \' A'B1@@10@ A'0>1' H?'-\'0>1' &?' <L1@ I ' C ' @10@ 0&>10@ <0@ H?1?L' '@0@ = &- ' <001001\' &?' <L1\' A10 1'-A 1' 1-' H?1B&-H ' @'1?' A I 0' @1' &?- 1@ 0'#-' A1+0- ' H' --=1' ' @1' & '0&' ' 10C&-A?\' A1' @10@ 1- '1 0 0& ->10@ H< 1' .-1- ' <0@ A1@L' +'@@10@ B&- 1' <C0 ' ? +1?L' &? \' =&' \' H' -?@@ D&>1' -1' =1>1' 0&' ' BD< .1\' A1HL' =&' \' C? ' -?@@ '1@L' #10 10@ #-0@ -1' BD< 1?L' <?B?-1>1- ' C' B1@@1' 1-BD10C-

1>' -=1' A' ' I ' @1' & ' B&-0'A1 <- ' B&>1- ' 1-' A'C010@ `>< 0@/ P @<' >&D1 1' A1' 0&-' &'<?>1' " 1- .@1 1' 10 ' <'@ D1\' D& 0@ A@B1'@ < @<' &? ' A1' &>1@ 1-' 10BD<?- .1' C' C+'@ 0&? 0@ C ' C+'0'&-0@ C? BD<'01 ' A1' @<CC&'0 &'@@ I ' 3-0@<A&D0@ A1' BD1+10BD'10@ I ' +10BD'10@ < R0.0'> ' A-C& '0 1>1- ' A1' 0&-' A' ' &'<?>1@ <A' & A1'. -1\' I ' 10 <#@'\' C' @<001- ' 0?'0A' @ H' &? \' @10'10 < ? \' I ' & A'-<-B10@ =1' \' 1-B&?- 1' C+'0&? 0@ -'0@<B'&-0@ A10@ BD1+10BD'10@ I ' +10BD'10@ @&? ' 1L1B? &? 0@ CB? < &? 0@ -& &' 0@ =<? &? 0@ ><'-@ 1-&? 0@ I ' 1B1C &? 0@ 0'#-' 1-' @1' 1>C0@ ' -<A1.<' 0@ & ' "1-.@1R 1' I ' 1-' 1>C0@ A?' ' A< <'-' & ' "1D@ .@1R 1' B&>1' 1-' 1>C0@ A1' -=1' A' ' ' @1' & ' H& 10 @ +1' &? \' 10@ C1'-0@ I ' <AA'B'&-0@ <' B1?L@ 0C'1-' A10& 1-<+ - ' =' >1>1-' 1-?\' I ' .< A1\' 1-' &? \' C&'- \@ @< >&A1 <@ B'&-' A10@ 10 < ? \' <+W- A' \' <' -=1' A' ' @1' & ' <+D' ' B10@ D1? 10@ I ' ' -&-' &#0 <- ;' 1 'H@ &? \' @10'1@1BA&-0@ A10@ &? \' BD1+10BD'10@ +10BD'10@ ##1'10@ C '& 10@ "1<-10@ &?' <? 10@ A'.C' 10@ 1@1 '+10' HB&-H10' 0C'1-' A1@ ' 0& 1-<+ - ' = <-a10@ 0<-\'10 1' 1-' -?@@1' >< 1' A10 &? #'1\' C' @<CC&0 &'@@ <+D' A' ' &?' C' ><?-A1>1-' A1' -=1' A' ' = ' @1' & @ ? +1?L' &? \' =&' \' H' -=1' A' ' = ' @1' & ' 1' ' <?L" = <-BD1>1-' 01\' @'# 11' I ' C &.< '=' B&>1' <?B?-1' A1' 010@ -&#@10@ C &.1-' &? 0@ <A' 1?1' A1+<D ' B 0@ D1? 10@ &?' B&>1' @? ' >10'C10@ <A' <' B10 ' 1>C0@ A1' =10<-B1' A1' B10 ' 10 < ? ' ' &? 1' B1&' >10>1' -=1' B' @1' & ' <A' CA&-8 @'1\' ` BCA&-0P' <' &? \' B1?L' H&?-' C? BD< 1\' C+'8 ' 0'&-0@ &?' <-0@<B'&-0@ A10@ BD1+10BD'10@ C?' +10BD'10@ / C? BD<010@ I ' 1L1B? \' &?' -'1D ' 1L1B? \' A1+<-' 10 ' C '-' &? ' A1' " 1B1>#' I ' &? \' @&? ' CB? < &? 0@ -& &' 0@ =1? &? 0@ ' 1L1B? &? 0@ &? \' ><510@ A10@ R0C<0010@ B&-8 1>C 10@=& =<' ? 10@ I ' >10C '0'&-0@ C' 1?L' &?' <?B?-1' A1?L' `=<' \' 4 1- &? ' @<' A' ' C? BD<01@ 1-B ' H'@0@ C? &>' 1-' ' ?C 0@ @&? ' . <B1' >1 1' 1-' @1L1B?B'&-'0'#-' C' 1?L' >10>10@ B&>1' C' @&? ' CB? < &? 0@ -& &' 0@ I ' 1L1B? &0@ <+ - A' \

' 'A1&' '#" C AC'>?0' HA' 0 < D-' +'0'0@ C01- '#@ < ? < I ' A'-<B&10@ CA=<@ '-'0'-. ?@'0@ @& '0@ '-= < #<@@'8 +<>' ?<>' ?#" ><.'0@ 1LC1A'1-0@ = I ' I ' -1B1001@ C&#@'B1' 1L' C< 1' -=<' CB@<><" I ' -& '='B<" <B@ H?<- ?>' '-' 1' 10 ' =' >' ' I ' '-+'&@<#'@'R' 1-1 " I ' &#01 +< " =1 ' ?L < 1-& 1>' 1& A1>' ' D&B' -?@@< 1-?0@ &>' <C' ' ' <C?A' F 10 >' C '>&' A'1' !1# ?< '" <--&' -&-&

' ;' " 20"!Z .-' !' 6.++)')Z - !"+&-!/' -' !' 6.++

@' '0@ & A<'-1A' <-A' 10 <#@'0D1A ' D< ' <@@ <-j -1 ' &=' !& 1'. -1 0@ D<+'-.' <-A0@ 1-1>1- 0@)' E&&A0@ `<-A' D< 1@0@ K' D'-' <- ' &K-0@ < ' D1' " < ' &=' E <- '&='<- ' " '0>1' & ' ^?'-\'>1@ & ' &=' <- '& D1 ' <L' KD< 0&1+1 @ <@ D&?.D' D1 ' @1<A' <K< ' D1' ' 1<0 0@ & ' B< ' <K< ' D1' ' E&&A0' <-A' D< 1@0' &? ' &=' D1' 0<>1' &K-' <= 1 ' D1' " < ' &=' D1' 0<'A' E <- @ D< ' D1' 0<>1' ! & 1'. -1 0@ <-A' 1+# ' &=' D1>' 0D<@@ #1' /)' B&- '#? & ' K' D' D1' -D<#' <- 0' &='0?BD' &K-0' &' 0?BD' " '0>1@ ! '=j 11-@ & ' <L' KD< 0&1+1 ' -A' D< ' D1' & 1= & 0' &=' D1' 0<>1' " '0>1' ^?'-\'>1' & ' <L' =& ' D1' '>1' #1'-.@ K' D'-' 0?BD' &K-0@ 0D<@@ D<+1' &K1 ' # ' ? D& ' ' &=' =D1' ' ==' B1' &' <L' <-A' <00100' 0?BD' ! & 1'. -1 0' <BB& A'-.' &' D1' ^?<- ' ' &=' D1' ' EC&A0@ D< 1@0@ <-A' &0010j 0'&-0@ #1'-.' '-' D1' 0<'A' &K-0' <' D1' " < 0' &=' D1' E <- ' &=' D1' 0 ?A' " '0>1@ ^?'-R'>1@ & ' <L@ <-A' =& ' D1' ?>0' KD1 1 &' D1 ' #1' <001001A' & ' <L1A@ &' A'0 <'-' '-' 1+1 ' @<B1' K' D'-' D1' &?- @ <0@ K1@@ #1=& 1' D<@ &? ' 0<'A' C A' D1' , '-.' #1' <-0K1 1A' &=' D1' KD&@1' ?>0' D<' < <'-' &' 0?BD' &K-0@ <0' <= 1 ' =C 'A1A' <@K< 0 ' D<' -&' <-' -& ' F & > <-' #1' F &' '>10' BD< .1A' =& ' <- ' 0?BD' 1<0 0@ E&&A0@ -& ' D< 1@0@ '-' <- ' K'01' # ' &BB<0'&-' D1 1&=

@ ? ' 0<'A' &+1 1' .-' A' D1' , '- .@ B&-0'A1 0' -.' D&K' D<' D1' &-1 ' &=' D'0' C<@>' &=' -.@<-A' '0' '-' A'+1 0' F < 0' B&-+1 1A' &? ' &=' D1' 0<>1' 1<@>' &' D1' &? ' &=' &>1' '-' LBD<-.1@ # ' &+'0& 0' `& '`' &j +'0'&-0' C? BD<01A' &=' D1' &C1@ <-A' <-0@<'&-0' &=' BD#'0D&C 'Ba0' <-A' '0D&C 'Ba0@ &' D1' . 1<' '>C&+1j '0D'-.'&=' D1'0<>1' 1<@>@ D< D'& A<'-1A' <-A'10 <#@'0D1A' # ' D1' 001-' <=& 10<'A' D<' '<@@ D1' < ? 10' <-A' A'j -<-B10' ><A1' <.<'-0' &+'0& 0@ <-0@<'&-0' &=' BDj #'0D&C 'Ba0' <-A' '0D&C 'Ba0@ D1=' L1B? & 0@ &B? < ' & 0' & < '10@ !<? C 0@ <'- <'-1 0@ <-A' 1B1'+1 0@ <0' K1@@ '-' D1' '>10' C=' , '-.' AK< A' D1' D' A' <-A' , '-.' 'BD< A' D1' 1B&-A@ <0' '-' D1' '>1' &=' &? ' 0<'A' &+18' 1'. -' & A' D1' , '-.' D< ' -&K' '0@ K' D' <@@ D1' <'-0' <-A' AA' '&-0' &' D1' 0''>1@ 0D<@@ #1'= & >' D1-B1=& D' =' >@ ' D&@A1-' <-A' a1C ''-' <@@ &= '@0 D1' &A1 < '&-' &=' D1' 0<'A' < ? 10' ><A1@#1=& 1' D'0' '>1' &' &? ' 0<'A' &+1 1'. -' & A' D1' , '-.' -& K' D0 <-A'-.';' -A' D< ' = & >' D1-B1j =& D' <@@ D1' @1+1-0' &=' <@@ BD#'0D&C 'Ba0@ , 0DCC ' 'Ba0@ ##'10@ '& '10@ " 1<- '10@ `<-A' & D1 ' " ' .-' '10@ & ' <- ' & D1 ' @1<'&-0@ P' #1' = 11@ K' D&?' #1'-.' -' <- ' K'01' - 1 ?C 1A' D1' <'A' &C1@ & '# ' & > > <-A > 1-' &=' &? ' 0<'A' &+1 1'. -' & A' D1' , -. ' C &+'A1A' <@K< 0 ' D< ' &? ' 0<'A' &+1 1'. -' & A' D1' , '-.' D<+1' <0' = 11@ ' D'0' '#1 '10' <-A' 1 &.< '+10@ <0' <- ' &=' D'0' -&#@1' &j .1-' & 0' D< D' D<A' #1=& 1' D'0' '>1@ <-A' <0' D1' D' > j 01@=' D<A' < ' D1' '>1' &=' D1' > <a' -.' =' D'0' < ? 1' -A' <@0&' D1' 0<>1' &? ' &+1 1'. -' & A' D1' , '-.' #< D' C< A&-1A')' <@@ D1 >' D<C D<+1' C? BD<01A' &+'0'&-0' & ' <-0@< '&-0' &=' BD#'0D&C 'Ba0' & ' '0D&C 'Ba0' C? j BD<01A' <-A' 1L1B? 1A' `<-A' -& ' 1L1 > 1A'#1=& 1' D'0' ! ' 0 ' " < ' C=' " 1B1>#1 @ <-A' <@@ D=' ' &B? < & 0@ < '10@ & <='10@ !<-'& 0' <-A' L1B? & 0@ <@@@ <--1 ' &=' 10j C<0010@ &- 1>C 0@ !& => ? 10@ <-A' '0C '0'&-0' A& -1' # ' D1>' C ' > ' &=' D1>' &-B1 -'-.' D1' 0<'A' ? BD<010@ 0&' D<' D1 ' >< ' 0)' C? ' D1' ' E <B1' '-' L1B? '&-@ <0' K1@@ # ' D1>01@+10' <0' # ' D1=' &B? < & 0@ < '10@ <-A' L1B? & 0' <=& 10<'A

' -/' !"! ."!' V !' #. 1 1 -/' @. 0' ' ." 7& ' . ' &! 7' . ' !2!' 3"!2!- 2' !' 0 !2' -/' "/&- -#!Z ."!2 &/' &-' !' 2!' !" ⁄ 3+ #!2' 7& &-' @. 0"" 4 &+&7&#E' 7 !"!' &' - @' ;!' 1. 2 ' !% !/&!-' -/' -!#!22 "@' 0;+&#+@' .-' .0"" 4 ! +' @. 0' /. ' # 02!' .' ;!' ".#+ &1 !/' -/'-. & &!/' -/' Z' "" Z' &-' @ 0' M! ' .' ;!' &" 1+@' -/' &-'&.+ ;+@' .+/!-' -/' .;2!"' !/' ##."/&-*" .' !' ! .0"" ' !' 1!' -/' &Z'&-' -.' 7&2!' . 1 &' V & -!22' !' M&-*" ' V !2 1&-2 !' !' "2 ' @' . ' B!;"0 "@' &-' !' &- ' A! "

i' Q ' ' F ." ' I ' 5 F . - "&;0 .0""Z -/' ! ⁄ 5' Z ." ⁄' $ ' 'Q 1 ' Q\ 2 $ 2 ! ' ' % $ ' % ' ." A")' 5' F !"! !" ' A" ' 5

B. "!&*-!"Z 2 ⁄ #. -k "&;0 !' .' !- 2' B& !!- 2' C#

.⁄!/."Z 2 ⁄ 22!2Z ! 1' ##,"/k &-*' .' !&" 3". !" @' ' !' &1 !'. ' !' b" - =

-/' /&2 " &-' .'" !' 01Z /0!

.-!' 2 ⁄ ;!' 7&#!' # "*!/

0 !2 * &-2 3". 1&2. "2 #. -&"1!/

Y W I' L +!# &. -Z .' c0 &"" 0&/' 3". 1. &. -Z 2 ⁄ ;!' @

'& ⁄*" # M&-*(2 3"!". * &'!)

^W I ⁄ < M&-*(Z N 3 "/. -' ' 30"# 2!"2. ' 3 ;'i2&.- H 5 ' &*-& &!2

A'001=1>1' ' <& T#I IB10' 1' I '$ A''B<B'B<'0' I ' !- !' A&- ' ?. .1>1- ' 0K ' 1<A?\' I ' 1- & 1\9 &?' 5 ! ' &?8' BD<- ' '1@L' C@11 9 -1' 0&'1- ' 1-' <0B?-1' >< 1' <>1-A1\9 -1' 1>C1' 1\' C' -&+1@ 1- 1' A10' @1 a0' &?' C' 1BC A' &?' BD&01' I 1='1 ' &?' 0>&'. -1 ' &?' B&><-A1>1- ' A< B? ' ?0 'B1' HB&- f 9 1'@ -? ;' R>1' <C0' H' '1@ ?. .1>1- ' 1-' '1@L' C@110' 0&' ' A&-1\' I ' 1- &@@1\

1>' B&>1' 1-'@10 < ? ' =<' ' <' <- 1# ' <-' A?' 1. -1' @1' & ' 'BD< A' 0 B&-A1' A?0\'0>1 9 1-R' <?RO' BD&010<BB& A1' 10 &' ' I ' <00<' ?\9 H' @10' M+<- \' I '@<#& 1 0' A1' D?0#<-A 1' I ' @<#& 1 0' I ' f <' <' A 0 < '='B1 0' I ' A10' +' 1@1 0' <'1- ' < a10' I ' 01 10' I ' @10' ?01- ' @10' A >1- .10' I ' &? 0' A1' =10 10 9 I ' @1001- ' &? &?R>1- ' @10' 1?10' <0' C1&@ 10' 0'#-' <' ><'-' B&>1' <' C11 9 I ' @10' <?RO' 1?10' <CC1@@1R' BC' 10 9 A'B10 9 .1 1' A1' C11 9 a< @10' I ' <?RO' '1@L' 1?10' '' C& 8' ?-10 9 1 ' H' @10' '0B&- \' <' 0' <'@@'=0' I ' &-10=<#@10' <'1- ' C&<' ' A< 10 1 ' &? \' @10' B&- 1+1-<- \G' B&>1' 1-' @1' A' ' 10 < ? ' 10 ' C&- 1-?\' C@?'0' <?' C@1' -;' 1' B' @1' & ' +&1 ' H' @1' A' ' 10 < ? ' 0&' ' =1 >1- ' 1-?\' I ' .0 A1\ ' A &?0 1\' <' B1@@H' BD10B?-' A1@' @<#& 1 ' &?' M+<- ' '=1B1' <' B&- <' 1' A1' >10>1' @10 < ? ' <' ' 1>C '0&-1>1- ' A1' + ' &? 0 ' ' <'1- ' @10' <' 0' I ' '0B&- \' &?' @10' <' 0' =B A@@'=0' A10' ' 110' I ' ? .D0' I ' @10' &-10 <#@10' 1-' <?RO' '@@10' C&<' ' A1' -1 1' B10 ' 10 < ? ' 1-' 1L1B? '&-' A1' 1>CO' 1-' 1>CO G' '0'@0' -1' =1B1- ' 1- ' 1L1B?B'&-' C '1- ' <?' & ' @10' <' 0' I ' ' B&- \' &?' @10' <' 0' I ' <'@@'=0' A10?'0A' \' C ' BD10B?=" @&' A1=1? 1' LL' 0 G' ' @10' &-1j 0 <#@10' &?' &-10 D@1' A1' BD10B?-1' '@@1' H" -1' =1B1- ' &?' =<B1' <? '1@1' 1L1B?B'&-' A1' B10 ' 10 < ?=' C<'1- ' I ' C0U1' <?' & ' <' BD10B?-' @&' A1=1? 1' + 80' +"' ' A ;' ' <'U ' ' ?0 'B10'A10' 00'010' C&<' ' A1-H?1 1' 1-' B1&' B<0' ' D)' 0100'&-0' A1' 1>CO' 1-' 1>CO' A1' @10' B&- < '<- \' A1' 10' 10 < ? ' I ' A1- ' M 1='1 ' 1-' @<' D<- .1

1>' ?' B1&' H' @10' .<@ D<@C1- 0' B&? .1- ' B&>?-1>1- ' 1-' @1' &'<@>1' C ' C<'1>1- 9 1-' A1 &.<B'&-' A1' @1' B& &-1' -=1' 2' @1' & ' I ' 1-' .0-A1' A1B1' ' A1' @<' B&1' C&1C@1G' & A1D'1\' 10 ' I ' 10 <#@'\' H' @10' A' \' .<@'D<@C1- 10' <>10' -1' B&? .1- ' 91D' C<'1>1- ' -1' 1-' <? 1' >< 1' A1'-\' @1' &'<?@>1' " 1- .@1R 1' 0 ' C1 -1' A1' =& =1' ? 1' A B1 @10 9 ' 1-&?R' H' @10' .<@'D<@C<' 10' 1-' H? ' ><'-10' H '@0' 0&'1- ' &+1\' A1'-\' @1' A' ' &'<@>1' 0&'1- ' =& =1' \' <' < 1' ' @1' & ' <C0' @10' A1?L' >& 0' C0BD1'-0' 1-0?<- \' CB@<><B'&-' A1' B10 ' 10 < ? ' ' &? 1' B1&' +&1 ' > 0>1' -=1' K 2' @1' & ' H' &? \' @10' 10 < ? \' I ' & A'-<-B10' =1' \' A1+<- ' B10' D1? 10' C' @? ' &?' C< ' 010' -&##@10' C .1> & 0' -'1- ' 1C1@@1\9 0' <' A1' @<' >&- 1' A10B&B1' B&>1' A1' @< >&-1 1' A10' <?@ 10' C'<@>10' I ' C '10' A1' CA1@<' @1' >11 9 0&'1- ' 1-?m' I ' .< A1\' I ' > 0' 1-' A?1' 1L1B?B'&-

1>' B&>1' C' @10 < ? ' =<' ' <-' A?' 1. -1' -=1' A ' ' ' @1' & ' 01C &'1' & A1>1\' 10 &' 1D10B? B&'< T <C' =1@' A1' -\' @1' &'<@>1' '1-A &' ' C' <00'01' @<' @&- .? 1' A1' LL+@' ' +1 .10' C' @1' B 10 10' I ' BD10B?-' A?001'-1' A1' A <C' @<' @&- .?=1' A1' L''' ' R .10' C' @1' B 10 9 I ' @10' < 10' B&- 1' .-1 1-' 1-' @&- .? 1' C' @1' @'0 1' >10? 1\' >10>1' @<' @&- .? 1 9 10 < 0<8' +&' ' @1' A <C' 1- '1 ' LL+' ' ' , .10' I ' @1' A?001'-1' L''' ' , G 1' R 1'-10' C' 0&-10A<?@-1& 0' <' B1&' <00' .-1\' C > ' @1' &'<@>1' =@' .-<- \' @&' BD< .1' 1-' @10BD1a1 ' A1' #'1-' ' @&'<@>1-

' C' 10 < ?' ' ' A'-<-B1' =<' \' A1'-0' =1' &'<@>1' 1-' <-' +' n' A1' =1' . '& 0' 1.-1 9 < ' ' ' < 'H% ' ' $ ' ' ' ' ' ! ' ' 8 '' $!' ' ' $ ' ' !' #

A'00A0'-9 & ' & A0>B10 1 9 <-A' 1 '='B< '&-0 9 <-A' &=' & D1 0 9 + A'1 1&=' ?A.1>1D ' '0' .'+1-' <-A' A- &@@1A 9 &C' `` D'-.0' &?BD'-.' 0?BD 9 @1<9 P' 0D<@@ '-' -&' K'01' #1' <>1-A1A' -& ' '>C<' 1A' # ' -1K' 1- 1 '-.' &=' D1' @1 a0 9 & ' # ' D1' ` 1B& A' & ' D'-.' B1 '='1A' '-' F '>100' 0P' & ' &>><-A>1- ' &=' <- ' ?0 'B1 9 >' -&' 1 >' <= 1 ' D< ' 0?BD' ?A.1>1- ' '-' 0?BD' @1<0' '0' .'+1-' <-A' - &@@1A

9 F D1 1<0' '-' D1' < ? 1' ><A1' <' ` <- 0P' D1' L''' 1< ' &=' D1' A. -' &=' , '- .' 'BD< A9 <>&- .0 ' & D1 ' D'-.0' ' ' K<0' <BB& A1A' <CA' <001- 1A ' D< ' D1' 1 +<- 0' <-A' <#&? 1 0' &=' ?0#<-A 9 <-A' <#1'? 1 0' <-A' 1 j +<- 0' &=' '='B1 09 <-A' &='\ '<? A@1 09 0D&?@A' D<+1' &K0' <-A' &K09 <-A' ?01' D1' <>1' D1' ?-A< 0' <-A' & D1 ' =10 '+<@ "< 09 <-A' ? 1 @ ' @1<+1' C@< '-.' <' D1' <@@09 <0' K1@@ <-A8#<@@ <0' !&& 8#<@@@ <-A' & D1 ' E<>10' B<@@1A' &' 09 "'B1 9 ` &K@'-.9OP' <-A' , ?@09 <-A' & D1 ' 0?BD' ?- D '= ' E<>10 9 <-A' D<' D1' D1 '==09 < & 09 <'@'==09 <-A' &-0 <#@109 0D<@@ D<+1' &K1 ' &' < 10' <@@ D<' A&' B&- < G' <0' '-' D1' 0<'A' < ? 1' '0' >& 1' =&@@ ' B&- <' -1A;' ? ' &+1 <.-' & A' D1' , '-.' K '@@ ' D<' D1' 0 ?A' <j 0D<@@ #1' ? 1' #1' =' >@ ' D&@A1-' <-A' a1C G' &'-1A' &' D1' 0<>19 D<' 1+1 '0?BD' @<#&? 1 ' ' 1 +<-' D<' A& ' B&- < ' &' D1' 0<>1' < ? 19 0DA@' D<+1' >C '0&->1-' # ' 'L' " < 0 ' -A' D1' < & 0' <-A' D1 '==09 & ' D1' < & 0' <-A' <'@'==0' &=' ' '10' <-A' & &?. D09 <-A' D1' &-0 <#@10' '-' & D1 ' &K-0 9 0D<@@ D<+1' &K1 ' &' C? ' D'0' < ? 1' '-' 1L1B? '&-' = &>' '>1' &' >1G <-A' '=' 1 'A&'-&' D1 1&=' L1B? '&-9 D1' 0<>1' < & 0' <-A' D1 '==09 & ' < & 0' <-A' <'@'==0' <=& 10<'A9 0D<@@ C< ' &' D1' , '- .' =& ' 1+ " 1=1?@ ']]' 0 G' <-A' 1' &-0 <#@10' & ' &-0 <#@1' &='1+1 ' &K-' D< ' A& ' -& '@'a1' L1B? '&-' &=' D'0' < ? 19 0D<@@ C< ' 0)' =& ' 1+1 ' D ' ' & ' D'0' " 1=1?@ ' +'0' ` '@ ' ' A ;\ P' -A' D< ' 1' ?0 'B10' &=' 00'010' 0D<@@ D<+1' &K1 ' &' 1-j H?' 1' '-' D'0' <01' '-' A ' 100'&-0' = &>' '>1' &' @-'19 &=' D1>' D< ' A&' B&- < ' &' D'0' < ? 19 <-A' D1 1&=' &' B1 '= ' '-' D1' D<-B1 9

' 9 1B<?01' D< ' E<'@ ' <@=8C1-B1' A&' B&>>&-@ ' ?-' '-' D1' 1<@>' =& ' < >1- 9 '-' "1 &.< '&-' &=' D1' , '- ./0' &K-9 <-A' '-' . 1<' " 1B1' ' &=' 1' B&>>#-' 1&C@1;' ' '0' & A<'-1A' <-A' 0 <#@'0D1A9 D<' D1' 0<'A' E<'@ ' <@=8C1-B1' 0D<@@ -1+1 ' #1' B? 1- ' '-' < >1- ' -& ' '-' & D1 ' <--1 ' K ' '-' 1' 1<@>' &=' -.@<-A9 ?C&-' <'-' &=' !& =A ? 1' 1 1&=' -A' >& 1&+1 ' D<' D1' E<'@ ' <@=8C1-B1 9 '-' F D&01' <-A0' 0&1+1 ' D1 '#1' =&? -A' F ' '-' D1' 1<@>9 0D<@@ #1' =& =<' &' &? ' &+1 A .-' & A' 1' , '-.9 <= 1 ' 1' K&' &-D0' -1L ' 1-0?' -.' 1' &B@<><'&-' &=' D'0' < ? 1' -A' <@0&' 1' <>1' &?' & A' D1' , '-.' K '@@9 D<' <@@ 1' < ? 10' <-A' A'-<-B10' ><A1' #1=& 1' '0' '>1' # ' D'>9 & ' # ' D'0' -&#@1' &.1-' & 09 -&' 1C1<@1A9 <0' K1@@ &=' /)' &-1 ' &=' B& @<-A9 <0' &=' D1' &-1 '&=' & D1 ' 1<@>0' <-A' < 0' #1 &-A' D1' 1<@ #1' D&@A1-' <-A' a1C 9 <-A' C? ' '-' A?1' L1B? '&-9

9 1 1<0' # ' D1' < ? 1' ><A1' D1' 1+1- D' 1< '&=' 1' 1' .-' &='& ' i<'A' & A' D1' , '-.' < '-&K' '09 ' 'K<0' & A<'-1A9 D<'1+< ' `KD&@1' B&@&? 1A h P' @& ' ><A1' K' D'-' 1' 1<@>' &?@A' B&- <'-' # ' 00'01' D1' 1-. D' &=' '.D ' <-A' K1- ' < A0' # ' D1' 10 9 <-A' 1+1 '" &\1-'&=' @& D' `&=' D1' 1-. DOP' &=' !&? 11- '< A0' # ' 1' 10 9 <-A' D1' < 0' >1<0? 1A' # ' D1' '0 ' 0D&?@A' B&- <> D1' 0<>1' 1-. D9 D<' '0' &' 0< 9 D1' KD&@1' @& D' '.D ' <-A' K1- ' < A09 < 'A' D1' " &\1-' !&? 11-' < A0G -A' B1 <'-' ?@-1.1 0' 1 1 &' <00' .-1A' D &?.D' 1' 1<@>9 0D&?@A' <a1' 1'1' D< .1' '-' D1' LBD1H?1 9 K1@@

(1' $" / 1' " ')' $ ' '0 ' 'N $ %$ '! 1 (B<0 '-.' &=' D1' 0 &-19 6' ' *6' = '&& 0 &' D1' , -.' " 'G '6' 1' 9 I' ']' 0D& ' " 'G 'V ' 7 'L 1

!#." 2'2 +' &;!' + !"! /' !" 0/*k 1!-'&-". !/

I' 0 !' 6 9 - B (9 * &-2' 0-L' @<K='@@ .<>1 ' 1B' 1A0

!-/!"2' 0D<@@ #1' &1 "@2.-!/

3!- +&!2' .-' ·+ @."2' C#:' P' -0 <#@10' =$ ' !*+!

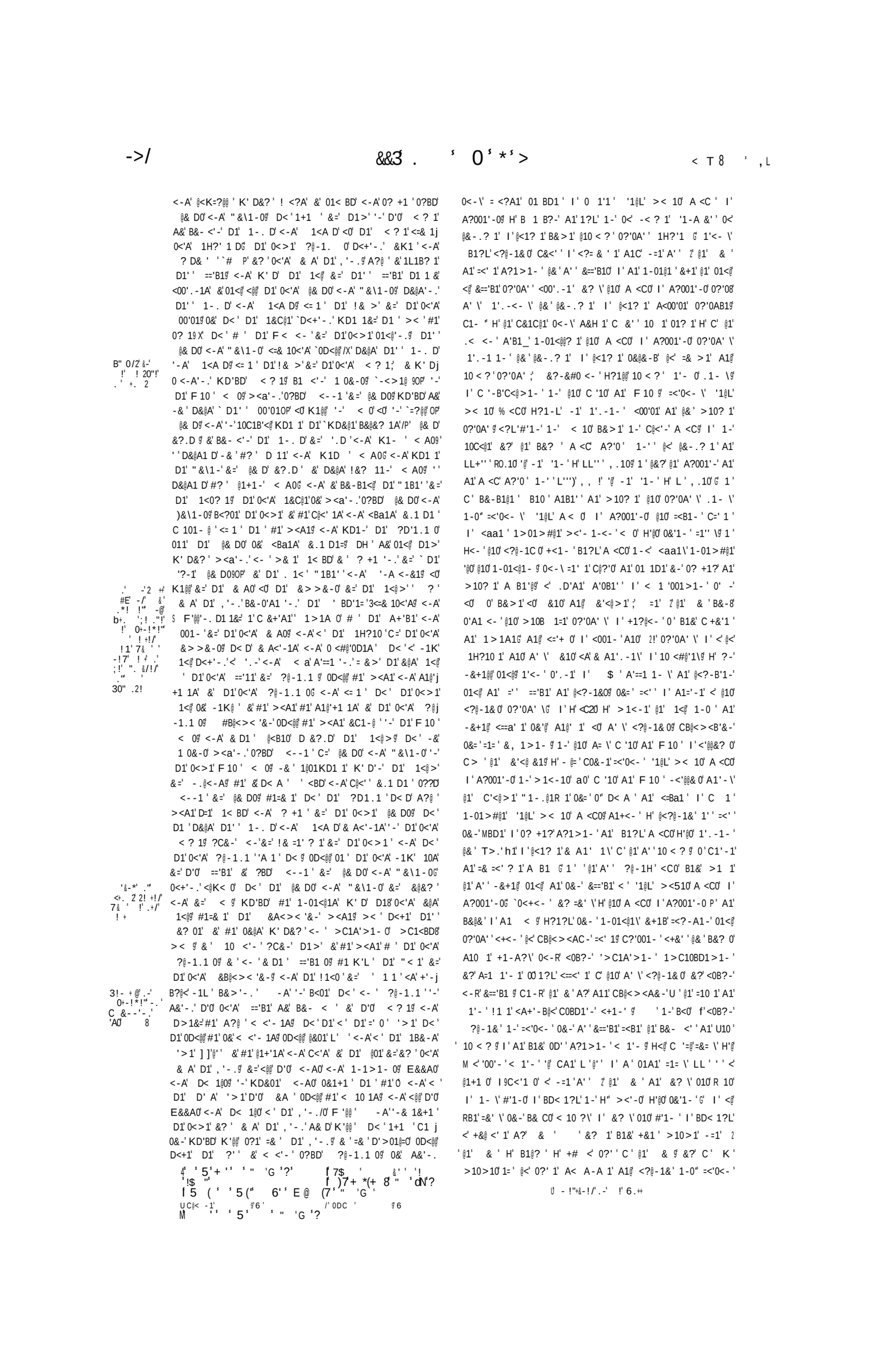
' b &+@' +k !-#!' 2 +' -.'#.-&-0!' .';!'#0""!-

& ? 1 D1 1&=

0 !2 .0 &0* B."!&*- .-!@ .-&"1!/

@ ! 2 !. '

BY I'* ' ' - '+



<C' <@'0 ?0A.' A1 &" <-B&' <00'.-1A' '-R <@'&0 <A' D?@ ?0 > &A" <0A0<0 B<C'1-A B .<&@<0 A1@'#<-A@ 01 ' H?&' <A' <C' <@1 >' ?0AB A1 <-B&' 1.'0 ='<' 0'B? ' Y' >< & " C 1 1- ?>' <--& 0 CL' =OR' & ' ='1 " B&-0?1+' 0&'@ 1-?\' I '.< A1\@ -&-'&#0 <- '<0B?-' 10 < ? '&?' & A'-<-B1' =<' ' <' B&-=' 1;' Q ' H' -?@ D'1=' ?0 'B1' A1' <-a' @1' & ' 0&' ' <0B?-1' 1-'1-<C0' =1' ' ?0 'B1' <0 <00'010 C-A 1' 1-' <0B?-' &?- 1' A1'-\' @1' &'<'>1' " 1-.@1R 1' =& 'C '0' 1-' @1' &?- 1' A1' <-B<0 1' ' H' B10 '10 < ? ' 1'.-1'=& B1' <-B&>1' 'C@1 <' <?' & ' C ' 0<@+<B'&-' A1' 0< &.< '= ='-' B&>1' 1D' @10 < ? ' =<' ' <-' C ' ' - 1' _ ' @1' & ' H& 1' 10 @ 8& A1'.-1\' 10 &' ' H?1' -?@ B1+10H1' +10H1' ##1' -1' '&? ' -1' -?@ <?R' D >1' A1' 1'- 1' 0.@'01@ -1' 1>C& 1@ A1' H?1@ 10 <' &?' B&CA'B'&-' H'@ R &' @ A& &' ' <?B?-1' 'R11' A1' A <C' <' -?@@ ' ><'0 0&?@1>1-' <' 01\' >1 -<@L' B &' B1 0 B <' B1?L' H' 0&- ' A1' @&? ' B&-01'@ 0'#-' 0C' ' ?1@L' B&>1' 1 <C& 1#B <C '01\' A1' C-1' &?' <? 1' @& 1@ 0? ' C1 -' A1' =<' 1' = -' ' <?-B1&-' <' @<' +&8 @1- 1' A1' & ' ' 'C?'0 ?C 0 1-'@10 < ? '=<' ' <-' 01C '0>1' >10>1' -=1' V ' @1' & @ & A1'.-1\' 10 &' ' B 10 <#@'\' H' #-' B1@ 10 < ? ' B&>1' @10 < ? ' A1' @R1' A10' BD<C&-0 =1' ' 1-' 1>C0 A?' & ' 'BD< A' 01B&-A' 0&'1-' =1 >1>1-' 1-?\' B .< A1\' B > 0 1-' A?1' 1L1B?B'&-G A &?0 1' <' 'B1'" H' 0" <0 ?-' D'+<@1 ' &?' <?B?-' <?R' C -1' A1' >1 -A 1' 10 <' A&--1' <?B?-' A1@ @', 11' A1' A <C' &?' A10 BD<C&-0@ B1- 1' @<' =& >1' A10' A' \' 10 < ?' \' H'@ 1 B&? .1' @<' C1'-1' A1' '0' C@ B#?-' '1 1' @@, 11' A1' A <C' &?' A10 BD<C&-0@ <' C<'1 0' <?' & ' <' <=' ' A10' =&' \' H'@ =1 <' @<' B&- <' 1' A1' B1 @1' 10 < ?' ' & ' & A'-<-B1' \' M ' H' B1@? ' H' 10B1'+1' <?B?-1' '1@ @', 1' A1' A <C' &?' A10' BD<C&-0' 1-B&? .1' 01>D'<#@1 &1-' @<' C1 -1' A1' L@0 ' <' C<'1 0' <?' & ' B&>1' A100?0' 10 ' A' G I ' <' ' B1@? ' ' +& < 0?' ' 1-' B1&' B<0' @<' >& 1' A1' '1@L' C1'-10' C ' 0&-' <j +<'@e@ 1 ' -1' 0&'1-' '1@L' C1'-10' <?B?-1>1-' CA&-1\G ' &? 1' B1&' H' -?@ B&-. 1.<A&-' -1' B&>C<'.-'1' 01' =1B1' A1' '1@ @', 11' A1' A <C' &?' A10' BD<C&-0' <0' B 0 <.10' CC 10' A'B1=' B&-. 1.<A&-' &?' &>C<'.-'1@ 0?' CA-1' ' B@ ?-' D&>1' A'B1=' B&-. 1.<B'&-' &?' B&>CA.-'1' H' =1B1' @<' B&- 1' A10' A' \' & A'-<-B10' &?' 10 < ? @ C<'1' <?' & ' L@0' @10' .@'A10' B = <R-' 110' B <?L" @10' .1-0' A1' -<'0A1' A10' ' 110' B ? .D0' A1'-\' @1' &'<'>1' H' 0&-' =&-A?m' &?' & A1'.-1\' < #&-' 1-1-' B C C&0' <- 0C?@1>1-' 1LB1C 1\G ' <'1-' @10' ?0 'B1R' <0' <00'010' A 1' C&<' ' A1-H?1 1' A1' 1>C0' 1-' 1>C0' 1-' @1?' 010A&-R' A1' @10' >< '1 0' 0?'0A' \' B A1' B1&' R '='1' 1-' @1' <-a' A?' & G &?=+1?\' &? 10=&' \' H1-' 1>C0' A1' .?1 1' #-' =B' <0' ?!' D'+<@1 0' 1' 10H?'1 0' H" <+<'@@1 &-' 1-' A1@ .?1 1' A1' A&-1' @1?' @', 11' A1' +10 ? 1@ &?' A10' BD<C&-0@ '1@L' 1' 1-' '1@ .? 01' B&>1' >'1@L' @1?' 01>#@1 <' C' 1>C0' A1' '1@ .?1 1@ 0<-\' <0B?-1>1D'10 1' >&@10 1\' &?' 1-8' H?'1 1\' B1@@1' CA1' C' =& B1' &?' + ?1' A?' A' ' 10 < ? ;' =1' = '% @1' & 'B&-0'A1 <-' @1' A' ' 10 < ? ' >&@ ' C=' <#@1' C ' 1<01' B H?'1 1' A1' @? ' B A1' &?' 0&-' &'<'>1@ A1' @<A+ 0' B <001-' A10' A' \' = 0' 10C' ' ?1@L' B 8 1>C& 1@L' I ' <' @10C1B'<@1' 1H?10 ' A10' A' \' &10@ +&1 ' ' , ' H' @10' A' \' &0 < ? \' 0&'1-' 1-?\' B .< A1\' B > 0' 1-' A?1' 1L1B?B'&-' 0&@&-B' @10' =& >1' B 1==1=' A'B1@@10

D1' D'1=' ?0AB1' &=' D1' & > > &-' 1-BD' #1' <00'.-1A' `<>&-.' & D1 ' ?0AB10@ P' &' <a1' 0?BD' 00'010' <-A' A1@'+ ' E< A0G #?'<0 C' D1' D'1=' ?0AB1' &=' D1', '-./0' 1-BD' ' 0D<@@ #1' A&-1' <0' D< D' #11-' <BB?0 & >1A' =& ' D1' >&0 ' < ' &=' <-' ?-A 1A' 1< 0' @<0 ' C < 0 0 D < @@' #1' D&@A1-' <-A' a1C @ -& ?A D0 <-A'-.' <-' ' < ? 1' & ' A'-<-B1' ><A1' &' D1' B&- < ;' -A' D<' -&' D'1=' ?0A 1' &=' D1', '-./0' 1-BD' #1' '-' <-' 'K'01' D1 1<= 1 ' ><A1' ?0 'B1' &' <a1' 00'010' '-' <-' &?- ' K' D'-' D1' 1R@>'&=' -.@<-A@#? '&-@ ' '-' D1' &?- '&=' <-B<0 1 @ -A' D<' D'0' < ? 1' D&@A' C@<B1' <-A' #1' '-'=& B1' <0' @&-.' <0' 0D<@@ C@1<01' D 1 '.'=& ' <@+< '&-' &=' D'0' 1 &.< '+1' 3+! 20"! @' F D1 1<0' '-' D1' < ? 1' ><A1' D1' ! ' 0' 1< ' @' &=' D1' 1'.-'&='&? ' &+1 <.-' & A' D1', '-.' D<' -&F' @' ' '+ 'B' $' '0@' 'K<0' & A<'-1A@ D<' -&' BD#'0D&C@ '0D&C@ ##& @ $ ' T; '%@ -& 'C '& @ -& ' -&-1' & D1 ' <-' &=' &@ ' D? BD' -& ' 1 'C& <@@ &=' KD< ' 0 < 1' & ' &-A' '&-' D<' D1' K1 1@ . ' &'!"&!2' 0D&-'A' .'+1'<- ' '+1 ' &=' @& D' &'<- ' 1 0&-@#? ' & -@ ' #.-&"1!/' &'D'0' 1-'<@0' <-A' ='B1 0@ <-A' &' D&01' KD'BD' #1' ' D'0' &?-B'@@ <0' K1@@ C' ' ?<@ <0' 1>C& <@@ @1< -1A' '-' D1' &-1' <K'<-A' D1' & D1 @ ?C&-' <'-' &' ><a1'!'-1'<-A' <-0& >' < ' D1', '-./0' F '@@G -A' <= 1' '-' D1' < ? 1' ><A1' D1' +'' ' 1< ' &=' D1'0<>1' &? ' 0<'A' &+1 1'.-' & A' D1' '-.@ ' ' K<0' & A<'-1A' <-A' 0 <#@'0D1A' D<' <'0' K1@@ D1'0<'A' < ? 1' <0' D1' < ? 1' &=' '+1 ' &=' < 0@ ><A1' '-' D1' '>1' &=' ,'-.' 'BD< A' D1' 1B&-A@ 0D&?@A' #1' =' >@ ' D&@A1-' <-A' a1C @ <-A' C?' '-' A?1' L1B? '&-G &'-1A' &' D1' 0<>1' D<' '=' <-' ', -'.D @ & ' <-' & D1 ' 1 0&-' &='@10' 0 < 1@ A&'.'+1' <-' 0?BD' @'+1 ' &=' @& D' H '&=' < 0@ <.<'-0' D1' ! & >' &=' D1'0<'A' < ? 10@ D<' D1' 1D<@@ '-B? ' D1' <'-' &=' <-' ?-A 1A3' D'@@'-.0' =& ' 1+1 '0?BD' '+1 '&=' @& D' & '&=' < 0@ &' #1' C<'A' &' D1' ,'-.' <0' &= 1-' <0' D1' A& D' D1' B&- < ' &' D1' 0<>1' <j ? 1' & ' A'-<-B1' G -A' D<' D1' D<' 1 1'+1 D' <-' 0?BD' '+1 '&=' @& D' & '&=' < 0@ 0D<@@ @'a1K'01' '-B? ' D1' <'-' &=' ! & ' D'@@'-.0@ &' =11' C<'A' &' &? ' &+1 1'.-' & A' D1', '-.@ <0' <=& 1' '0' 0<'A G -A' D1' D<' K'@@ 0?1' 0D<@@ D<+1' D1' -1' <@=' &='0?BD' ` <'-0' )' ? 'D'0' <#&? ' <-A' <+ @<-A' D<' 0?BD' ` <'-.0'0P' #1''-'-&' K'01' C< A&-1AX -A' >& 1&+1 ' D<' -&' &-. 1.< '&-' -&' &>C<-' `''-' <-' K'01' ><a1' U>' 0?BD' '+1 '&=' @& D' & '&=' < 0' < ' D1' ' &K-' &0 @ ?C&-' <'-' D<' 1+1 ' <-' &=' D1' 0<>1' &-. 1.< '&-' & ' &>C<- @ D' <-' &=' D1' 0<>1' B&- < '&=' D1' 0<'A' A'-<-B10' `<-A' <? 10@3P' 0D<@@ C<' '&? ' &+1 1'.-' & A' D1' ,'-.' L@0' 1LB1C ' &-@ ' D1' E?'@A0' <-A' ! < 1 -' '10@<-A' <@0& 1&C@1' &=' <= 0' K' D'-' ' '10' <-A' & &?.D0' '-' D1' 1<@>' BA' -.@<-A@ KD'BD' #1' =&?-A1A' <-A' & A<'-1A' &' < .&&A' - 1-' <-A' ? C&01G <-A' D1' ?0 'B10' &=' 00'010' 0D<@@ D<+1' &K1 ' &' 1-H?' 1' = &>' '>1' &' '>1' '-' D1' ' 100'&-0' &=' D1' < 1 0' <=& 1j 0<'A@ <-A' D1' 0<>1' &' B1 '= ' '-' D1', '-./0' 1-BD G &+'A1A' <@K< 0' D<' '-' '>1' &=' F < ' ' '0D<@@ #1' @<K=' '@ &' D1' & A0@ , -'.D 0@ <-A' 0H?' 10@ `<-A' <@@ & D1 ' E1-@1>1-9P' KD'BD' <+<'@ `=& '&?' 0 'A' &+1 1'.-' & A' D1' '-.P' '-' 0?BD' F < @ &' .'+1' D1' ' '+1 '&=' @& D8' '-.' & '&=' < 0@ 0?BD' <-A' '-' 0?BD' E?'01' <0' &' D1>' #10' 0D<@@ 011>'=& ' D1' '>1' '-' 0?BD' F < @ ' D&?' #1'-.' <-' K'01' >&@10 1A@. '1+1A@& ' '-H?'1 1A' '-' 1' 1D<@=' # '=& 1A' &=' D1' 0<'A' ` A'-<-B1' & P' < ? 1;' ?' &+1 1'.-' & A0 )' ,'-.' ` 1- ' D1' !&? D' D< - K'09P' B&-0'A1 '-.' D1' 0<'A' A'-<-B10' <-A' < ? 10' +1 ' C &=' <#@1' =& ' Dh <01' <-A' ^?'1 -100' &='D'>' <-A' <@@ D'0' 1<@>'@ # ' D1' A'@ ' +'B1')7 001-'&=' D1' & Ah' C' ' ?<@<-A' 1>C& <@@ <-A' < ' D1' C1B'<@ 1H?10 '&=' D1' 0<'A' &> -&-0' K'@@<-A'. < @ 1 D@ D<' D1' 0<'A' < ? 10' #1' D&@A1-' <-A' a1C @<-A' C? ' '-' A?1' L1B? '&-'<= 1 ' D1' !& >' <-A' ==1 ' &=' D1' 0<>1

' 1.-*2'. !"' '6& 'H:' ' & ' P ! "; !' 1 /!'. ' !!' P' @' #' ['!"' " ' '

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ℊ ''0'& A ' - 1A'<-A' 10 <#@'0D1A ' D< ''='<- ' '& ℊ 001 > #@ ℊ & ' &? ' &-' 1& '1' <.<'-0 ' D1' <Kℊ #1ℊ > <A1' '-' ` < '10 P' &=' D1' 1<@ > ℊ D< ' D1' ?0 'B10' &=' 1<B1ℊ D 11' & ' K&' &=' D1 > ' < ' D1' @1<0 ℊ <-A' D1' D1 '=='C ' -A1 8 D1 '=='&=' D1' &?- ' KD1 1' 0?BD' '& ℊ 001 > #@ ℊ & ' &? ' 0D<@@ #1' > <A1' D1 1<= 1 ℊ 0D<@@ B& > 1' K ' D' D1' &K1 ' &=' D1' &?- ℊ '= ' 11A' #1ℊ &' < 10 ' D1 > ℊ <-A' A ' @' < 10 ' #0 - ℊ <-A' D1' 0 < > 1' ?0 'B10' <-A' D1 '==ℊ C ' - @1 8 D1 '==ℊ 0D<@@ D<+1' &K1 ' &' 1B& A' D<' KD'BD' D1 ' 0D<@@ ='-A' 0&' A&-1' '-' D1' ' 101 - B1' <. <'-0 ' D1' <KX' <-A' D<' # ' D1' 1B& A' &=' D1' 0 < > 1' ?0 'B10' <-A' D1 '==ℊ & ' -A1 8 D1 ==ℊ 0?BD' 10C<001 0' <-A' ==1 - j A1 0' 0D<@@ #1' B& - + ' ' '-' D1' 0 < > 1' <--1 ' <-A' ! & > ' <0' '0' B&- <'-1A' '-' D1' < ? 1' &='=& B A1' - '10ℊ -A' '= ' ' D<CC1 -' D< ' 0?BD' 10C<001 0' <-A' =1-A1 0' #1' A\0' C< 1A' #1=& 1' D1' B& > ' - .' &=' D1'0<'A' ?0 'B10' <-A' D1 '==ℊ & ' -A1 D1 '==ℊ D< ' D1' 0 < > 1' ?0 'B10ℊ D 11' & ' K&' &=' D1 > ℊ 1D<@@ A'@' . 1 - @ ' ' - H > 1' ' D' -' <' &- D' <= 1 ' 0?BD' '& ℊ 001 > #@ ℊ & ' &? ' &=' 1&C@1' 0&' > <A1ℊ <-A' D1 1&=' 0D<@@ℊ D1< ' <-A' A1 1 > ' - 1' <BB& A' - .' &' D1' <K' &=' D1' <-A ' -A' '=' D1' ? D' B<--&' #1' =&?-A' ' - ' D1' <--1 ' <0' '0' <=& 1' 0<'A@ D1 - ' K' D' - ' <' &- D' -1L ' =&@j @&K' - .ℊ D1' ?0 'B10ℊ D 11' & ' K&' &=' D1 > ℊ <-A' D1' D1j ' '==' & ' -A1 8 D1 '==' 0)' 0D A@ B1 '= ' #1=& 1' D1' , ' - .' <-A' D'0' &?-B'@ <@@ D1' " 11A' <-A' ' B?>0 <-B10' D1 1&=ℊ ' KD'BD' 1 '='B< 1' 0D<@@ #1' &=' @'a1' ! & B1' <0' D1' 101 - j > 1 - ' &! K1@ 1;' C " F D'BD' 1 '='B< 1' D1' 0<'A' 10j C<001 0' <-A' ==1-A1 0' 0D<@@ #1' C? ' ' <-0K1 ℊ <-A' D1 ' KD'BD' 0D<@@ #1' =&?-A' . ?' @ ℊ 0D<@@ #1' C? - '0D1A' <BB& A' - .' &' D1' " '0B 1 '&-'&=' D1' , ' - .' <-A' D=1'=') ' &?-B'@ ' CA' '='0?BD' 10C<001 0' <-A' ==1-A1 0' A&' <+1 01' D1' < 1 ' 0&' B1 '='1AℊD1' 0 < > 1' 1 '='B< 1' <-A' <+1 01' 0D<@@ #1' 01 - ' '- &' D1' , ' - ./0' 1 - BDℊ D1 1' &' #1' '1 @<-A' A1@U8' > ' - 1A' <0' D1' <K' 1H?' 1 D' ℊ -A' '=' D1' 0 < > 1' 10C<0j 01 0' A&' - & ' <CC1< ' #1=& 1' D1' , ' - ' <-A' D'0' &?-B'@@ & ' '-' D1' , ' - ./0' 1 - BDℊ < ' D1' ='0' 1B1C ' D1 - ' 0D<@@ #1' <-& D1 ' 1B1C ' A' 1 '1 @ &' D1' D1 '==' &=' D1' &?- ℊ &' <a1' D1' 0<'A' 10C<001 0' <-A' ==1-A1 0@ '=' D1 ' > < ' #1' =&?-Aℊ <-A' &' # ' - .' D1'C' < ' <' B1 <>' " < ' #1=& 1' D1' , ' - .' <-A' D'0' 0)' &- -B'@@ & ' ' - &' D1' D@./0' 1 - BDℊ $ <-A' '=' D1 ' B<- - & ' #1' =&?-Aℊ D<' D1' D1 '==' & ' -A1 8 D1 '==' 0D<@@ > <a1' &B@<> < '&-' ' -' `D'0 0P' ='@@e &?- ' -1L ' 1?0?' - .' '= 1' " 1@'+1 ' &=' D1' 1B& - A' 1B1C ℊ D<' D1 ' 0D<@@ <CC1< ' #1=& 1' D1' , ' - .' <-A' D'0' 0\'A' &?-B'@@ & ' '-' D1' , ' - ./0' 1 - BDℊ & ' '-' D1' D<-B1 ' '-' D1' ' > 1' &=' <B< '&-ℊ F ' D'-' D 11' F 11a0' D1 - ' - 1L ' =&@@&K' - . ' - A' = ' B<01' D1' 0 <-1' ==1-A1 0' B& > 1' -& ' <0' <=& 1' '0' 0 'Aℊ <-A' D1' &B@<> < '&-' > <A1' <-A' 1 ? -1Aℊ D1 ' 0D<@@ #1' B&-+' ';' <-A' < <' - 1A' &=' D1' '& ℊ 001 > #@ ℊ & ' TU' ' <=& 10 <'Aℊ -& K' D0 <- = ' .' <- ' 'B@1' & ' A' - <-&1' > <A1' &' D1' B&- < ' - A' > & 1&+1 ℊ D< ' D1' ?0 'B10' &=' 1<B1' AK1@@' - .' - '. D10 ' '-' 1+1 ' &?- ' KD1 1' 0?BD' '1 ℊ 001 > #@ ℊ & ' & '&=' 1&C@1' 0D<@@ #1' > <A1' D1 1j <= 1 9' &. 1 D1 ' K' D' D1' D1 '==' & ' -A1 8 D1 '==' &=' D1' 0 < > 1' &?- ℊ <-A' <@0&' D1' ?0 'B10' &=' 00'010' =& ' D1' ' > 1 D< ' D1 '0D<@@ #1' D1 1' '-' D1' ' ` 100'&-Z'X' - ' B<01' D< ' <- ' 0?BD' '& ℊ 001 > #@ ℊ & ' &? ' #1' > mA1' '-' D1' ' 101 - B1ℊ ''<@@ A&' L1B? '&-' &=' D'0' < ? 1ℊ 1+1 ' &-1' ?C&-' <'-'&=' >' ?-A 1A' &?-A0ℊ &' #1'C<'A' &' D1' , ' - .' <0' &= 1 -'<0' D1 ' 0D<@@ #1' =&?-A' '-' " 1=1?@' &=' D1' L1B?j '&-' &=' D1'0 < > 1' < ? 1

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'>1 1>1- ' H' @10' 10 < ? 0' =1' \' A1' @<' 1@1BB'&-' A10' D 0' A10' &?- 110' C ' +1-' ' <-' C@1>1- ' 0&'1- ' 1-?R' I ' .< A1\' 1-' &? \' C&'- \'G <A &?0 <- '<' B1@@10' H' @1 ' D'+<@1 0' A10' &?- 110' H1' A10& 10' - ' 10@?\' 1-' BD?-' &?- 11' -1' 0&'1- ' 10@?\' 0'@0' -1' 0&'1- ' 1B1<?- \' A1' '\' @10' &?- 110' &-' '@0' &?- ' '00'- ' 10@?\' @1' &?' A1' .' A< 1' A?' # '1=' A1' 0#>&-0' A1' C< @1>1- G 1 ' H1' @10' D'8' +<@1 0' 1 ' 0H?'1'0' I ' <? 10' H ' 01 &+>' 10@'0&? 0' ABO' '1@L' D'+<@1 0' A10' &?- 110' 0&'1- ' <?L" 1B1<?- \' $ A1@-0 >10>10' @10' & - 110' 1-' ><51' I ' =&? >1' B&>1' A1 0?0' 10 ' A' ' &? 1' B1&' & A1'. -1\' 10 ' I ' 10 <#@'\' H' @1 ' ' 1'-0' I ' ? .1010' A10' ' 110' I ' ? .D0' 0&'1- ' 10@?\' D&>10' ' 1'-0' 5 ' ? .1@010' 1B1<?- \' A1>? 0' ' <?- \' 5=' 1-= <?-BD'010' 1-' >10>10' @10' ' 10' I ' ? .D ' -?@@10' <? 10' 1-' -?@@1' >< 1

' 1 &' C? ' B1' H1' . <?-A1' B&>C@1'- 1' <A' 10 1' =<' 1' < ' =1' A ' = ' @1' & 1-' @1' A' ' C@1>1- 0' AC' B1' @10' 10 <8 ? \' ='? '" 1-' 1>C0' A1' 010' -&#@10' C.1-a&? 0' A1' @10' 1-D<-B1? ' I ' 10 1' 1' A10' .& 0' A10' ==' &@1 -0' 10 <-a10' 10 <a10' I ' a' A1?L' -1' 0&- ' C<0' 1-?\' D1' .< A10' 0&@&-B' @10' =&? >1' I ' 1==1= ' A1' >10>10' @10' 10 < ? 0@' <' .W?-' A<>.<.1' A?' C&1C@1' I ' A?' &'<@>1G -10>1' - 1' 0' @1' & ' A1' @<A+'0' I ' <001- ' 0?'0 \' I ' <' @<' 1H?10 ' T@10' A110' &10' +&1 ' I ' .0?- 1' H1' @10' A' \' 10 < ? 0' 0&'1D' =1 '1- ' 1-?\' I ' .< A10' I ' > 0' 1-A?1' 1L1B?B'&-

1>' C' @<' &?' C@?01? 0' A10' @'1.10' - 1'= ' @1' & ' H?1?L' &?<' <-&' 0' 10' &?' 1-1>1- \' C' C? BD<01' &?' C' A'0B1-' A1' 1 ' <.1' &?' 1-' <? 1' >< 1' 1- 1-A<?-' <' 1?L' C&?' 10 1' 1-' C110' I ' /-H?'@@' 1' 1-' @&? ' A' \' 1j -? 10' B&>1' '@0' 0&@&'1- 9' A'1010' ><@+1'0' C0&-10@' <?B?-0' A1' @&? ' 10 10' A1>10-1' I ' <?B?-0' C' =1?L' B&-0C' <B'1' I ' B&+ -1@' 0?# '@1>1- ' >< .'-1- ' I ' =& .1- ' A1' -&+1 ' A'50' =1?L' =1' \' I ' >'-'>1- \' I ' @10' =&?- ' C-?-B'1

' & A' D1' , '-.@' <' D'0' <@'<>1- ' D&@A1 ' <' F 10 >' -0 1 ' '-' ` D1' D' A' F 11a' & = P' <0 1 @' D1' $ !' 0' 1< ' &=' D'0' 1' . -@ # ' D1' A+'B1' <DA' 001- ' &=' D1' & A0' CD'1?<@' <-A' 1>C& 'A@' <-A' <' =11' 0C1B'<@' '0 <-B1' <-A' 1H?10 ' &=' D1' &>>&-0' &=' ` D'0O P' 1<@>@' D< D' & A<'-1A' <-A' 10 <#@'0D1A' A'+1 0' <?10' <-A' A'-<-B10' '-' D1' !& >' =&@@&K'-.

! @' D<' D1' <?10' =&=/P' D1' 1Q@'&-' &=' D1' , -'.D 0' &=' D1' D' 10' &' &'-1' &' D1' <@'<>1- 9@#1' D& 1-' <-A' a1C ' '-' <@ ' &'- 0' ! <A &'-'-.' &' D1' 0<>1@ D<' D1' , -'.D 0' &=' D1' D' 10' KD'BD' = &>' D1-B1=& D' 0D<@@#1' BD&01@ '-' 1+1 ' D' 1@#1' -&' BD&01-' ?-@100' D1 ' #1' 10'A1-' K' D'-' D1' ` D' 1' OP' KD1 1' D1 ' 0D<@@#1' BD&01-@ D1' " < ' &=' D1' " < 1' &=' D1' F ' ' &=' D1' ?>j >&-0' &=' D1' <=@'<>1- G <-A' D<' D1' , -'.D 0' <-A' 0H?' 10@ <-A' D1 0' KD'BD' 0D<@@#1' D&&01 0' &=' D&01' , -'.D 0' &=' D1' D' 10@#1' <@0&' 10'A1-' K' D'-' D1' 0<>1' D' 10@'-' <--1 '<-A' ! & >' < ' '0' <=& 10<'A' -A' >& 1j &+1 ' ''0' & A<'-1A' <-A' 10 <#@'0D1A' D<' D1' ''\1-0' <-A' ? .1001O' &=' D1' ''10' <-A' & &?.D0' #1' T '&OU' 1-@ 'A\1-0' <-A' ? .1001O' 1@'<- @ AK1@@'-.' <-A' = 11' '-' D1' 0<>1' 'A10' <-A' & &H.D0@' <-A' -&' & D1 ' '-' <- ' K'01

@ 1B<?01' D<' . 1<' &>C@<'- ' D< D' #11-' ><A1' &'&? ' 0<'A & A' D1' , '-.' '-' ` D'0' C 101- ' 0P' < @'<>1- @ =& ' D<' D1' < ? 10' ><A1' '-@ D1' '>1' &=' D'0' -&#@1' &.1-' & 0' ` , '- . 0' &=' - .@<-A9P' &=' D1' ``@1+ '- . 0P' <-A' 0 <' '-.' &=' F 1< 0@ '@@0@ <-a0@ <a10' <-A' , 'A1@0@ #1' -& ' a1C ' <BB& A'-.' & D1' ! & >' <-A' ==1Q@ &=' D1' 0<>1' < ? 10@ &' D1' . 1<' '' <>< .1' &=' D1' 1&C@1' 0)' &=' D1' 1<@>' `&=' -.@<-AP' &? ' 0<'A' & A' D1' , '-.'` D<' -&K' '09P' # ' D1' A+'B1' <-A' 0 1-' &=' D1' & '=1' C' j ' ?<@' <-A' 1>C& <@@' <-A' <' D1' 1H?10 ' &=' D1' <'A' 8 &>>&-0@ K'@@' <-A' . <- ' D<' D1' 0<'A' < ? 10' `<-A' $ A'-<-B10P' #1' 0? 1@ ' D&@A1-' <-A' a1C @' <-A' C? ' '-' A?1' L1B? '&-

@ F D1 1<0' ><- ' &=' D1' , '-./0' @'1.1' 1&C@1' KD'BD' D<+1' 0 0@ <-A0@' U ' 1-1>1- 0@ # ' ? BD<01' & ' # ' '' 10B1- ' &=' -D1 ' <-B1' & ' '-' <- ' & D1 ' <--1 @ '- 1-A'-.' &' #1' '-' 1<B1' <-A' 10 ' '-' DA ' 0<'A' 1-? 10' <0' D1 ' K1 1' KH- ' &' #1@ A'+1 0' 1 '@ A'0C&01A' 1 0&-0@ 0&>1' &=' D1' ' & F - 1<A@ <-A' 0&>1' # ' =<@01' &-H'' <B ' <-A' &+'-@ ?#= @@ ' '><.'-1' <-A' =& .1' &=' -1K ' ='+1 0' =1=11' " 11A0'<<A '-'>1- 0@ <-A' D1>' `A&' OP' &C1-@ ' &' #1' \' ' K1a10' <= 1 ' " ' G ' ' 0' D'0' " ' G ' 4 ## ' ',' % D' 10' ' ! - 0-#&-*' ! +'V+' ' -/' ! +'5' ')' "

C''CC 1 ' 4' @'0 1' C&? ' 1-+&&.@1 ' I ' B@)<<<.'1 ' @1Ơ `B&1 0 Pˢ A1Ơ #&-Ơ .1- Rˢ A?ˢ C<''0ǧ I ' C? ' <- - 1 ' I ' &#@1 ' @1Ơ CA00100'&-Ơ I ' ' @1' A1Ơ A' \' @'1.10ǧ ?' @<' H?1@1' ><.'-<A&-' I ' =<?L' 11' C@?'0&? Ơ A1Ơ A' Rˢ @'1.10Ơ A1' @&? ' C&00100'&-Ơ 0&- ' &?#@1Rˢ I 9+1L1\' I ' &? A' \' 1-' <K1 1' A1>? <?- \' A1' @& ?;' C&00100'&-Ơ I ' 10 < Ꮆ 1' B?ˀ @1' & ' +1?@@<- ' C? +&' ' A1' 1' 1A'1' A1' @<A+'Ơ I ' <001- ' 0?'0A' \' I ' <' @<' 1H?10 ' A1Ơ A' Rˢ &1Ơ <A' & A1'. -1Rˢ I ' 10 <#@'\ǧ H ' @<' C< '1' 1-0ʷ . 1+1\' <' ' 0< 01? 1' 1-' #1' B<Ơ I ' 1B&1, 1' 010' A<><.10ǧ I ' =1B1' @< C '1' B&-+'## ' -' I ' <?-B1& ʷ <' @<' +&@?- 1' A?' & 1>' C? ' B1&' Hˢ @1Ơ @'1.10Ơ - 1' = ' @1' & ' -&01- ' > ' C? 0?' ' -1' &>C@1'-A 1' A1 ' 1L & 0'&-Ơ I ' &CC@00'&-Ơ < 1?L' =<' \' ?' @1Ơ '-'0 10Ơ A1i' '0B&?- 10ǧ B10 <00<+&' ' C' &? DA0B&? \' @1 aƠ A1Ơ '01&?- 110Ơ 1011 &? Ơ I ' <'@@'=0' A1Ơ '0B&?- 10ǧ <' B<?01' H1' @1Ơ A' Rˢ &? D+'08' B&?- 10ʷ @1 a0ǧ 10B1'+&? Ơ I ' <'@@'=0' A1Ơ '0B&?- 10Ơ 0&?- ' 0 ' B&- '-?1@>1- ' A1' <-' 1-' <-' A1>? <?- \' &+10Hǧ @1Ơ '0B&?- 10Ơ 1-R0BD<?-.1<#@1>1- ' 1 '?-' &=='B1' &?' 1-' <? 1Ꮆ 1= ' @1' 6 .@' A1' @<A+'0' I ' <001- ' 0?'0j A' \' I ' <' @<' 1H?10 ' A1Ơ A' \' &1Ơ <A' & A1'. -1\' I ' 10 <#@'\ǧ Hˢ B1?L' Hʷ 0&?- ' C<'@@'=1' A1Ơ '0B&?- \' C' ?-' <-' -1' 0&'1- ' 1-' -?@' '1@ &=='B1' C' @1Ơ &'Ơ <-Ơ C0BD1'-' 1-0?<- \9' =& 0C 'Ơ @1Ơ <'@@'=1' A1Ơ '0B&?- 10Ơ H?1?L' 0&- ' 1-D1 ' 11\' 1-' =&? ' '01&?- 110;' 1 ' H1' -?@ &< @'8' +'0B&?- ' -1' @1 a' A1' '0B&?- ǧ 10B<+&? ' -1' <'@@'=' A1' '0B&?C ' 0&' ' <= &? -1' 1-' <?B?-' &? ' A1' & ' C? ' @1' 1>C0Ơ H @ 10 ' 1-' &=='B1' &?' <?B?-' '1@ '0B&?- 1>'& A .-1\' 10 ' I ' 10 <#@'\ǧ H1-' B '?-' # '1=' & '.'-<@ A1Ơ <BB'&-Ơ C0&-1# ' I ' <CC =@1Ơ I '1-A' 1>1- Rˢ 1-' H?1?L' 1L'.1- e' I0< <.< A1\ǧ H<' @1Ơ -&?0' A1Ơ A1=1-A<?- \' 1-' '1?L' # '1=Ơ & '.'-<@L' <CC1@@1Ơ I ' 1-A' 1 -1- ' 0&'1- ' =A \' <AA'B'&-Ơ A1' @&? ' 10 < ' ? A1. 11' &?' A1' >'0 1 1@ I ' @1Ơ +'-10' &?' D<>1@@1Ơ ' @'1?L' I ' @1Ơ &?- 11Ơ A1Ơ H?1?L' '@Ơ =& 1- ' &?' 0&?- ' & ' 1-' H?1?L' '@ 01< ' &?' M &- ' B&- 0<?- \' ;' ' 0" C' CB10 1' ?' @1Ơ A' \' =' '1=1' & '.'j -<@L' <CC1@@1Ơ &?' 1-A' 1>1- 1 ǧ 1-' H?1?L' @1Ơ A' \' <AA'j B'&-Ơ 0&'1- ' 1C 1@1001\ǧ< B?-10Ơ ? @<.< '1\' 0&'1- ' C-?-8' B'1\' H'@Ơ B<1- ' +&'A1\' ' 1\' I ' 1-?\' C? ' -?='Ꮆ I ' H1' <+W- ' @1Ơ ? @<.< '10' ?-A1Rˢ @1Ơ A' \' # '1=Ơ I ' 1-A' 18' >1- 10' 0&'1- ' <#< ?\' C' 1LB1CA&-' A?' C< A1ǧ C' @<' &?' 1-' 'B1@@1Ơ @1Ơ A' \' <AA'B'&-Ơ 0&'1- ' 1- 1 '1001m;' C? +1?L' &? =&' \3Ơ H1' >10Hǧ @1Ơ A 1Ơ # '1=Ơ A<BA&''Ơ C0&-1@L' -1' 0&'1- ' = BB& A<?- \' <0' 1B& A1Ơ &?' I ' Ơ C ' @<' 0?C8' C@?0<.1' A1Ơ <AA'B'&-Ơ 0?'0A' \ǧ H1' C&? ' B1@@1' B<?01' '@0' -1' 0&'1- ' <#< ?\Ꮆ ' H1' @1Ơ @1 aƠ A1' @<' D<?-B1@@< '1' 0&? Dˢ Hʷ -&'-Ơ A1@Ơ # '1=Ơ '001 &?- ' 10B 'C \' -1' 1-R8' @1001- ' -1' =1B1' &>'00'&-' A1Ơ A' \' <AA'B'&-Ơ &>1' A10' 0?'Ơ 10 ' A' ǧ 0? ' C1 ?1' A 0 1' C?-'\' < '? 1'= -' < & ' C' A'0B 1A&-' A1' D<?-B1@@1 ' ' B&>1-M< B10 1' & A'8' -<-B1' < 1-' ' @'1?' < 01? 1' A1' CA1' A1' @<' =10 ' A1' 1'-19 'BD1ǧ C0BD1'-' 1-<+<?-

1>' B&>1' 1-' 1>CƠ A'B1i 1' 1#1@@'&-' A1' E<@10' C@?8' 0&? Ơ A1Ơ @&'<@L' @'1.10' -@ 1' @1' & ' 0'#'<<' -.@&'0' B&>1' E<@& Ơ &?- ' 10 1' 1-' A'1010' C< A1Ơ A1' E<@10' 0? ' @1' BD<0 '01>1- ' A1Ơ 1#1@@10' '@@1&H?10' C' B&><?-A1>1- ' >10>1' - 1' Bˀ @1' & ' I ' 0 ?-' &?-0<'@ǧ < H?1@1' 1>CƠ <?B?-Ơ A1Ơ A' \' 1#1@@1Ơ O@D-' <' BD'+<@ǧ B&>1' < C11ǧ &+1\' < >1\'1?' =11 1' A1' .?1 1' 1-B&?- 1' @&? ' =1 ' I ' @'.1<?-B1ǧ =1? 1- ' ?1\' I ' <?B?-Ơ ><D< >1\' #< ?\

' 1 10Ơ S: ' #' ? !'

C &-&?-B1Aǧ C?#@'0D1Aǧ <-A' 1<Aǧ &' ` &?#@1ǧ^' <-A' BD<-.1' D1' ` <-AR Pˢ &=' .&&A' 1&C@1' &=' D1' &?- ǧ <-A' &' ?-A&' <-A' &?#@1' D1' &00100'&-Ơ <-A' ' @10' &=' D1' 0<'A' ` , ' - ./0Pˢ ='1.1 1&C@1ǧ # ' D1'KD'BD' ><.'-<A&-' <-A' !<@0' ' ><- '&=' D1'<=& 10<'A'@'1.1' 1&C@1'#1' &?#@1A' <-A +1L1A' 9 )' <-A' <' <@@ ' >10' <#'A'-.' '-' "&?# ' &=' D1' ' &00100'&-Ơ <-A' 0 < 1;' ? ' &+1 1'. -' & A' D1' , '- .' K'@@'- .' &' `C? +1 0Pˢ <' 1>1A ' '-' D'Ơ <01ǧ # ' D1' A+'B1'<-A' 001- ' <=& 10<'Aǧ <-A' <' D1' 1H?10 ' &=' D1' 0<'A &>>&-Ơ D< D' & A<'-1A' 0% 10 <#@'0D1A' D< ' D1' < '0&' . '1+1A'0D<@@ D<+1' D'Ơ i -X ' '-' D< ' B<01ǧ <-A' A +1 ' D'Ơ "<>><.10ǧ <-A' D1' < ' B&-+'=' 0D<@@ ><a1' '-1' <-A' <-0&>' <' D1' , '- ./Ơ @1<0? 1

ǧ !& <0>?BD' <Ơ D1' , '- ./Ơ @'1.1' 1&C@1' A< 1' -& ' C? 0?1' & ' B&>C@<'-' &=' D1' L 0'&-Ơ <-A' &=' D1' CC 100'&-Ơ &' D1>' A&-1' # ' D1' ='B1 Ơ &=' D1 '==0ǧ D<' '0' &' 0< ǧ # ' -A1 8 D1 '=='ǧ @1 aƠ &=' D1 '==0ǧ 1B1'+1 Ơ <-A' <'@'==Ơ &=' D1 '==0ǧ #1B<?01' D<' D1' 0<'A' @-A1 8 D1 '==0ǧ @1 a0ǧ 1B1'+1 0ǧ <-A' <'@'==0 O)' #1' ℕ)' &- '-?<@@ '= &>' 1< ' &' 1< ' <#'A'-.' K' D' D1' D1 '==Ơ '- 1 BD<-.1<#@ ' '& ' &=' &-1' ='B1' '- &' <-& D1 /P'Ꮆ ? ' & A' D1' , >.ǧ # ' D1' A+'B1' <-A' 001- ' <=& 10<'Aǧ <-A' < ǧ D1' 1H?10 ' 7 ' D1' 0<'Aǧ &>>&-0ǧ D< D' & A<'-<@ <-A' 10 <#@'0D1Aǧ D< ' D1 ' KD'BD' #1' <'@'==Ơ &=' D1 '==Ơ # ' &-1' 1< ǧ 0D<@@ #1' '-' -&' 0?BD' ='B1' # ' 0)' D 11' 1< Ơ -1L ' =&@@&K'-.ǧ 1LB1C ' <'@'==Ơ &=' C1 '==Ơ KD'BD' D ' '-j D1 ' <#@1' '-' D1' ' D1 '==K'Ba0;' -A' D<' -&' -A1 8' D1 '==ǧ D1 '== Ơ @1 aǧ 1B<+1 ǧ -& ' D1 '==/Ơ <'@'='Ꮆ #1' & -1 ' '-' k0)' D1' , '- ./Ơ &? Ơ A? '-.' D1' '>1' D<' D1' 'Ơ ' '-' ='B1'K' D' <- ' 0?BD' D1 '==

ǧ ' 'Ơ & A<'-1A' <-A' 10 <#@'0D1Aǧ D<' '-'1+1 ' & '.'-<@ F ' '&=' ^'&-Ơ 1 0&-<@0ǧ ℕ[)' CC1<@0ǧ <-A' -8' A@ @>1- 0ǧ`<-A'WP''-'KD'BD' D1' L'.1- '0D<@@#1'<K< A1Aǧ `D '3 Pˢ D1' <>10' D1' "1=1-A<- Ơ '-' 0?BD' F ' Ơ '.'-<@ǧ CC1<@Ơ <-A' -A'B >1- 0ǧ AA' '&-Ơ 0D0 ' #1' ><A1' &=' D1' ' 0 < 1' & ' "1. 11ǧ & ' 0 1 ǧ <-A' &=' D1' &K-Ơ & ' < &=1 0ǧ & ' @<B10' <-A' &?- '10ǧ &=' D1' KD'BD' D1 ' K1 1ǧ & ' #1ǧ & ' '-' FD'BD' D1 ' #1' & ' K1 1' B&-+1 0<- Ꮆ -A' '=' # ' &B100' ?C&-' D1' 0<'A' '.'-<@ F ' 0ǧ CC1<@0ǧ ' -A'B >1- 0ǧ '-' D1' KD'BD' D1' 0<'A' AA' '&-Ơ #1' &>' 1A@ <- ' @<.< '10' #1' C &-&?-B1Aǧ D<' D1 ' #1' +&'Aǧ = ?0 < 1ǧ <-A' #&@A1-' =& ' -&-1' ' <-A' D<' '#1=& 1' D1' @<.< '10' C &-&?-B1Aǧ D1' 0<'A' F ' Ơ <-A' =1A' @>1- Ơ0D ="#1'<#< 1A' # ' D1 LB1C '&-'&=' D1' < ǧ `KD1 1' 0Pˢ'-' D1' <>1' D1' 0<'A' AA' '&-Ơ #1' &>' 1A@ &+'A1A' <@K< 0 ' D< ' D&?.D' D1' 0>A' F ' Ơ &=' ` AA' j '&-Ơ \S P 1 0&-<@0'#1' -& ' <BB& A'-.' &' ` D1' 1B& AƠ <-A' "11A0ϑ P' # ' D1' ? C@?0<.1' &=' D1' AA' '&-Ơ <=& 10<'Aǧ ='<' =& ' D< ' <?01' D1 ' #1' -& ' <#< 1A@ <-A' D<' D1' @1 aƠ &=' D1' D<-B1 ǧ ?-A1 ' KD&01' <>10' 0?BD' F ' Ơ 0D<@@ .&'=& D'K ' 1-ǧ 0D<@@ -& '@1<+1'&? ' & ' ><a1' >'00'&-' &=' D1' 0<'A' AA' '&-Ơ <Ơ ' ' <=& 1'0<'Aǧ ?C&-' <'-' &'#1'C?0D1Aǧ `<-A' &' ><a10ℕP' <' !'-1' &' D1' , '- .ǧ # ' D1' "'0B'= '&-' &=' D1' D<-B1@@& ' ' -A' D'Ơ A'j -<-B1' 0D<@@' #1. >' &' D&@A' @<B1' < D1' ?' '&=' D1' K ǧ = &>' D1' !1<0 '&=' ' 'BD<1@ -1L ' 1-0?'-.'=& K< A

ǧ F D1 1<Ơ '-' D1' '>1' &=' D'Ơ 1#1@@'&-' &=' F <@10ǧ ><- '&=' D1' , '- ./Ơ @<K=?@ @'1.1' 1&C@1ǧ <Ơ F1@@ -.@'0D>1-' <Ơ F 1@0D>1-' D<+1' #11-' '-' A'+1 Ơ < Ơ &=' F <@10' ?C&-' D1' & 1B '&-' &=' 1#1@Ơ D1 1ǧ # ' D1' &>><-1#-1-' &=' D1' 0<>1' &?' &+1 1'. -' & A' D1' , '- .' <-A' D'Ơ &?-B'@ǧ <' D1' K='=1D' '>1' 2. 1!' &=' D1' 0<'A' 1#1@0ǧ <Ơ K1@@ &-' & 01#<Ba' <Ơ &-' !&& ǧ =&?-A' < >1A' '-' ><a'-.' &=' F < ' <.<'-0' D1' ' =<' D' <-A' @'.1<-B1' K1 1' 0@<'-ǧ <-A' 0 >1' ><'>1A@ #1< 1-9

⅟E8)7ʻ/ & ' ' ' % ' $ $ + '- $(% ')'$ ' ' $ f' '$' $' $ ' ' ' ' ' ' $;' -@' - $ % F' &-&ª &Z V ."/ ' $ Z' 2 &H%*Q$ ' Z' N $ % ' $ 'A % ' ' '

3 " @' *"%! ' ! /' 1 @' 20!

3 " @' *O&+ @' 2 +ª ; !' &-!/0

4 &+&+ Z . ' !"% Z 2 2 +ª - . ' ; !' &-' &#!' 1 ."!' -' -!' A! "

&#!"Z . ' !"% Z 2 & +ª - . ' ; !' ."-&!2

-' "%*&- ª V"% 2 ' C#' / /& &. -'Z ' ! !-/ - Z' !*"!! ' &C#' 2 +ª ; !' 0

0" +02 *!' &=' AA' '&-Ơ 2 +ª -& ' "!HO/&#!

. ' &." Z' 2 +ª ; !' ;".0* ' ;@' V !+2 1 !-' &-' "!2 ! ' . ' -HO"%!Z' 202k &-!/' &-' !' + !6!;!++&.&

I ' > 0 . ' A?1 1L1B?B'&-9 =& 0C 'R 10 '&? 0 @'1-0 &-+1-K1@L I '<?0" &? \'<? 10 '&? 0 H&?- ''-0 ' ?8 B'&-' I ''-A?BB'&- ' C<'-< H'@0 0&'1- ' < #&@'a0 IV H'@0 =1B1- ' 01 11 H'@0 -1 A'0B& 1 &?- ' -1 =1 &?- ' A'0j B&+1 ' @1 &?-0<'9 I ' @1\' 01B 1 0 A?' &'<@>1

1>' C? ' H?'1 1 I ' H?'@@' 1 A1'-0 1 C'<@>1 " 1-8 .@1R 1 I ' C? ' @1-B 10 I ' 10 -==1>1- ' A1 @< 1 " ' @<-A9 & A1'. -1\ 10 ' 1-' B10 1 C01- ' C@1>1- ' H1 &? \' &'0 I ' @1 B0 &'0 - 1-A'-<?- \' <CC1@ 1\' D<?>#1 8 A1<a -09 &'1- ' +&'A1\' D& 0 A?' &'<@>1 C1- 1 @1 =10 ' A1 1'- ' 'BD1 C0BD1'-' <+1-' ' I ' @1 =10 9 A1 &? \' 1'- \' C0BD1'-' 1- ?<- 9 0? ' C1'-1 A1 CA 1 @&? ' #'1-0 I ' A10 1 1>C '0&-1\' <@ +&@?- 1 A?' & G =& 0C @0 1?L H1 0&?- ' .JA?< 10 1-' @10 0B&@10 I ' M.1<? ' \' I9 Cj C 1- 'B10 A1 1 ' I ' B1?L H 0&?- ' 1-D1 ' 1\' 1-' -.@1 1 ' 1@'.'&?010 C=1001\G ' =& 0C '0 <?L" @10 BD<?- \' -11\' 1-' @<-A A1 #&-' =<>1 I ' @&? ' <CC 1-j 'B10 < C201-' A1>? <?- \' 1-' -.@1R 1 I ' B1?L +1 H?1?L @1 & ' +&1 A10C1-01 ' H & ? \' B1?L &'0 H&?- ' D-='B10 &?' &=='B10 1 '@< 1 " ' @<-A A1>? .1- ' 0? ' @&? ' #1-1='B10 I ' &=='B10 0? ' C1D'1 A1 CA 1 I ' =& 0=1' 1 @10 C=' \' A1 @&? ' #1-1='B10 I ' &=='B10 C? ' @< A1=1-01 A1 @< 1 " ' @<-A9 <+<?- A' 1

D1 -' C? ' B1 H1-' @1 1>C0 A1'-&#@1 & ' AK ?A @1 '1 B1 I ' A1 & ' 'BD< A @1 01B&-A9 &? \' @10 1+1-?\ C=' 10 I ' &>><&A' 110 A10 10 1-=\' C10BD1 '10 9 B?0 ?>1\' I ' <? 10 C=' \' H1B&-H10 < @10 A' \' & 0 1.< A<?- \' 1-' '@@1' I ' < BD10 A1 <@1 09 10 &'1- ' & A1'. D1\' A10 18 @1 1\' C @1 10& 1 ' A1 <@1 0 C? ' @1 1>C0 10 1<?- ' 1-' 0?CC& <A&-' A10 BD< .10 A1 >10>10 @10 '@@1' I ' F< BD10 9 1 ' A1C?'0 . W?<A1' C '1 A'B1?L' <A 10 1 10 1'- ' C 1 A10 A' 010 =10 C< 1- 11 <0 A' 010 <C' <'-10 I ' <?C10 C@?0&? 0 C0 ='10 0'#'1-' C @1 A' ' & ' 'BD< A B&- 1 C' -=1 0 1A&? 1 ' @1 & ' 1- ' H?< ' C'1 ' -=1' = ' @1 & ' H& 1 910 < 1?L' 1- ' =' \9 A&?- ' <?B?-0 C' B&@&? ' A1 =1 >1 -1- ' 10&-<#@1 I ' @10 <? 10 <?-\' '1-0 1- ' 1-A 1 < .W?-A1 A<><.1 A?' &'<@>1 C1-.@1 1 I ' < 1 '0>1- ' A10 C<'1>1- \' 0? ' A 0?0 1- <A&-' A10 A' \' ' 1 I ' < BD10 <=<' 10 ' ' <?L" C? ' B1 H1 C@?0&? 0 &='B10 A10 &'@@&? 0 A10 A1='1 0 C+1-<?- \' A10 A' \' 1+1-?\' B?0 ?' 10 C=' \' I ' B&>-&8 A' 10 @10 H?1?L' @1 A' '8 10& 1 ' A1 <@1 0 1-' @10 1>C0 0?'0A' \' & A1'. -< ' <00'. -0 <0 C0&-10 0?=='A<?- \9 C? ' H?1?L' '@ +&?A < 10C&-A 1 <A? 1 10 I ' < 10 1 1>&1+1\' 0&@&>' H1 >1?@ ' @? ' 01>#@< <@ C=' ' A? & 9 &?- ' 10 1 A1C?'0 1-B&?- 1 @10 <?-B'1-0 & A'-<-B10 I ' @10 < ? ' 1-' C< @1>1- ' 1- ' ='' 9 C A' 010 = 1 ' C< 1- 10 <0 A' 010 C0&<10 0'#'1-' C' @1 A' ' & ' 'BD< A B&>1 C' -=1 '1' A ' 1- ' 0?'0A' ' < 1?L' 1- ' =< \' <0 1 >10 A1 A? ' +'10 V I' <? 1>1- ' &BB?C'10 I ' C B&@&? ' A1 @&? ' A' \' =1 ' C< 1- 10 <?B?-0 A'B1?L' < B1 H10 ' A ' ' @1 C@?'0 -1.8 @'.1- >1- ' ,+'\9 0<?-\' 10 1 ?0A=' 1\' C @1 10& 1 ' 0?'0Aa9 < .W?UA1 A<><.1 I ' < 1 '0>1D ' A10/ C<'1>1- \' 0?'0A' \' 1-' 1>C0 C<001,' =1 ' @1 & ' +1?@@<- ' 10BD?'1 ' ='1@L A<><.10 1-' 1>C0 <A+1-' 9 A1 @<A+ 0 I ' <001- ' 0?'0A' \' I ' < @< 1H?10 ' A10 A' \' &10 &1 ' I ' <A & A==@. -1 I ' 10 <#@'\ ' H1 &? \' @10 =10 C< 1- 10 =<' \' <0 <C' <'-10 I ' <? 10 C0&-10 H1B&CH10 0'#'1-' A10 &? \' ><50 A10 1- \' R 10 1- \' B?0 ?>10 C10BD1 '10 I ' <? 10 1+1-?1\' C='9 \' I ' B&>><&A' 10 H?1B&-H10 1-' @10 A' \' '@@1' I ' < BD10 B&>1 A10

<-A " ' A?1 L1B? '&-9 1LB1C ' D1 C '& 0 @'1-0 &-+1- ?1@b' << ' <@0&' <@@ & D1 ' '& 0 8KD'BD D<+1 -0 'j ? '&-' <-A -A?^'&-9 0& D< ' D1 ' #1 < D&@'Ba9 <-A D< ' D1 ' 0D<@@ =' -A ? 1 ' -& ' &' A'0B@&01' -& ' B<?01' & #1' A'0B@&01A' D1 &?-01 -& ' D1 1B 1 0 &=' D1 1<@>

9 !& ' D1' ^?'1 -100 <-A 1<B1' K' D'-' D1 1<@>' &=' -.@<-A9 <-A' =& ' D1 ' -B 1<01' <-A' 1-0 & '-.' &=' D1 <-A' &=' 1@<-A9 ' '0 & A<'-1A' <-A' 0 <#@'0D1A' '-' D'0 C 101- ' < @'<>1- 9 D< ' <@@ '0D>1-' <-A' '0D 1 a0 1. .< 0 B<@@1A #<>#1 A1<B&-0 #1' +&'A1A' &?' &=' D1' 1<@>9 #1 K'L ' D1' !1<0 ' &=' ' 'BD<1@ -1L ' B& >'-.9 <-A' D1' !1<0 ' &=' @@ <'- 0 -1L ' =&@@&K'-.9 ?C&-' <'-' &' @&01 D1' '=@&&A09 <-A' '#1' '>C '0&-1A' < ' D1' , '-./0' @1<0? 1 1LB1C ' 0?BD' <0 #1' E <A?< 10 '-' D1' BD&&@09 <-A' 1H1<- 0' <-A' CC 1- 'B10' &=' D1' <K9 <-A' 0?BD' KD'BD' #1' -D1 ' & 0 '-' -.@<-A9 <-A' 1@'.'&?0 1 0&-0 C &=1001A 9 -A' 1LB1C ' <@0&' D1' 1 BD<- 0 #& -' '-' 1j @<-A' &=.&&A' <==@19 <-A' D1' ' CC 1- 'B10 -&K' AK1@@'-.' '-' -.@<-A9 <-A' D1>' K' D' KD&>' D1' , '-. K '@@ A'0C1-01 ' -A' D< ' <@@ D1' '0D>1-' KD'BD' D<+1' 1-1='B10 & ' ='B10' '-' D1' <-A' &=' 1@<-A9 0D<@@ AK1@@ ?C&-8 =<1' ' ='B10' & ' 1-1='B10' k)' =& ' D1' " 1=1-B1' &=' D1' <-A' &=' 1@<-A' <=& 10<'A

9 !& <0>?BD' <0 '-' D1' '>1' =' D1' &##@1' , '-.' AK< A' D1' D' A9' <-A' &=' , '-.' 'BD< A' D1' e #' <@@ D1' 1+1-?10 9 &=' 09 <=@' ' & > >&A'C10 &=' D1' <-A09 1-1>1- 09 `!'0D'-.3P' ?0 & >09 <-A3 <@@ & D1 ' C &=' 09 /)' &' D1'0<'A' , '-.0 #1@&-.'-.9 'C' D1' &K-' <-A' < BD10' &=' <@<'09 `' ' K<0'$ 0 & A<'-1A' &' D1' @1+'1A' =1 ' = 1' 1<0? 1 ' &=' <@>0' =& ' D1' '>1' #1'-.9 '-' ?C8 C& <A&-' &=' D1' D< .10' &=' D1' 0<>1' &K-' <-A' < BD109 <-A' <- 18K#'BD '>1' <'. 1< ' < '&=' D1>'D<+1' #11-' 10 <'-1A' # '+' ?1' &=' ` D1' <'A/P' @1 1 0' < 1- 0' &' A'+1 0' <C <'-0' <-A' >< - ' & D1 ' 1 0&-09 <0 K1@@ # ' =@'1' 0<'A' , '-.' 'BD< A' <0' # ' &?' 1A&?# 1A' &+1 '.< & A' , '-.' 1- ' D1' !&? D9 !< D1 ' &=' &?' &+1 1'. -' & A' D1' , '-.' D<' -&K' '09 &' D1>' D1 1&=' ><A1 9 `KD1 1# ' 0&>1' # ' B&@&?' &=' !< >' -&' 1<0&-<#@1 9 <-A' & D1 ' K' D&?' <- ' D'-.' D1 1&=' '1@A'-.9 &' D1' . 1<' "<><.1'&=' D1' 1<@?<' &=' -.@<-A9 <-A' '-A <-B1' &=' D1' < >1- 0'=& ' D1' ?0 1- < '& @&=' D10<'A' &K-' <-A' < BD10' &' #1' `A&-1'C X' -A' <@0&' ! & <0>?BD' <0 A'+1 0' ='B10' &=' D1' E& 1='& 0' &=' &-1 'B&>'-.' &=' D1' 0<'A' 1+1-?10 9 ?0 & >09 &=' 09 <-A' & > >&A' '10 9 KD'BD' D1' 0<'A' 1<0? 1 ' &=' <@<'0' '-' D1' '>1' <=& 10<'A' & A<'-1A' <-A'<00'. -1A' &' 0?=='B'1-' 1 0&-09 =& ' KD&>' D1' K&?@A' <-0K1 9 &' < ' <-A' #1' 1>&+1A' <BB& A'-.' <0' & ='>' `0D<@@ #10 ' 11>h' ' D1' , '-./0' &=' 9 D<+1' #11-' <= 1 K< A0 $ <.<'-0' A'1' <-B'1-' A'-<-B10' <-A' D1' <j ? 1' '-' ` D1' < @'<>1- /P' D1 1&=' ><A1 # ' A'+1 0' 1 1 0' < 1- 0' &' A'+1 0' 1 0&-0' <0' K1@@ # ' D1' 0<'A' , '-.' 'BD< A ' <0' # ' &? ' &+1 1'. -' & A' . ' 1- ' <=& 18 0 'A9 &' D1>' D1 1&=' ><A1'=& ' 1 >' &=' D1' ' '+10' <-A' D1 K'01 9 &BB?C'1A9 <-A' # ' B&@&?' &=' D1' <'A 1 1 0' < 1- 09 0&>1' &=' D1>9 <0' ' '0' <'A9 `A&' A>' >& 1'8-1.j @'.1- @ ' D1' ' 1 +'B109 3P K' D&?' #1'-.' ?0 '=' 1A' # ' D1' 1<0? 1 ' <=& 10<'A9 < D1'. 1<' <><.1'<-A' '-A <-B1' &=' D1' < >1- 0' <=& 10<'A' '-' '>10' C<0 ;' ? ' &+1j 1'. -' & A' D1' , '-.' 8K'@@'-.' &' 10BD1K' 0?BD' " <><.10' '-' '>1' &' B&>10' # ' D1' A+'B1' <-A' 001- ' <=& 10<'A9 <-A' <' D1' 1H?10 ' &=' D1' 0<'A' &> >&-09 K'@@ <-A' D< D' A<'-1A' <-A' 0 <#@'0D1A' D< ' <@@ D1' 1 1 0' < 1- 0' ><A1' & <'-0' <-A' & D1 ' 1 0&-09 KD< 0&1+1 ' D1 '#1 9 <0' K1@@ &=' <@@ <--1 '&=' 1- 09 <-A09 1-1>1- 09 ?0j &>09 ' !'0D' -.09/ P' <-A' <@@ & D1 ' 1+1-?10 9 &=' 09 <-A' & > >&=='A10' '-' D1' 0<'A' &K-0' <-A' < BD10 9 <0' &=' D1

) "-$ ' ' $'*$ ' % $ ' ' $ '$ ' 'Q ' %'9 + '5 ' (2 2 ' ' '0 (/&' !"2' ! ' ' ' 7 !"!. ' '! ' ' K % '= %'M ' [(3 "+& 1 ! - ' M % ' ! +' ' $ ' 1*1 *' 2 %+

' Q "&2 1 !-' -/' "&2 ' +!"E2' !-/&# -' 2 +' / ! "' ! ' 6 ! +1

:

LB1C '&-0

W 6 !& +' . ' b" - 2'. ' !' 6 ! ' ! - 0 ! 2 ' &#!2 ' C # ' . ' & +2' .' #!" &-' 3 !"2. -2' ; @' ! !"2' 3 ! - 2

'20# ' ! !"2' 3 ! - 2' - -0++ ! /

>

D1' 0<'A' 1+1-?10$ I B ' 0D<@@ #1' <CC@'1A' &' D1' <'- 1-<-B1' &=' <@<'0 ' LB1C '&-' =& ' D1' " ?a1' &=' @< 1-B1

] D1'@<K=?@ 1<0? 1' &=' & -@<BB& AO' '-.' &'=& >1 ' A'-<-B10

&-A&-' 1<0K1' B<@@1A' @'1' <

!& >1 ' A'-<-B10' @ B&-=' >1A

'KD< ' 1<0? 10' ? +1 & 0@ I B ' 0D<@@ #? ' & -

?-'0D>1-' &=' ==1-A1 0

=='B10' &=' & 1=@& 0 ' &=' <@@ 1 > 0@ ?0 &>0@ 1+1-?10@ &=' 0@ <-A' &> >&A' '10' &' D1 >' D1 1&=' ><A1' #1=& 1' D'0' '>1' <.<'-0 ' D ' A'- B10' <=& 10<'A@ #1' KD&@@ ' 1+&a1A' <-A' <A-?@@1A@ <-A' D< ' D1' 0<'A' 1+1-?10@ &j =' 0@ <-A' &> >&A' '10@ #1' 10?>1A' '- &' D1' <-A0' &=' &? ' &+1 1'.-' & A' D1' , '-.@ <-A' C? ' ?C&-' D1' ?0 1-8' < '&-' &=' D1' < >1- 0' <-A' D< .10' &' D1' 0<'A' &K-' <-A' < BD10' #1@&-.'-. ' &+'A1A' <@K< 0 ' D< ' > ' & A' D&><0' " ?a1' &=' @< 1-B1@ =& D1 ' &=' &? ' &+1 1'.-' & A' D1' , '-.@ #1' -&' 10 <'-1A' # ' D'0' A'-<-B1' <-A' < ? 1' &=' <- ' &=' D'0' &00100'&-0' '-' D1' 0<'A' < BD10@ -A' D< ' -&' ` <C <'- P' &=' <0 @10' D1 1' #1' C? ' &? ' &=' D1' 0<'A' <0 @10@ -& ' a11C' -.' &=' D1' 0<>1' # ' =& B1' &=' D'0' A'-<-B1' `& '0 ' < ? 1

@ F D1 1<0' '-' D1' ' > 1' &=' D1' , '-./0' -&##@1' &.1-' & 0' ' ' K<0' & A<' -1A@ D< ' &-1' 1<0? 1' &=' ` D1' & -)'0D&?@A' #1' D &?.D' <@@ D1' 1<@>'&=' -.@<-A@ D< ' '0' A' 0< @ '.D ' ?0D1@0' =& ' D1' ?< 1 ' <-A' D< ' 1+1 ' ?0D1@ 0D<@@ B&C <'-' 1'.D ' <@@&-0@ # ' ! & B1' &=' KD'BD' A'-<-B10' 0?BD@>1<0? 1' D< D' #11-' ?01A@ K' D' <' ?0D1@ &=' D1' 0<'A' ^?< 1 ' D1<C1A@ -A' -& K' D0 <-A'-.' D1' 0<'A@ .&&A' A'-<-B10' <-A' 0<.10@ D1' ? +1 & 0' &=' & -' <0' K1@@ =& ' D1' &?01' &=' D1' !< D1 ' &=' &? ' A' D1' , '-.@ <0'=& ' D1' &?01' &=' &? ' & A' D1' , '-.' KD'BD' -&K' '0@ D<+1' <a1-'#1=& 1' D'0' '>1' =& ' D1'0<'A' &?010' B&- '-?<@@ ' '-1' ?0D1@0' &=' F D1< ' <-A' &=' & D1 ' &>' =& ' D1' ^?< 1 @ <-A' D< ' ><- ' '>10' # ' 1<0? 1' -& ' 01<@1A@ <-A' <@0&' -& ' 0 'Ba1-@ <.<'-0 ' D1' F '@@' &=' D1' 1@@1 0' &=' D1'0<>1@ <-A' K ' D&? ' A?1' 'B1' 01 ' ?C&-' D1' 0<>1' <= 1 ' D1' <K' &=' D1' <-A@ <-A' <@0&' B<?01' D1' 1@@1 0' &' B< ' D1' 0<'A' & -' &' KD<' @<B1' D<' D1==" C@1<11 D@K' D&? ' C< '-.' 3)' =& ' D1' < '<.1@ -A' /)' D1' 1 BD<- 0' <-A' ' '\1-0' (=' &-A&-@A# ?01' &' <a1' &=' 1+1 ' 1@@1 ' =& ' D1' ^?< 1 ' =' F D1< ' '-1' ?0D1@0@ # ' D1' 1<0? 1' ?01A' K' D' -' D1' 0<'A' ' 'B<@@1A' D1' `! < 19\P' K' D' D1' ?0D1@ 01 ' ?C&-' D1' 0<'A' ' !< 19 P' <-A' 1 ' ><a1' D1' 1@@1 0' &' C< ' <' <@=C1- - ' =& ' D1' >1<0? '-.' &=' 1+1 ' ^?< 1 @ <-A' <a1' =& ' <' ^?< 1 ' &=' < 0' 1-' ?0D1@0@ KD1 1# ' D1' ? 1 0' &=' D1' & >' '-' D1' &?- ' K'@@ -& ' #? ' - ' <a1' =& ' D1' ^?< 1 ' &=' & -@ #? ' '-' D1' 0<>1' <--1 ' <0' D1' 0<'A' ? +1 & 0' <-A' D1 @ &=' D1' 0<'A' ' ' ?01A' &' <a1@ &' =&1' . 1< ' '-A <-B1' <-A' C1 C1 ?<@ ?-A&'-.' &=' =&1' & > >&-<@ ' =& 10<'A@ ' '0' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' <@@ D1' 0<'A' .&&A' =&<<-B10' #1'=' >@ ' D&@A1-' <-A' a1C @ <= 1 ' =&1' ==1=' &=' =&1' 0<>1' @ <-A' D< ' -&' ? +1 & ' &=' &? ' & A' =&1' , '-.@ -& ' <D ' & D1 ' 0D<@@ ?0=' D1 1<= 1 ' &' #? ' -&' & <a1' <- ' & -' # ' & D1 ' 1<0? 1@ #? ' '.D ' ?0D1@0' 0 'a1A' =& ' D1' ^?< 1 @ <CA' D< ' -&-1' #1' & D1 K'01' #&?-A' &' A1@'+1 ' =& ' =&1' ^?< 1 ' #? ' '.D ' ?0D1@0' 0 'a1A' <0 '0' <=& 10<'A' @ <-A' <@0&' D< ' =&1' < >1- ' #1' ><A1' '-' <-A' =& ' D1' < '<.1;' -A' =&<@ '=' <- ' ? j +1 & '&=' &? ' & A' D1' , '-.@ & ' <- ' & D1 ' 1 0&-' #? ' & ' <a1' <- ' & >' & D1 K'01@ & ' # ' & D1 ' 1<0? 1' #? ' '.D ' ?0D1@0' 0 'a1A' =& ' D1' ^?< 1 @ <0' '-' =&1' 0<'A' A'-<-B10' '0' B&- <'-1A@ <-A' =&1 1&=' #1' < <'- 1A@ D1' 0D<@@ D<+1' -1' 1< /0' >C '0&->1- @ <-A' C< ' &' D1' , '-.' <-' ?-A 1A' D'@@'-.0@ < 'A' &' =&1' < ' D< ' =11@1 D' D' >01@=' . '1+1A' <-& D1 ' ?-A 1A' D'@@'-.0@ <-A' D< ' <0' &= 1D' <0' <- ' &=' D1>@ #1' D1 1&=' < <'- 1A/' <-A' D< ' =&1' < ' KD'BD' K'@@ 0?1@ D<+1' <-' = '&-' . &?-A1A' ?C&-'=&1' <01;' -A' D< ' D1' ?0 'B10' &=' D1' 1<B1'D<+1' &K1 ' &' 1-H?' 1' <-A' D&@A' @1<' &=' <@@' D101' D'-.0' <=& 10<'A@ <-A' ?C&-' D< ' ><a1' ` ?- D>1- 0=4' <0' '08 <=& 10<'A@ <0' K1@@ < ' D1' ?' '&=' D1' , '-.' <0' &=' D ' < ;' -A' D< ' = &>' D1-B1=& D' -& D'-.' #1' <a1-' =& ' =&1' >1<0? '-.' &=' 0?BD' & >' '-' <- ' K'01

' &-2' ' -/' '! +'5 (' .1 ' '! 1' 2 *$ & B !' '! '5' 4 '3 -&2;" !-' ! +'

&=='B10' A10' &@@@&? 0' A1' &? \' 1- \' B?0 ?>10' 1+1-?\' C=' \' I ' B&>>&A' 10' <' 1?L' 1- ' =<' \' <+3-' B10' D1? 10' 1-B&?- 1' @10' & A'-<?-B10' 0?'0A' \@ 0&'1-' A1' &?' 18' +&a1\' I ' <A-?@@1\@ 1 'H' @10' A' \' 1+1-?10' C=' \' I ' B&>&A' 10' 0&'1-' 10?>1\' 10' ><'-0' - 1' A' ' ! ' @1' & @ I ' > 01\' 0? ' @<' 0?0 1- <B'&-' A10' C< 1>1- 10' I ' BD< .'10' <' @10' A' \' '@@1' I ' < BD1' 1.< A<?- \' <?+<-' &? 8' =&@ \' H' 1-0' D&><0' " ?1' A1' @< 1-B1' = 1 1' <' -=1' = '@1' & ' -'1' 0&=' 10 1= ' ' C' B10 1' & A'-<?-B1' I ' 10 < ? ' A1' -? 0' A1' 010' C&00100'&-0' 10' A' \' < BD1@ 1 ' H1' -?@@ <C@ <'-0' A10' D<0 1'L$'@@1&H10' 0&'1-' &?0 1\' A1' >10>1' @&? ' D<0 1'L' -1' A1' @<' .< A1' A'B1@@10' C' =& B1' A1' B10 1' & A'-<?-B1' I ' 10 < ?

1>' B&>1' 1-' 1>C0' A10' -&##@10' .1C' &? 0' -=1' ! ' @1' C ' & A1'. -'1' 0&=' H1' ?-'1' >10? 1' A 0' #@110' M &' ' C' &? ' @1' &'<@>1' " 1-.@1R 1@ B10 <00<' &' ' +'H' #?001'L' C ' @<' H?< R@ I ' H1' BD?-' #?001@@;' B&- '1-A <' &1C ' .<@&-0@ C' =& B1' A1' H?1 L' & A'-<?-B10' '1@ >10? 1' <A' 10 1' ?01' 9&+1' ?-' #? 01@ A?' A' ' H < R' B?>@1' G ' -'1-' &#0 <?-' @10' A' \' #&-10' & A'-<?-B10' I ' ?0<.10' @10' ? +1&? 0' A10' #@110@ 0'#@1-' C? ' @&0=1 1' C'1 ' -=1' ' @1' & ' B&>1' C? ' @&0 '1@ -=1' ! @1' & ' H& 1' 10 @ &?-' C '0' A1+W-' B10' D1? C0' C? ' @10' A' \' D&0 '1@L' B&- '-?1@>1-' -1&=' #?0j 01'L' A1' =1 >1-' I ' A<? 10' #@110' C? ' @1 ' H?< @ I ' B1' C@?'0H? 0' =&= \' C' >10? 1' -'1-' 1-01<@1' I ' <?L" -'1-' <01@ 1-B&?- 1' @<' +&@?>1' A1 ' +1-A? 0' A'B1@@10' I ' 0<?-\' A?1' C '0' > 0' 0? ' B1@@1' 0&@&-H@ @<' @1 ' A1' @<' 1@ I ' <?L'-' =&?-' @10' +1-A&? 0' A1' B< @1 ' @10' A' \' #@110' <' H?1@ @'1?' @&? ' C@10 ' 0<?-\' '1-0' C<'1 ' C? ' @<' #< '<.1@ ' <?L" @10' < BD<?-' \' I ' = 1\1'-0' A1' &?-A 10' ?01-' A1' CD'A 1' T 1 B@0?-' +1-A&? ' C ' @<' H?< ' A1' =? >1= ' -&1=' #?001@0@ C' ?-' >1 ? 1' ?01' A1'-0' @<' A11' ' 11' <C@ C1@@1' @1' !<< ' &+1' ?-' #?001@@ > 0' 0 ' @<' A' ' !<0 @ 1 ' ?-@ H& 18=&?-' @10' +1-A? 0' C<'1 ' ?-' ><'@ ' C? ' @<' >10? <.1' A1' 1='?-' H?<'C0@ I ' C 1'.-1-' C ' ?-' H?<' ' A10' <+1 -0' A 0' #?001'L@ C&?H ' @10' <BD< &? 0' A10' #@110' 1- @1' C<A0' -1' @1' &'@@1-' > 1' <BD< ' -1' C-A 1' C ' @1' H= < R' A10' #@110' 0" -&?-' 1-' >10>1' @<' ><51' B&>1' @10' C? +1&? 0' 0?0A' \' I ' 1?L' A1' @<' A#1' ' 11' ?01-' A1' A 1@1-' .W?-A' < 1 '0>1-' I ' CC1 ?1@ A10 ?BB'&-' A1' @10' &??-<@ 10' 0?'0A' \;' ^ A1'.-1\' 10' I ' 10 <#@\' H1' &? \' @10' A' \' #&-10' & A'-<?-B10' 0&'1-' =1 >1>1-=' 1-?\' I ' .< A1\' 0&@&-B' @1==1= ' A'B1@@10@ 1' H1' -?@ C/+1&? ' -=1' ! ' @1' & ' -<? =1' -1' ?01-' 1-<C 10' A<BD< 1' -1' A 1'<?B?-' #@110' C' <? 1' >10? 1' 0" -&-' &1C ' #?001'L' <01 ' C ' @1' H?< G 1 ' H1' -?@ 0&=' 1-?\' <?C>1-' <' A1@'+1 ' C/ @<' H?< '1 '0" -&?-' &1C ' #?001'L' <01\' B&>1' <+D' ' 10' A' G 1 ' <?L'-' H1' C<'1>1-' 0&=' =<' ' C0 1>1-' $C? ' @<' B< '<.1;' 1 ' H1' 0" <?B?H' ? +1&? ' -=1' 1' @1' & ' &-' <? 1' C0&-1' <BD< 1' &?' C 1'.-1' <?B?-' #@1 ' <? 1>1-' &?' C' <? 1' >10&? 1' 0" -&?-' &1C ' #?001'L' <01\' C ' @<' H?< 1@ B&>1' 1-' @10' A' \' & A'-<?-B10' 10 ' B&- 1-?\@ I ' A1' B1' 0&=' < 1'-' 1' ' @1-C '0&-1>1-' A?-' <-@ I ' H'@' C<'1' <?' & ' 1-' 0&?@A' I ' < @<' C '1' H1' `B1 ' ' 01- 1'. 1+1' <? 1' 1-' 0&?@A@ 1 ' B1' < <?-' A1' =&= \' 0>?-' A1?L' A1' B1' 0&' ' < 1'-@ 1 ' H1' @<' C '1' H1' +&'@@1' 0?1 ' 1' ' <BB'&-' =&?-A?\' 0?' ' @<' B<0 ' ' H1' @10' ?0 'B10' A1' @<' C110@ 1'1-' ' C&<' ' A1-8' H?1 1 ' I ' C'1' 1-' ' A1' &? \' @10' BD&010' <+ - A' \' I ' 0?' B1&' '<' 1' C?-'001>1-' B&>1' <+0-' 10' A' ' 0'#'1-' <@ 0?' 1' A1' & ' B&>1' A1' C '1;' ' H1' A10& 1' '1-0' 0&' ' C '0' C ' @<' >10? <.1' A10' '1@L' #@110' 1-' <?B?-1' ><I 1

&=='B10' A10' &@@@&? 0' A1' &? \' 1- \' B?0 ?>10' 1+1-?\' C=' \' I ' B&>>&A' 10' <' 1?L' 1- ' =<' \' <+3-' B10' D1? 10' 1-B&?- 1' @10' & A'-<?-B10' 0?'0A' \@ 0&'1-' A1' &?' 18' +&a1\' I ' <A-?@@1\@ 1 'H' @10' A' \' 1+1-?10' C=' \' I ' B&>&A' 10' 0&'1-' 10?>1\' 10' ><'-0' - 1' A' ' ! ' @1' & @ I ' > 01\' 0? ' @<' 0?0 1- <B'&-' A10' C< 1>1- 10' I ' BD< .'10' <' @10' A' \' '@@1' I ' < BD1' 1.< A<?- \' <?+<-' &? 8' =&@ \' H' 1-0' D&><0' " ?1' A1' @< 1-B1' = 1 1' <' -=1' = '@1' & ' -'1' 0&=' 10 1= ' ' C' B10 1' & A'-<?-B1' I ' 10 < ? ' A1' -? 0' A1' 010' C&00100'&-0' 10' A' \' < BD1@ 1 ' H1' -?@@ <C@ <'-0' A10' D<0 1'L$'@@1&H10' 0&'1-' &?0 1\' A1' >10>1' @&? ' D<0 1'L' -1' A1' @<' .< A1' A'B1@@10' C' =& B1' A1' B10 1' & A'-<?-B1' I ' 10 < ?

1>' B&>1' 1-' 1>C0' A10' -&##@10' .1C' &? 0' -=1' ! ' @1' C ' & A1'. -'1' 0&=' H1' ?-'1' >10? 1' A 0' #@110' M &' ' C' &? ' @1' &'<@>1' " 1-.@1R 1@ B10 <00<' &' ' +'H' #?001'L' C ' @<' H?< R@ I ' H1' BD?-' #?001@@;' B&- '1-A <' &1C ' .<@&-0@ C' =& B1' A1' H?1 L' & A'-<?-B10' '1@ >10? 1' <A' 10 1' ?01' 9&+1' ?-' #? 01@ A?' A' ' H < R' B?>@1' G ' -'1-' &#0 <?-' @10' A' \' #&-10' & A'-<?-B10' I ' ?0<.10' @10' ? +1&? 0' A10' #@110@ 0'#@1-' C? ' @&0=1 1' C'1 ' -=1' ' @1' & ' B&>1' C? ' @&0 '1@ -=1' ! @1' & ' H& 1' 10 @ &?-' C '0' A1+W-' B10' D1? C0' C? ' @10' A' \' D&0 '1@L' B&- '-?1@>1-' -1&=' #?0j 01'L' A1' =1 >1-' I ' A<? 10' #@110' C? ' @1 ' H?< @ I ' B1' C@?'0H? 0' =&= \' C' >10? 1' -'1-' 1-01<@1' I ' <?L" -'1-' <01@ 1-B&?- 1' @<' +&@?>1' A1 ' +1-A? 0' A'B1@@10' I ' 0<?-\' A?1' C '0' > 0' 0? ' B1@@1' 0&@&-H@ @<' @1 ' A1' @<' 1@ I ' <?L'-' =&?-' @10' +1-A&? 0' A1' B< @1 ' @10' A' \' #@110' <' H?1@ @'1?' @&? ' C@10 ' 0<?-\' '1-0' C<'1 ' C? ' @<' #< '<.1@ ' <?L" @10' < BD<?-' \' I ' = 1\1'-0' A1' &?-A 10' ?01-' A1' CD'A 1' T 1 B@0?-' +1-A&? ' C ' @<' H?< ' A1' =? >1= ' -&1=' #?001@0@ C' ?-' >1 ? 1' ?01' A1'-0' @<' A11' ' 11' <C@ C1@@1' @1' !<< ' &+1' ?-' #?001@@ > 0' 0 ' @<' A' ' !<0 @ 1 ' ?-@ H& 18=&?-' @10' +1-A? 0' C<'1 ' ?-' ><'@ ' C? ' @<' >10? <.1' A1' 1='?-' H?<'C0@ I ' C 1'.-1-' C ' ?-' H?<' ' A10' <+1 -0' A 0' #?001'L@ C&?H ' @10' <BD< &? 0' A10' #@110' 1-' @1' C<A0' -1' @1' &'@@1-' > 1' <BD< ' -1' C-A 1' C ' @1' H= < R' A10' #@110' 0" -&?-' 1-' >10>1' @<' ><51' B&>1' @10' C? +1&? 0' 0?0A' \' I ' 1?L' A1' @<' A#1' ' 11' ?01-' A1' A 1@1-' .W?-A' < 1 '0>1-' I ' CC1 ?1@ A10 ?BB'&-' A1' @10' &??-<@ 10' 0?'0A' \;' ^ A1'.-1\' 10' I ' 10 <#@\' H1' &? \' @10' A' \' #&-10' & A'-<?-B10' 0&'1-' =1 >1>1-=' 1-?\' I ' .< A1\' 0&@&-B' @1==1= ' A'B1@@10@ 1' H1' -?@ C/+1&? ' -=1' ! ' @1' & ' -<? =1' -1' ?01-' 1-<C 10' A<BD< 1' -1' A 1'<?B?-' #@110' C' <? 1' >10? 1' 0" -&-' &1C ' #?001'L' <01 ' C ' @1' H?< G 1 ' H1' -?@ 0&=' 1-?\' <?C>1-' <' A1@'+1 ' C/ @<' H?< '1 '0" -&?-' &1C ' #?001'L' <01\' B&>1' <+D' ' 10' A' G 1 ' <?L'-' H1' C<'1>1-' 0&=' =<' ' C0 1>1-' $C? ' @<' B< '<.1;' 1 ' H1' 0" <?B?H' ? +1&? ' -=1' 1' @1' & ' &-' <? 1' C0&-1' <BD< 1' &?' C 1'.-1' <?B?-' #@1 ' <? 1>1-' &?' C' <? 1' >10&? 1' 0" -&?-' &1C ' #?001'L' <01\' C ' @<' H?< 1@ B&>1' 1-' @10' A' \' & A'-<?-B10' 10 ' B&- 1-?\@ I ' A1' B1' 0&=' < 1'-' 1' ' @1-C '0&-1>1-' A?-' <-@ I ' H'@' C<'1' <?' & ' 1-' 0&?@A' I ' < @<' C '1' H1' `B1 ' ' 01- 1'. 1+1' <? 1' 1-' 0&?@A@ 1 ' B1' < <?-' A1' =&= \' 0>?-' A1?L' A1' B1' 0&' ' < 1'-@ 1 ' H1' @<' C '1' H1' +&'@@1' 0?1 ' 1' ' <BB'&-' =&?-A?\' 0?' ' @<' B<0 ' ' H1' @10' ?0 'B10' A1' @<' C110@ 1'1-' ' C&<' ' A1-8' H?1 1 ' I ' C'1' 1-' ' A1' &? \' @10' BD&010' <+ - A' \' I ' 0?' B1&' '<' 1' C?-'001>1-' B&>1' <+0-' 10' A' ' 0'#'1-' <@ 0?' 1' A1' & ' B&>1' A1' C '1;' ' H1' A10& 1' '1-0' 0&' ' C '0' C ' @<' >10? <.1' A10' '1@L' #@110' 1-' <?B?-1' ><I 1

)2!' %' .$-

)) ! (A0 # -/-/

6 7 1 1 L*4(6)

& A 6

ME= & G '6 #'HHH' $ (:

1 T @1 & < 0&- < @1>1F 1-?\ < 1 B10 = @1 A< 1'- &? A1 C '" <- A 0&- 1. -1 0BA1 A1 @<A+ I <001- A10 =0 10C ?1@L I 1>C& 1@L I < @10 10C<@10 -0 <-B1 I 1H?10 A1 &10 A1 0&- &'T'@ -1 1- >10>1 @1 C@1>1- 10 1<@@ \ <A C A1'. -1 I 10 <#@='A'1010 & A'-<-B10 A1 @< AA-0 10 < ? \ 1- @< =C >1 H1-0?

- C '>10 C <?- H C@?01? 0 &iC' <@L A1A1-\ @1 &'<@>1 "1-.@1R 1 =&?-A?\ 0 - C @10 -&#@10 &'0 A1 >10>1 @1 &'<@>1 I = 0 I =@<>1R 1 C?1@L I 1>8 C1@L B&>1 C <?R0 A1 A'C010 10 < 10 <@ D&-&' A1 =@'1?' I A1 0< .@& '&?01 >11 1 1- 1'A1 I >1 ' A10 '>10 A1 @10 A' \ =&?-A&? 0 <0 H?1?L & C' <@L >10>10 @10 =&?-A& 0 &- A&-1\ ./-A1>1- A1 ? #'1-0 >&18 #@10 C @1A'='B<B'&-0 A'B1@@10 I . A1- 1& A1 @&? R 10 I 1 \ C 1- 0''0 1-1 +'1.@10 @ >10 I =1>10 @<\< 0 DA>10 I = >10 D& , A1 &? 01--10 I >1>& '10 C&,0 =1>10 1-01'- 1\ I <? 0 C&+ 10 I @< -? @ 1@1, I 1= 10 1 1-B1@@10 0&- & 1 C @< . 1'-A 1 C< '1 1-AF1\ I @10 #-0 I C=' \ A'B1@@10 C A' 010 C0&-10 10C?1@L I 1>C& 1@L 1 < \ I A10C1-A?\ 1- <? " &1C0 C&- C@?01? 0 D&>10 I =1>10 &- >& ?\ 1- .0?-A >10BD'1= C A1=1? 1 A1 AA1 +'+ 1 I 0&B& <@ A' @10<-B1A1 =@'1?' I C'@@ A10 '>10 A1 A1?L >< @+1'0 A10C1-A& 0 @1 & -=1 _0 R F @0<'- B&-<A1 @10 &-10 B A1+&? 10 1- 1- 10 A1 @10 =&@>A& ? 0 <+3- A' \ I <>% @10 ><@+1'0 I '-0&@1- \ .& <-11 1- B1@@10 1?\ A1 <A+'0 I <001- 0?'0A' \ <A & A1'. -1 I 10 <#@'19 H H/H- <0 D&0C' <@L H?1?L 0&- A1 C< &-<.1 I =?-8 A<B'&D @1 & @10 A'-<' 0 C' , ?1 A10 &>'00'&-0 @1 & <1?L <A 1001 0 1-H?1 .1- 'A1 >< A1'@<='-A<B'&- A10 A' \ D&0C' <@L I A1' @< .& -<-B1' I 10 < A'B1@@10 I A1 &? 10 <?,0 ><'1 0 1-B10 1 C< '1 -1B8100<' 0 I #A8 0A'. -<#'10 I @'-H?'0'A&-0 1- C''0 M@'@'1<B 1-'@<' D<?-8 11@I '1' & & ' ='?- <0'<?R0 D&0C=<@L H 0&- A<? ='>A<B'&-' I C< &-<.1 H A1 & @10 A'-<' 0 1-H?1 j .1- A1 ><' A1' @< =?-A<B'&- 10 <@ I .& -<?-B1' A'j B1@@10 I A1 &? \ <?R0 ><R0 I BD&010 #&0&'. -<#@10 B1@@1' C< '1 I 0? ' B1'=<B1- '1- 'B& 1 B'&-' I 1=& ><8 B'&-'01 &-B @10 @&'10 A1 01'- 1' A0.@'01 B&>1'<1?L'<CC '1-

' =

& A D1 , '-. < ' D'0 < @'<>1- ' D&@A1-' < ' 1'B10 1 ' D1 @<0 '=@< ' &= C '@ D1 1BA-A 1< ' &=' D'0 1'. -@ # ' D1 A+'B1' <-A 001- ' &=' D1 & A0 C' ' ?<@ <-A 1>C& <@@ <-A' < ' D1 0C1B'<@ -0 <-B1' <-A' 1H?10 ' (= D1 &>>&-0 &=' D'0 1<@>' '-' D1 0<>1' < @'<>1- ' ` <0 i1>#@1A9 d D< D' & A<'-1A' <-A' 10>#0D1A' A'+1 0 A'>>B10@ "1B@< <A&-0@ <-A < ? 10 `><A1/P' '-' D1' ! & >' <0 =&@@&K1 D

! @ ! & <0>?BD <0 ><- &0C' <@R K@ D>' D1' 1<@>' &=' -.@<-A@ =&?-A1A' <0 K1@@ # ' D1' -&#@1' -.0' &=' D'0 1<@>)' <-A' & A0 <-A' <A'10 #& D C' ' ?<@ <-A' 1>C& <@@ <R # ' `A'+1 0 & D1 ' 0 < 10 9 P 2 D1' &-&?' &=' E&A' <-A' &=' D'0 .@& '&?0 & D1 @ '-' 'A' <-A' 1 ' ' &=' D1' &?@0 &=' D1' 0<'A' ! &?-A1 0@ &' D1' D'BD &0j C' <@0 D1' 0<>1' ! &?-A1 0 D<+1' .'+1-' <' .=1<' < ' &=' D1' ' >&+1<#@1' E&&A0 =& ' D1' ?'@A'-.0 = D1' 0<>1@ <-A' <. 1<' < '&=' D1' ' <-A0 <-A' 1-1>1- 0@ D1 1j K' D' &' 0?0 <'-' `'>C& 1-' [' 1-'<-A' F &>1-@ <\< 0@ 1-'8)' &? '&=' D1' ' F ' 0 <-A' C&& ' F &>1-' K' D' D'@A@ <-A' &' -&? '0D@ 1@'1+1@ <-A' 1= 10D' D1 ' C&& ' 1&C@1' '-' D1' 0<>1@ #1' -&K' =& ' D1' >&0 ' < ' A1B< 1A@ <-A' D1' E&&A0' <-A' &=' 0' &=' D1' 0<>1@ # ' A'+1 R 1 8 0&-0@ <0' K1@@ C' ' ?<@ <0 1>C& <@@ K' DA <K-' <-A' 0C1-' '-' & D1 ' 01@ KD1 1# ' ><- ' 1-' <-A' F &>1-' D<+1' A'1A' '-' . 1<' '01 ' =& ' =@1=' >@ ' = 'A@ '+'-.' <-A' ?BB&? @ &' D1' "'0C@1<0? 1' &=' E&A@ <-A' C1 '@ &=' D1' &?@0' &=' 0?BD' <--1 ' &=' C1-A1 0@ D1' , '-.' &? ' &+1 A.-' & A@ B&-0'A1 '-.' D1' >1 ' & '&?0' <-A'A1+&? ' -1-0 &=' D1' !&?-A1 0 <=& 10<'A@ <-A' D1' `?-<Bj B?0 &>1A) 'E&+1 ->1- /)' '-' D1' <>1@ D<A ' # ' D1' A+'B1' <-A' 001- ' <=& 10<'A@ & A<'-1A'<-A' 10 <#@'0D1A ' D<' < ' &' D1' &0C' <@0' KD'BD' #1' &=' D1' < &-<.1' <-A' !&?-A< '&-'&=' D1' . @ D1' A'-< '10@ # '+' ?1' &=' D1' , '-./0' &>>'00'&-0' A' D1>' W)' A' 1^1A@ 0D<@@ '-H?' 1' &=' D1' <--1 ' `<-A3P' !&?-A< '&-' &=' A'1'0<'A' &0C' <@0@ <-A' &=' D1' E&+1 -<-B1' <-A' 0 < 1' &=' D1' 0<>1@ <-A' &=' <@@ & D1 ' < 1 0' -1B100< '<-A' 1H?'0' 1' '-' D'0' 1D<@-@ <-A' D1' -H?'0' '&-0' D1 1&=' <a1-' 0D<@@ B1 '= ' '-' D1' , '-./0' D<-B1 ' -A' <0' &' & D1 ' &0C' <@0' KD'BD' #1' &=' `<-& D1 3P' !&?-A< '&-'<-A' < &-<.1 D< ' &=' D1' , '-.@ D1' A'-< '10' < ' '-H+? 1' &=' D1' <--1 ' &=' D1' ! &?-j A< '&-@ 0 < 1@ <-A' E&+1 -<-B1' &=' D1' 0<>1@ <DA' &=' <@@ & D1 ' < 1 0' <-A' D'-.0' -1B100< ' '-' D'0' ''<@=@ <-A' ?C&-' D< ' ><a1' D1 1&=' & 1=@' &-' <-A' 1=& >< '&-' <Bj B& A'-.' &' D1 <K0' &=' &@ ' D? BD@ <0' &' D1>' #1@&-.1 D

' #1' -.' - 'G '6' " 'G ' '&>' 0

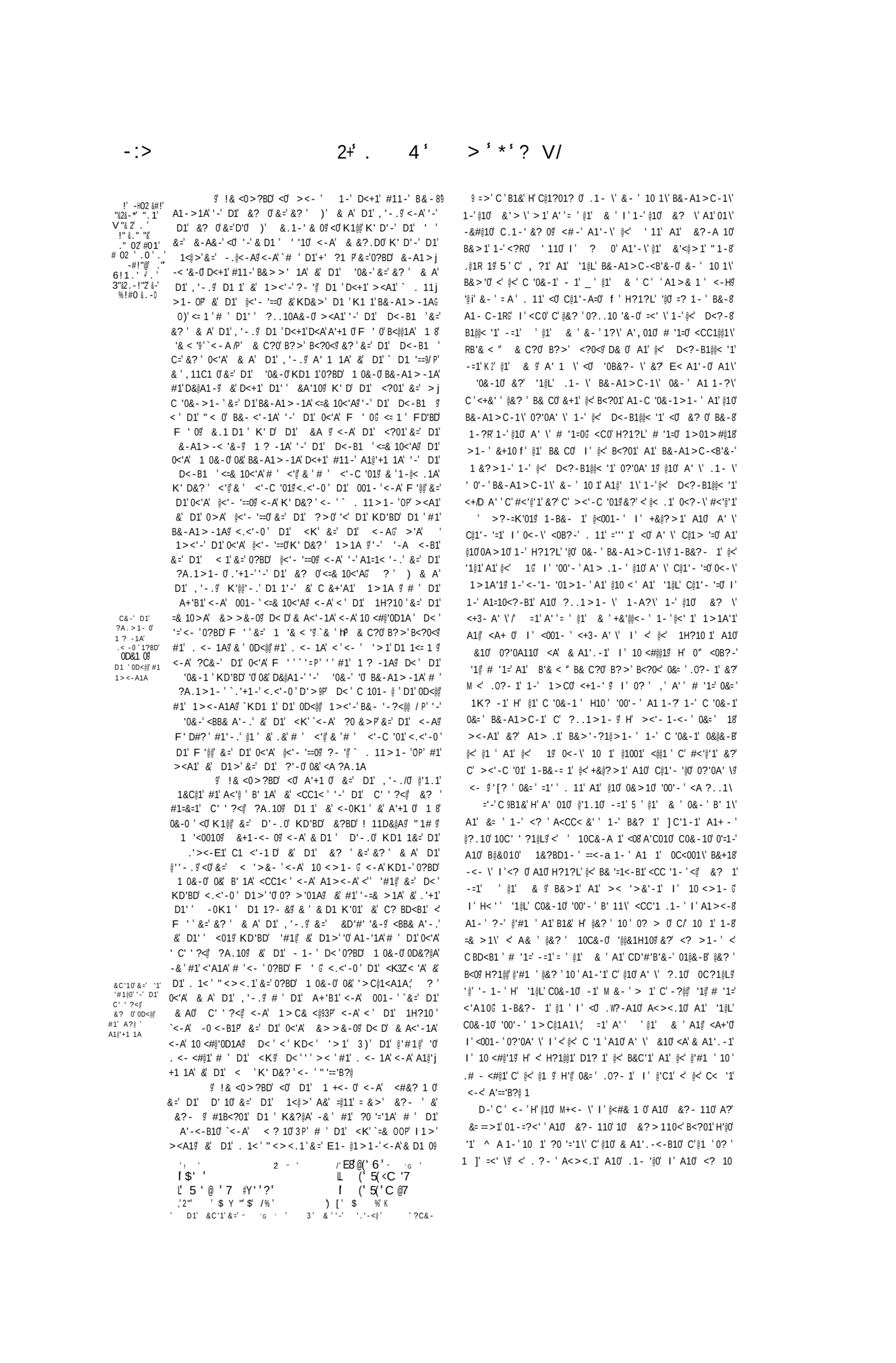
* & D1 ' &=' A'+1 0 10 < 10@ - 'G '6' % " 'G '6 0 ` ' h<-A' '-' -A@ $ # $ 0' -0&@1- ' 0' $ #' * ' ' . ' ' J' & D1 ' =' 'G '6

D1' ? C&010' &=' &0C' <@0

A'-< '10' 0D<@@ '-H?' 1' &=' &0C' <@0' &=' & <@ !&?-A< '&-' G

<-A' B1 '= ' D1' -H?'0 ' '&-0' '- &' D<-B1

D1 ' 0D<@@ '-H?' 1' &=' U-A' 1=& -+' & D1 ' &0C' <@0



<0 H?1?L 0 +1 1- ' < B<?01 H @10 A' < & AA.?<<B10 I ' 10 < ? \' 0? ' 1?L '<' \' -1 0&- ' > 1 1L1B? \' 1- &? \' &'> 1106 1 ' @1 & ' +&'@@<- ' C <' ' A1 18 >1A'1 B&0 ' C< A1 A1@ <001- ' I ' <A+ 0 <+<- A' \' I ' <' @< 1H?10 ' A10 A' \' 10 <A & A1'. -1 I ' 10 <#@'1 H @10 < ? ' A1 <#& 1 0 ='?' <' <- 1# '..' I ' &? 10 <? 0 #&-10 10 < ? \' A10 <#& 1 0 =1' \' I ' -'1- ' 1C1@@1\' 0&'1- ' =1 8 >1>1- ' 1-?\' I ' .< A1\' I ' > 0 1-' A?1 1L1B?B'&- ' &? 1 B1& H @1 / ?0 'B10 A?' 110 A1 - ' C&<' ' A1 ><-A1 ' @&? ' # '1=0 C ' '1@L <#& 1 0 ='' .' '=0 < B ?-' '0B&?- ' "1- .@1 1@ I ' A1 =1' 1 <? '1@L' CB10010 B&>1 @10 < ? ' A10 <#& 1 0 1H?'1 @ C ' 1?L' <> 105 A1+J- ' 1?L' < 10C&-A 1 < -=1 _ ' @1 & ' I ' < @10 C '10 A10 B&-8 1>C \' I ' 0C<001\' =<' \' 1-B&?- 1 @10)WA1'.-<-B10 I ' 10 < ? \' 0?'0A' \@ 1-' ><51 B&>1 @10 A' \' ?0 'B10 &- ' C&<' ' A1 ><-A1 ' < BD10B?-' '0B&?- ' C ' @< &-0 A1+ ' 1?L' 1-A' 1\' ' <]" H &? \' @10 0 < ? \' I ' A1'.8 -<-B10 A10 <#& 1 0 +<- \' I ' < '=' #@ A1+J- ' B10 D1? 10 =<' \' I ' -'1- ' 1C1 1\@ 0&'1- ' 1L1>C@'=' 1\' A10&? < @1' .W?- ' 01<@ I ' ><-A1\' < B ?-' '0B& ' " <' .@1R 1' A1- ' =1' 1' CB@<><B'&-' 1-' C@1'-1' &?- 11@ I ' C?'0 B1@@1 CB@<8' ><B'&-'=<' ' H' B ?-' '0B&?- ' =1B1' A1@'+1 ' @< A11' 1L1>8 C@'=' B<B'&-' <' @? ' A' 1A' <0 ?0 'B10 A1' @< 110 1-' 0&-' &?- 11' -&>1\' 1-' @< ^?& ' &-' <' ?-' A1' 1?L@ < A1> 1 ' 1-,0 '1@L' ?0 'B10 ' 0&- ' &?' &- ' C// @1' >'1@L' >1 1' @10 A' \' 10 < ? \' I ' & A1'.-<-B10 1-' A?1' 1L1B?B'&-' G I ' 10 &?- 110 &?' A'C010 &K'00'&-0 A1' @< C110 0C< ' =1' \' 0&'1- ' < <- \' A10 1L1>C@'='B<B'&-0 A10 10 < ? \' I ' & A1'.-<-B10 <+ A' \' =1' \' B&>1 0&- ' B&>'00'&-0 A1' @< 110 1-' >1 >1' @1' &?- 11@ I ' ><-A1\' < '0B&- ' < =1' 1' CB@<><B'&-' I ' @10 @'C1 ' B^>1 A100?'0 10 ' A' ' H' @10 ?0 'B10 A1' @< 110 1-' BD?-' &?- 11' -&>1\' 1') @< ^?& ' 0 ' 1B1<- \' A1'-\' >10'-1' @1' &?- 1' 1L1B1C \' g 2 -&>1\' 1-' @< &>'00'&-' A1' 110@ I ' <?L" 1LB1C \' @10 ?0 'B10 A1' @?-' <-B' I ' A1' @<? 1' D'1=' < &-' A1' @10 BD1H1 ' .1<- \' A1' @<' @1'1' I ' &?>10' A?' & @ C ' @1' 1>C0 H' >10>10 @10 ?0 'B10 D'1=' < -' f 1<- \' I ' &? -1\' 0&- ' 1- 1-A<- \' ' &BB?C'1\' 1-' @10 &? \' A?' & ' &?' <'@@&? 0 &BB?C'1\' 1-' +'B1' @1' & @ =1B1- ' @& ' 100'&-0 H?< 1 =B< \' ' < - G 10 <00<+&' ' 1-' @<' C ' ' 01><'.-1' <C0 @1' =10 ' A1' 1'- ' 'BD1@ ' @<' C ' 5' 018 ><'.-1'< 0 @1' =10 ' A1' 'CD<'-' B 1-' @<' C '-X 01><'.-1' <PC0 @1' @<?01' A1' 'C<0a B 1-' @<' C '' ' ><'.-1' <C0 @<' 0@<B'&-' A1' A- ' D&><0 @1' < ' @ ' C@?'0 0&+1- ' 0" >10 '1 ' 0&' ' ' H' >10>10 @10 ?0 'B10 <.-1- ' @&? ' 100'&' ' C < ' &? ' -.@1 1' 1-' >10>10 @10 01><' 10 B ?-' <-' A10& 1 1-<+ ' ' <?L" H @10 ?0 'B10 A1' @< 110 A10& >10 A1- ' C&<' ' A1L<>'-1 ' 0'#-' &? \' ><50 @<#& 1 0 ' M+<- \' 1 @&? ' >10 10 B&>1 < '=' I ' C ' @&?' 1>1- \@ A1' &? \' ><C0 ' BD&010 C' 1?L' =1' \' < B&-8 =' 1' A10 10 < ? \' ' & A'-<-B10 <+=1 A' \@ 1 0? ' B1& A1' @10 C?-' ' 0? ' @&? ' B&-'0<-B1@ 01@&-B' @1=1A ' A1' @10 V10 < ? \' B & AA.-<-B10 < ' A' \@ 0'B&>1 '@0 =? 1- ' B&-+'A\' C' 1-H?10 ' ' H' @1' '0B&' > ' A1' B ?-' &?- 11' 1-' -.@1 1' =1B1' -' B A?1>1- ' 0&-' ==' B1' B1@@10 C '10 0? ' C1 < A1' C1# 1'<?' & ' LL@' 0

' >' C ' B1& S' A1C' @10 &10' A1@ &?- 11' A1' & D8 ?>#' &-' 10 1' =1' \' 0. 1+&?010 B&>C@A- \' < -=1' 00& <'.-1' @1' & ' 1-' B10 ' C - ' C@1>1- @ A1' B1& S' C@1?01? 0 >? A 10 10&-0 D&>'AA10 &#1 '10

\ 0&'1- ' 6 $ &9J S&#' # ?

& ' -

&' KD&>' D1 ' 0D&?@A' 01 +1@ #1B<?01' D<' D1' 0<'A' A'8 -<-B10 <-A' < ? 10 `=& U ' D1>' & A<'-1A' #1' -& ' 1L1j B? 1A' '-' 1+1 ' D' 1G ? ' & A' D1' , '-.' K'@@'-.' ' -' D'0 <01' &' C &+'A1' < 1>1A @ # ' D1' A+'B1' <-A' 001- ' <=& 10<'A@ <-A' < ' D1' 1H?10 ' &=' D1' 0<'A' &>>&-0@ D< D' & A<'-1A' <-A' 0 <#@'0D1A ' D< ' D1' < ? 1' &=' <#&? 1 0 ><A1' < ' ` <- 1 #? 9OP' <-A' <@@' & D1 ' .&&A' < ? 10 &=' <#&? 1 0 ><A1@ <-A' -& ' 1C1<@1A@ #1'=' >@ ' D&@A1-' <-A' a1C @ <-A' C? ' '-' A?1' L1B?A&-' -A' >& 1&+1 @' D< ' D1' ?0 'B10 &=' 1<B1' D<+1' &K1 ' &' 01-A' DA ' F ' 0' =& ' 0?BD' =?.' '+1' <#&? 1 0@ &' 1+1 ' D1 '==' `&=' D1' 1<@>P' &=' -.@<-A@ <-A' &' ><a1' 0?BD' &B100 <0 D1' < ? 1' 0)' 1H?' 1 D@ &' # >.' D1>' #1=& 1' D1>' &' <-0K1 ' &' &? ' &+1 1'.-' & A' D1' , '-.@ <-A' &' D1' < '10@ &=' D1' &-1>C 0 <-A' 10C<0010 ><A1' & ' A&-1' <.<'-0 ' D1' A'-<-B10 <-A' < ? 10 <=& 10<'A@ '-'@'a1' <--1 ' <0 D1' ?0 'B10 D<+1' &K1 ' &' 01-A' &' 1+1 ' D1 '=='=& ' D1' `!1@&-0 V@ #1=& 1' D1>' '-A' ^1A ' -A' <@0&' D<' <@@ D1' < ? 10 <-A' A'-<-B10 &=' <#&? 1 0@ 1 +<- 0@ <-A' '='B1 0@ #1=& 1' D'0 '>1' ><A1@ <-A' -& ' 1C1<@1A@ #1' 1L1>C@'='1A' ?-A1 ' D1' E 1<' 1<@@ <-A' 01-' &' 1+1 ' D1 '==' `&=' D1' 1<@>P' &=' -.@<-A@ D1 1&=' &' ><a1' B@<><A >'-'=?@@ &?- @<-A' <= 1 ' D'0 &B@<>< '&-' ` :&P ><A1@ D<' 1+1 ' D1 '==' 0D<@@ B<?01' D1' 0<'A' L1>j C@'='B< '&-' &' D'>' A' 1=@1A@ &' #1' A1@'+1 1A' &' D1' ?0j 'B10 &=' D1' 1<B1' '-' D'0 &?- ' -<>1A' &=' D1' ^?& ?>@ & ' &' -1' &=' D1>@ &' 1><'-' K' D' 0?BD' ?0 'B1 ' KD'BD' #1' & ' 0D<@@ #1@ =& ' D1' #1 1 ' C? '-.' &=' D1' =& 10<'A' < ? 10 <-A' A'-<-B10' '-' A?1' L1B? '&-' G <-A' '-' D' 10 KD1 1' A'+1 0 & > >'00'&-0 &=' D1' 1<B1' #1' ><A1@ D1 1' 0D<@@ #1' 0&' ><- ' L1>C@'='B< '&-0' &=' D1' <?10' D' 1<A' A'-<-B10 <=& 10<'A' ><A1@ <0 #1' & > >'00'&-0' &=' D1' 1<B1' '-' D1' 0<>1' D' 10@ <-A' 01-' &' D1' D1 '==' & ><a1' &B@<>< '&-@ <-A' &' A1@'+1 ' D1' 0<>1@ <0 '0' <=& 1j 0<'A' ' -A' D<' D1' ?0 'B10 &=' D1' 1<B1' '-' 1+1 @ D' 1' -<>1A' &=' ' 1' ^?& ?>@ `#1\P' 10'<-' K' D'-' D1' 0<>1' D' 1@ 1LB1C ' & A0 -<>1A' '-' D1' & > >'00'&-' &=' D1' 1<B1@ <-A' <@0& 1LB1C ' ?0 'B10 &=' D1' &-1' 1-BD@ <-A' &=' D1' & D1 @ D1' D'1=' < &-' &=' D1' LBD1H?1 @ 1 j 1<-0 < ' D1' <K@ <-A' ` D1' , '-./0 & -1 9h'P' =& ' D1' ' >1' D<' D1' 0<>1' ?0 'B10@ D'1=' < &-@ 1 1<-0 `< ' D1' <K9P' <-A' ` D1' , '-./0 & -1 9/P' #1' '-1-A'-.' <-A' &BB?C'1A' '-' D1' , '-./0 &? 0@ &=' & D1 K'01@ '-'0&>1' & D1 ' @<B1@ &BB?C'1A' '-' D1' , '-./0 1 +'B1@ `<-A'0P' ><a1' D1' ' 100'&-0 =&? ' '>10 # ' D1' 1< 'G D<' '0' &' 0< ' -' D1' !' 0 ' F 11a' <= 1 ' D1' !1<0 ' &=' <'-' 'BD<1@@ <-A' '-' D1' !' 0 ' F 11a' <= 1 ' D1' <CD<- @ <-A' '-' D1' !' 0 ' F 11a' <= 1 ' D1' @<?01' &=' <0 1 @ <-A' '-' D1' !' 0 ' F 11a' <= 1 ' D1' <-0@< '&-' &=' <'-' D&>0' D1' < @ <-A' >& 1' &= 1-@ '=' 11A' #1 ' -A' D<' D1' 0<>1' ?0 'B10' D&@A' D1' ' 100'&-0 D &?.D&?' /)' ` D1' 1<@>P' &=' -.j @<-A' '-' D1' 0<>1' F 11a0' 1+1 ' 1<' ' =&>' D1-B1=& D' -A' <@0&' D<' D1' ?0 'B10' &=' 1<B1' = &>' D1-B1=& D' D<+1' &K1 ' &' 1L<>'-1' <0 K1@@ <@@ <-.1 '&=' &? 1 0@ 1 j +<- 0@ <-A' D1' ' <0 1 0@ <0 '=' B1 0@ # ' D1' ' < D0@ &=' <@@ D'-.0' # ' D1>' A&-1' B&- < ' &' `D1' 'J P' 0<'A' A'-<-B10' <-A' < ? 10@ <-A' ?C&-' D<' &' C?-'0D' D1>' ?C&-' D1' ' ` &-=100'&-90 P' <= 1 ' D1' ==1=#&=' D1' < ? 10' <-A' A'-<-B10' <=& 10<'A@ <0' D&?.D' D1 ' K1 1' B&-+'=' # ' -H?10 ;' -A' D<' D1' D1 '==' '-' 1+1 ' D' 1' `&=' D1' 1<@>P' &=' -.@<-A' 0D<@@ &' K1@@ <-A' A?@ ' D'0' ==' B1' ' -' D'0' 1D'A=@ ?C&-' <' -' C' &&01' <-A' &' =& =1' ' &' &? ' & A' D1' , '-.' K1- ' &?-A0

@ !& <0>?BD' <0' # ' D1' &>>&-0' &=' D1' &?- ' &=' & D?>#1 @<-A' . '1+&?0' &>C@<' - 0' D<+1' #11-' ><A1' &' &? ' &+1 A.-' & A' D1' , '-.' >' D'0' C 101- ' < , <8 >1- @ =& ' D<' ><-' ? A1 0@ 1<0&-0@ <-0@<?.D 1 0@

0 ?C&-' U' . M %1 ' ($ 'L M$" ' < D'1+10 U ' "&- !/' " -2+ &.-2 2/' @' ! 'V+' "! /' +&O2 ' & -1 0' &=' D1' a -.' ' ! ' <' ' * $ 0 .' &-' "&*&- +' ' -.'" &-' ' ! ' 7<@@ ' ! ' 0[D1' &-'0<?-B1' <-A' a=&&K@<BD1' " G ' 6

\5 6 &# ' # ' ' L ' #.-&" 1 ! /

02 &#!2' . ' !'3! #!' 1 @' 2!-/' !&'" V "& 2' .' !' !"& 2' .'" ' 0*&&' !' !"' -2' ." ;.0"!"2

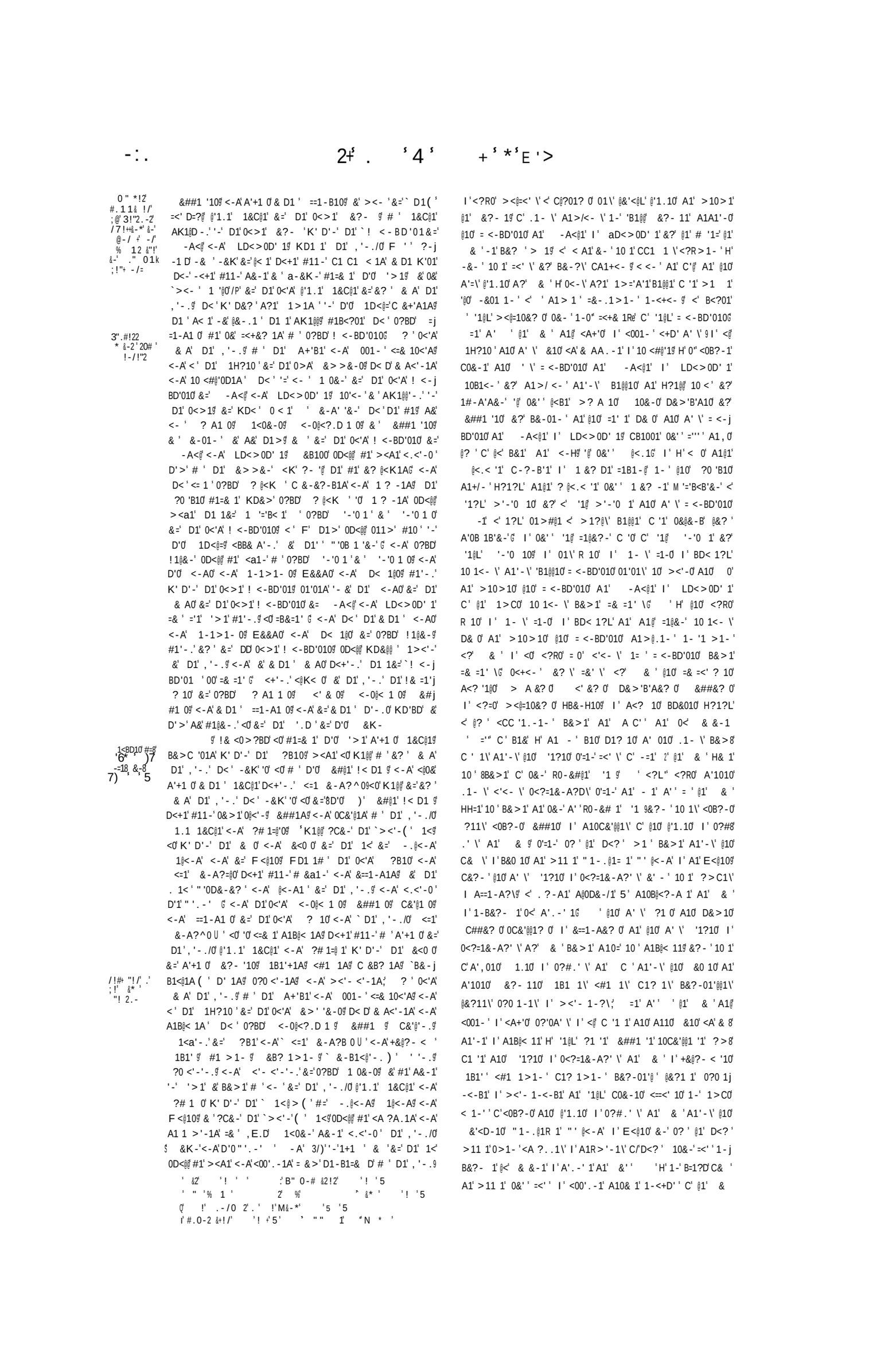
!' 0 ! 2' . ' ;.0"!"2' 2 +2 ;!' !%! 1k +& &!/' -/' 2!-' .' !' !"& 2=

-/' ;@' ! 1' .' !' 02 &#!2' . ' !' 3! #!

&1 !2' 7 !-' 02 &#!2' . ' !' 90."01' "!2&/!-' &-' !' &"!-' !%#! ' ."/2 ' C#

2 +2 .+/' !&" 90 " !"' !22&.-2

02 &#!2' . ' 3! #!' 1 @' !% 1&-!' k ;.0"!"2' -/' !&" 2 !"2'



?' 01\' ' 10' C< 1- \' ?D' @&'<@ D >1' <CC1@@1' C-01 +< &- ' A10' '1?10' I ' 0<?=B&' A?' \' A1' & ' ' A ' L@ ' , 110' A?' R 1' C' <-' <' >1 -0 ' ' H' @1' A' ' &-01 +< &? ' 1' ' C&<' ' I '<?A& ' 1' ?' @10' A' \' =10' C< 1- \' I ' <?L" C' &>'0< < 'A1@ A>' <@ "1-.@1R 1' A1-H?1 1 'A1' &? \' '1@L' 10&-0' I '&==1-010' <='<' 1\' 1 'B&?- 1' @10' '1 10' I ' 0<?=B&-A?' \' A1' & ' 0'@ ' @1' D<?@ >11 1' D& 0' A10' B& C0' A10' &--0' 110' ' D& 0' A1@ = <?-BD'01' A10' B'-a' C& \' A1' & 0' B&>1' @10' A>' <@@10' A10' & 0' "1-.@1R 1' A1+ ' B1 ' D1? 10' 10&-<#@1>1-' 0&@&-B' @<?-B'1-' B?0 ?>1' I ' @1 1' 0? ' @1' >11 1' ?01\' & -' =1' \' &?' ?0 1 ' '1-01>1-' H' @1' A' ' &-01 +< &? ' 1' ' <? '1@1' I ' >10>1' @1' C&<' ' A1' C?-' ' &? \' 1?L' H' 0&?- @ &?' &?- '1= A' 1\' &?' <BB?01\' A1+ '@? @ 0'#-' < 0? 1' A1' & 'B&>1' <' 0? ' A1' C< '1@ A<0B?-1' BD&01' <==<' 1' 1-B&?C 1' @10' '1?10' I ' 0<?=B&C0' A?' \' A1' & ' 0?' @1' D<?' -@11 1@ D 0' A1 ' B& C0' A10' &?- 110' I ' '# 110' A1' &'<@>1' "1-.@1R 1' I ' D& 0' A1' @1' A' ' ! <?-BD'01' d I P' A1' B -a' C& R ' C' '1@1 ' C110' 1L'0 <>'-<B'&-' C+10' A1R>'-<B'&?' ?..1>1-' I ' 1L1B?B'&-@ B&>1' @10' A>' <@@10' A10' & 0' "1-.@1 1' A1+3-' B10' D1? 10' 10&-<#@1>1-' 0&@<-B' @<?-B'1-' B?0 ?>1' I ' @1 ' $ 0?' @1' >11 ' ?01\' &?-' '=<' \' &A' ?01\G =& 0H@ H' @<' A1 >' ' -<B'&-' A1' >& ' A1' D&>1' B10 ' C< '1' I ' @1'1B?B'&-' A'B15' 0&'1-' ? A'\' 101 +1\' <' A' ' A>' <@e' ? <' 0&-' @'1? 1-<-' .1 <@ D& ' A1' @<' A' ' ! <-BD'01' A10' A' \' B'-a' C& \0 ' ' @1' A' ' &-01 +< &? ' 1D' C@1'-' C&<' ' I ' <?A'& ' 1' A1-H?1 1 ' 0'#-' Ai'-\' @'#@110' I ' = <-BD'010' B&>1@ A1D& @ C' .1- \' 1-D<#' <- \' A<-\' @1' B& C0' A1' &?- 11' ' @'# 1' &?' @1' A' ' C& ' 10@ A1' &? \' '1@\' 10&-0' I ' &==1-010' <=@<' 10' 1-B&?-R' @10' '1?10' I ' 0<?=j B&-A?' \' A1' & ' A1D \' @10' B& C0' A1' &?- 11' I ' @'# 1' &?' @1' A' 'C& '10@ I ' A1=<' ' 1-, 0 A1?L' <' 1-A' 1 \' A1+3-' @? ' C110' 1-' '<' =&? &1' 1-0?<- @ 10 <00<+&' ' C' <C'<0' I ' L'.1-A10' H' '001 &-' 0'#-' 1-' >10>10' @10' &?- 110' A10' H?1@@10' 10' 0?CC&01' A1?L' 1-Aa1\' 10 1@ B&>1' 1-' @10' &?- 110' @&?' A1?L' 1-A' 1>1-\' 0&-' C '01\G @10' H?1]' <C'<0' I ' L'.1-A10' 1-' < <#'A1?L' &?- 110' 0&'1-' 1 ?><#@10' <' ?-' >10>A' &? @ I ' H' @1' C ' ' <C'<0' 1-' <>#1A1?L' &?- 110' 1' ' & ' A1' 1 &? -1' C' ?-' >& 0' <' >1 -0' G I ' 1-' B<0' H' B<C'<0' I ' 1L'.1-A10' 0&'1-' B10 1' C< '1' <.< A1\' H' @10' -&?-0' I ' 0? -&?-0' A1' '1?L' < 1-A'R0' I ' @<' +'@@1' I ' @1' &?- 1' I ' @<' >'0 '1 1' A&-' '@0 0>' ' 0&'1-' 10C1B'='1\' 1-' @1-A' 1>1-\' I ' 1-' @1 ' CB1001' A'B1@@10 ' ' H' @1' A' ' &-01 +< &' 1' ' C@1'-' C ?' A&'1 ' ' 0? 1' A1' HB&-H@ H" 0&" +&?A < C@1'-A 1' A1+/-' @? ' A<0B?-1' &==1-01' < @<' C< '1' =<' ' 1 B&?- 1' @10' A' \' '1?10' I ' 0<?=B&-A?' \' ' H' A1?L' D&>10' <CC '01\' A1' @1 ' 0&'1-' -'&>1\' I ' <00&B'1\' 1-' BD?-1' B&>' A&-' A1' & ' <='' ? 1' <' '1@ &-01 +< & ' ' H' @1' A' ' &-01 j +< &?' I ' @10' A' \' D&>10' <CC '01\' A1' @1 ' 1-' @<' A' ' J' >'00'&-' <' @? ' <00&B'1\' 1'1-' C@1'-' C&<' ' I ' <?=@& ' 1' A1=1' ' A?1' A1@'C<-B1' 0&@&-B' @<' @1 ' A1' @<@ R 1' A1' '1@L' 1-A' 1\' A1+ ' @1' A' ' &-01 +< &? @ A1R' BD&010' <==<' 1\' A1'-\' @1' B& C0' A1' ?- 11' &?' @'# 11' &?' @1' A' ' C& ' 10@ 1-B&?- 1' @10' A' m' '1?10' I ' 0<?=B&-A?' \' A1' & @ I ' A1R>'-1 ' 1?L' 0? 10' B&>1-B1\' <' 0? ' A1' HB&-H@ C< '1' H' 0& '+&?A < C@1'-A 1' A1+W- '@1' A' ' &-01 +< &? @ A<0B?-1' &==1-01' < @? ' =<' ' 1DB&?- 1' !Z' A' \' '1?10' I ' 0<?=B&-A?' \' I ' 1-' A?1' 1A 1001' I ' 1>1A'1' =<'

¼ † # ? !&>'

'D'0' 1 1 0' < 1 = 0@ &-1'@<K=?@ <-' B<@@1A' <' &-01 +<j & '&=' D1' ` ?B1'<-A' D1' , '-./0' <=1' &-A?=@0@ P' KD'BD' 0D<@@ D<+1' ! & ' &?-A0' <-A0' # ' D1' 1< ' < ' D1' @1<0 ' 'A' D<' D1' 0)' &-01 +< & 'D<+1' &K1 ' <-A' ? D& ' ' # ' D1' 0<'A' 1 1 0' < 1- 0@ <-A' <@0&' # ' &>>'00'&-' &=' D=1' A>' <@ &=' -.@<-A@ &' '-H?' 1' &=' <@@ 0?BD' 1<0&-0' >A' ==1-B10' &' #1' A&-1' <.<'-0' D1' ` ?B1' <-A' <=1' -A? @0 ' ?C&-' D1' `>< '-(' 1<@ &?' &=' D1' &A ' &=' D1' &?- '10@ <-A' &?' &=' D1' ! <-BD'010' &=' D1' !'+1' & 0' &=' D1' , '-.@ <0' D1' A>' <@0' &=' D1' , '-.0' &=' ' .@<-A' #1=& 1' D'0' '>1' 1<0&-<#@ @ <= 1' D1' &@A' ?0j &>' <-A' <K' &-' D1' `>< 'D P' 1<' ?01A@ D<+1' A&-1' &' ? A ' -A' <@0& D<' D1' 0<'A' &-01 +< & ' D<+1' @'a1' <-A' D1' 0<>1' &K1 ' &' C?-'0D' <@@ D1>' KD'BD' #1' & ' 0D1@@ #1' '-A'=@1A' & ' <BB?01A' #1=& 1' D' >@ <0' K1@@ <' D1' , '-./0' ?' '<0' <' D1' < /0@ &=' <-' D'-.' &' #1' A&-1' <.<'-0' D1' ` ?B1' <-A' =11' , '-./0' <=1' &-A? 0 P' ?C&-' D1' `><'-' 1<@ &?' &=' D1' &A ' &=' D1' &?-j '10' <-A' '#1 '10' &=' D1' 1<@>' &=' -.@<-A@ <-A' &?' &=' D1' 0)' ! <-BD'01' &=' D1' !'+1' & 0@ #' 0?BD' &B100@ L<>'-< '&-@ &&=0@ "1 1 >'-< '&-@ ?A.1>1-@ <-A' L1B? '&- '<0' 0)' A>' <@0' &=' D1 , '-.0 &=' '.@<-A' #1@ =& 1' D'0' '>1' 1< &C<#@ @ <BB& A'-.' &' D1' @A' ?0 &>' <-A' <K' ?C&-' D1' `><'-') ' 1<' ?01A@ D<+1'A&-1'& ' 01A@ ` <+'-.'<' D1' "1 1 >'-< '&-' &=' D1' "1< D' &=' `<' <-'\ ' '-' D'0' 1D<@=@ <-A' D1' L1B? '&-'&=' $ '0<>1@ !$ &@ '<@j K< 0' 101 +1A' &' D1' <'A' A>' <@@ & ' &' D'0' .1-1 <@ '1?j 1-<-' &?' '&=' D1' 0<'A' ! <-BD'010' &=' $ '5 -' '+1' & 0' -A' D<' D1' 0<'A' &-01 +< & ' D<+1' =?@@ &K1 ' <-A' ? D& ' ' ''-H?' 1@ <0' K1@@ + ' D'-' '#1 '10' <-A' ! <-j BD'010' <0' K' D&? @ # ' 1-' '-D<#' '-.' K' D'-' D1' &A ' &=' D1' &?- ' <-A' '#1 ' FD1 1' D1' 0<'A' & ' '0@ &=' <@@ 0?BD' 1<0&-0' <-A' ==1-B10' &' #1' A&-1' <.<'-0' D1' ` ?B10@ <-A' <.<'-0' D1' , '-./0' <=1' &-A?Q@ U ' K' D'-' D1' &A ' 8&=' D1' &?- ' <-A' '#1 ' FD1 1' D1' 0>A' & ''0@ <-A' &' ><a1' <.<'-0' D&01' 1 0&-0' #1=& 1' D'>' ' /)' '-A'A@1A@ 0?BD' &B100' <0' D1 1' =&@@&K1 D@ D<' '0' &' 0< @ # ' <C'<0' <-A' L'.1-@ KD'BD' 0D<@@ <0' K1@ '.&' '-&' D1' &?- '10' &=' KD'BD' 0?BD' 1-' 0&' '-A'^1A' #1' 0?CC&01A' &' #1@ <0' '-&' D1' &?- '10' KD1 1' 0?BD' -A' >1-0' =11' <a1-G KD'BD' <C'<0' <-A' L'.1-' <=& 10<'A' '-' #& D' &?- '10' 0D<@@ #1' ` 1 ? -1AU ' < '&-1' h)" < @<-A' D<' D1' =' 0' <C'<0/'-' #& D' &?- '10' D<+1' "<' &=' 1 ? -'# ' <' &-D' <' D1' @1<0 G -A' '-' B<01' D<' D1' <C'<0' <-A' L'.1-' #1' <K< A1A' '-' D'0' 1D<@=@ D<' D1' <>10' <-A' ? -<>10' &=' 0?BD' 1 0&-0' 0&')' '-A'=@1A@<-A' D1' &K-' <-A' D1' &?- @ <-A' 0 1 ' KD1 1&=' D1 ' #1@ 0D<@@ #1' 0C1B'='1A' `<-A' A1B@< 1A ' '-' D1' -A'AD-1-0' <-A' &B10010' &=' D1' 0<>1' -A' D<' D1' <'A' &-01 +< & ' D<+1' =?@@ &K1 ' &' D1< @ <' 1+1 ' <-/0' ?' ' KD'BD' K'@@ B&>C@<'-' #1=& 1' D'>'801@=@ & ' D'0' '1? 1-<- ' &=' <- ' ==1-B1' A&-1' &' ''1' < ' <. ?-0' D1' 0<'A' ? 10' <-A' <=1' &-A?^0@ -A' D<' K&' 1-'@1< -1A' '-' D1' <K' #1' -<>1A' <-A' <00&B'< 1' '-@ 1+1 ' &F>'00'&-' =' &?' & A' D1' , '-.0' &' #1' ><A1' &' 0?BD' &-01 +< & ' -A' D<' D1' 0<'A' &-01 +< & @ <-A' D1' 0<'A' 1-'@1< -1A' '-' D1' <K@ '-' D1' /)' &>>'00'&-' &' D'>' <00&B'< 1' <-A' <00'.-1A@ 0D<@@ D<+1' = '@@ &K1 ' <-A' ? D& ' ' &' ><a1' "1@'+1 <-B1@ <BB& A'-.' &' D1' <K' `<-A' 0<. ' [=' D1' <-A@ &='0?BD' 1-' 0&' '-A'= 1A' #1=& 1' D1' 0<'A' &-01 j +< & @ &=' D'-.0' &' #1' A&-1' K' D'-' D1' &A ' &=' D1' &?- ' & ' '#1 ' KD1 1' D1' 0<'A' & ' '0@ <.<'-0' D1' 0<'A' `' ?B1' <-A' D1' , '-./0' <=1 &-A?=@0@' 1-A' '&' A1j 1 >'-1' 0?BD' ?' 0' B&>>1-B1A' <' <-' <-/0' ?' ' KD'BD' K'@@ B&>C@<'-' #1=& 1' D1' 0<'A' &-01 +< & ' &=' <- ' =j =1-B1' A&-1' &' D'>' <.<'-0' D1' 0<'A' ` ?B1J P' <-A' <=1' &-A?= 0@<-A' D1 1&=' &' ><a1' A?1' 1A 100' <-A' 1>1A

U ! ((' %' '. %" '$' 'E 1' '2 &/!' 5 '5< 9 5(5A '#?# ' ?

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7.+< 7@!"Z 2 +#;!' 22.#& !'&-' .1 1&22&.-= 7& ' V' ·-_]('."' !' 0 .k "&@' .'20#' .1 1&22&.-L

23 . ' 4 ' + ' * ' >

-A' D<' D1' 0<'A' K&' 1-' &' D1' 0<'A' &-01> &' 0&'<00&B'< 1@ #1'<00'0 '-.'<-A'< 1-A'-.' &' D1' 0<'A' &-@ 01> &' &' ><a1' D1' " 1@'+1 <-B10' <-A' " 1 1 >'-< '&-' '-' D1' <--1'<-A'!& >' <=& 10<'A@ KD1-' D1 ' #1' # ' D1' 0<'A' &-01 +< &' 1<0&-<#@ ' 1H?' 1A' -A' D<' D1' 0<'A' &-01 +< &@ <-A' D1' <'A' K&' 1-' &=' <K@ #1' 0K& -@ D<' D1 ' -&' -&-1'&=' D1>'0D<@@ <a1' !11@ E'= @ ' 1@ F<.10@ 1K< A' &' &B<.1' &=' <- ' & D1 ' D<-' &=' D1', '-.' '-' <- ' K'01' '-' D'0' 1D<@=@ '-' '-A1 <-B1' &=' A?1'` L1B? '&- ' <-A' ?-'0D>1-'&='0?BD' <' & 0' <-A' ==1-A1 0' <=& 10<'A' -A' D<' D1' 0<'A' &-01 +< & ' 0D<@@ #1' 10'<- ' '-' D1' & '<-A'` @<B100P'KD1 1'D1'0D<@@ #1' &-01 +< & ' <00'.-1A' <0' <=& 10<'A@ <-A' 1+1 ' &-j 01 +< & ' 0D<@@ <a1' 1< @ ' =& ' D1' 0<'A' ==' B1' !& ' &?-A0'&=' D1', '-.'<' D1' @1<0 @ <-A' D<' D1 ' #1' 0K& -@ D<' '=' <- ' 1 0&-@ &=' KD<' 0 < 1' & ' &-A' '&-' 0&1+1 ' D1' #10 C &B? 1@ 1LB' 1@ & '<#1 ' D1>@ &=' <- '&=' D1 '@ &' A&' <- ' D'-.' B&- < ' &' D'0' A'-<-B1' <-A' '0) ' < D' <=& 10<'A@ D<' 1+1 '&=' D1>' 0D<@@ ><a1' A?1' 1@< '&-' &' &? ' &+1 1'.-' & A' D1' , '-.@ & ' &' D1' D<-B1@@& ' &=' -. &'A'=& ' D1' '>'#A-.@ <0' 0C11A'@ ' <0' D1' K A@' >< @ K' D&? ' &-B1<@>1-' '-' <- ' &'-@ ?C&-' <'-' &=' >C 'j 0&->1-@ <-A' &' ><a1' !'-1' <-A' <-0&>' <' D1', '-./0' @1<0? 1 ' -A' D<' D1' 0<'A@ &-01 +< & ' D<+1' < 1<@ &=' &? ' & A' D1', '-.' & A<'-1A' =& ' D1' 0<'A' ==' B1 ' -A' D<' D1' <0 1 '&=' D1' @''C@ < .1@ & ' <@'-.1 @ & ' & D1 ' 1001@ '-' D1' 0<'A' & @ #1' 0K& -@ <-A' D1' ` &00100& 0P' <@0&@ '=' D1'#1' C 101-@ #1=& 1' D1' 0<'A' <-01 +< & @ #1j =& 1' D<' D1' C<00' &? ' &=' D1' 0<'A' & @ D<' D1' 0D<@@ -& ' < 1>C ' &' A&'<-' D'-.'<.<'-0' D1' 0<'A' ` ?B1' <-A' D1' , > ./0' <=1' &-A?B 0 0P' -A' <@0&' D<' D1' 0<'A' &-01 j +< & @ 0D<@@ B<?01' &' #1' '- & 1A' &=' 1B& A' #1=& 1' D'>@ <0' K1@@ D1' <>10' &=' 0?BD' K-1 0' <-A' <0 1 0@ <0' D1' <>10' &=' D1' ' D'C' < .1@ <@'-.1 @ & ' & D1 ' 1001@@ &j .1 D1 'K' D' D1' ?>#1 ' &= D1 < '->' < ' D1' 0<>1'#1'-.' -A' '=' D1 ' <a1'<-' D'-.' &=' D1', '-./0' -1>'10@ & ' &=' <-' & D1 0@ D1 ' 0D<@@ B<?01' &' #1' # &?.D ' 0?BD' ` D'-.0' <a1-N P' '- &' D1' & 9<-A' D1 1&=' ><a1' =?@@ = '=& 8@ >< '&-' &' D1' 0<'A' &-01 +< & @ #1=& 1' D<' D1 ' D1 1&=' ><a1' " '0BD< .1' & ' <@1C' '=' ' ' #1' -& ' D<' # ' ! & B1' &=' F '-A@ 1>C10 @ & ' &=' -1>'10@ & ' 0&>1' & D1 ' 1<0&-j <#@1' <?01@ 0?BD' D'C@ < .1@ <@'-.1 @ & ' & D1 ' 1001@@ >?0 '1-1 ' '- &'<-& D1 ' & '=& ' D1' 101 +< '&-' &=' D1' 0<>1' 1001@@ & ' B' D1 ' <?01' 1<0&-<#@1C -A' D<' D1-' D1 'OD<@@ ><a1'=&'@ -=& >< '&-' &' D1' 0<'A' &-01 +< & @ & ' &' D1' &-01 +< & '&=' @'1' & ' '-' K BD' D1' 0<'A' 10j 01@0' < '+1' & '1-1 @ &=' D1' ')' '\1@ <-A' &=' D1' ^?<-' ' &=' D1' D'-.@ 1B1'+'-.'<' 1 1 ' 10 '>&-'<@ ?-A1 ' D1' 0<'A' 1<@ &=' D1' <=& 10<'A' &-01 +< & @ #' D1' K@''BD' D1' &-j 01 +< & ' &=' D1' 0<'A' & @ KD1 1&=' D1' 1001@ & ' 1001@0' `0D<@@ .&' &?9h'P' >< ' D<+1' & 'B1' &=' '1' ^?<-' ' '<-A' <@0&' &=' D1' <@?1' &=' D1' E&&A0' `<-A' D< 1@0P' 0&' <a1-' -A' '=' <-' ` &00100& 'OP' & ' ?0 1 ' &=' <-' D'C' & ' & D1 ' 1001@@ .&' &? ' &='<-' & ' &=' D1' 1<@>' `&=' -.@<-A9P' & ' A'0BD< .1' D'0' D'C' & ' 1001@ <.<'-0' D1' ! & >' &=' D'0' A'?<-B1@ D<' 0?BD' D'C' & ' 1001@@ &.1 D1 ' K' D' D1' '\1' ` 0A 1-' '-'/P' D1' 0<>1' A?@ ' ><A1@ 0D<@@ #1'=& =1' ' &' D1', '-.@<-A' D1' &A ' &=' D1'` &00100& 'OP' & ' <0 1 ' &=' 0?BD' D'C' & ' 1001@ B& > >' 1A' & '0&-@ D1 1' &' 1><'-' ?- '@ D1' D< D' ><A1' <' ! '-1' <-A' <-0& >' & ' D1', '-.;' &+'A1A' <@K< 0' D<' -&' k &00100& 0 'P' &=' D'C0' .&'-.' &? ' &=' <-' & ' 0D<@@ ><a1' <-' ! '-1'-& ' <-0& >@ & ' D<+1' >C '0&->> ' &=' &A @ '=' D1' 0<>1' ` &00100& 0 WP' #1' -& ' '-' DR' 0<>1' @?C ' <' D1' '>1' &=' =&1' ==1-B1' B& > >' 1A' <.<'-0' D'0' A'-<-B1

' H' @10' A' \' A1?L' D ?10' '00'-' <' @1' A' ' &-01 +< &? ' <00&B@1\' 0&'1-' <00'0 <-\' I ' 1-1-A<-\' <' A' ' &-01 +<j &? @ C '=' = 1' @10' A1@' <<B10' I ' A1 >'-<B'&-' 1-' >< 1' ' =&? >1' <F-A' \@ H< ' '@0' 0&?-' C' @1' A' ' &-01 +< &? ' 10&-<#@>K1-' 1H?'0' ' H' @1' A' ' &-01 +< &? ' I ' @10' A' \' A1?L' D&>10' A1' @1 '0&'1-' ? 1\@ H'@0' -1' -?@@ A1' 1-L' A <' &?' C=&A &-' A1'-?@@ ' 0 <& ?" A1' & ' =11' A&?-' @&?1 1'.<.1' 1.< A1' <1' # &B<.1' 1-' <0B?-' < 1' B1A1' C< '1@ 1-' A10 B> #<<B1' A1' A?1' '-H?'0'B'&-' I ' C?-'0018' >1-' A1' '1@L' <' &? 0' I ' ==1-A&? 0' <+J- A' \' ' H' @1' A' ' &-00 +< &? ' , <' 1B1<-' 1-' @1' C& ' I ' @'1?' &?' @M <<00'.-1 &-01 +< &?=B&>1<+W- 10 ' G' '=D'A <' BD?-' &-+1 0< &? ' C ' @1' A' ' &==' B1' B@'?-' <-' L@'@' A18" & ' <' >1 -0G' 'H'@0' 0&'1-' ? 1\' H' 0" <0B?-1' C0&-1@' A1' H?1@1' B&-A'A&-' &?' 10 < ' H'@ 0&=@ 1?L' &?' <0B?-' A1' 1?L' CB? 1' 1LA 1' &?' <#1 1' A1=&' 1' <0B?-' BD&01' <' B&-8' '1' A'B10 1' & A'-<-B1' I ' @1', 1>1-' <+0-A=@ H' BD?-' A1' 1?L' =1 <' A?1' 1@<A&-' <' -=1' B ' @1' & ' &?' <' @1' D<-B1@@1 ' '' <<.@1= 1' C ' @1' 1>C0' 10 1<-' 0" D<0 '>1-' B&>1' #&-1>1-' C? <' 0<?-\' B&-B1@@1>1-' 1-' <0B?-' C&'-' 0? ' C1'-1'A1>C '0&-1>1-' I '=&' 1'= -' I ' <-B1&-' <' +&@?- 11' - 1' @1' & ' ' @1' A' '8 &-01 +< &? ' 1' ' ?-' 01<@ A1' & ' & A1'.-1' C' @1' A' '&==' B1' ' H' @1' <'0 1' A1' -'1=' #< .1' #<@1-.1' &?' <? 1' +1001=' 1-' @1' A' 'C& '0&' ? 1@ I ' @1' C&00100 =' <? A' 0' @ 0&' ' ?! ' A1+3-' @1' A' ' &-01 +< &? ' <+3-' H' @' C<001' D& 0' A1' A'1' C& ' H' @' -< 1>C 1 <' =1-0' 1-B&- 1' @10' A' \' '1?10' 0<?=1&-A?' \' A1' & ' ' H' @1' A' ' &-01 +< &? ' =<B1' <' &@@1 ' A1' 1B& A' A1+3-' @? @ <#'1-' @10' -&?-0' A1' '1#0' C&00100&? 0' I ' ><'0 10' B&>1' @10' -&?-0' A1' @&? ' -'1=' #< .1' #<@1-.1 1' &?' <? 1' +1001@' 1-01>#@1' &+10H@ @1' -&>#1' A10' >< ' 0' 1-' 'B1@@ 10 1<< \' ' '@0' C2.-1-' '1-0' A10' 1-1> 0' A1' & ' &?' A<? 10' HB&-H0@ H'@0' '1@1' C '01' =1 &+>' <>10-1' 1-' @1' A' ' C& ' I ' 1-' =1 &?-' C@<-1' 1-=& ><B'&-' <' A' ' &-01 +< &? ' A1+0-' H'@0' 1-' =1B1-' A10BD< .1' &?' +1'@A1C 0" -1' &=' H' C'=& B1' A1' +1-' A1' 1>C10 ' ? A10' 1-1> 0' &?' <? 1' B<?01' 10&-<#@1' '1@L' -'1=' #< .1' #<@1-.1 1' &?' <? 1' +1001@@ A&' ' 1-1 1-' <? 1' C& @ C ' 0<@+<B'&-' A1' >10>1' @1' +10 1=' &?' <? 1' B<?01' 10&-<#@1C ' H'@0' <A&-H0' =1B1-' C@1-' 1-=& ><8' B'&<' <' A=' &-01 +< &? @ &?' <' @1' &-01 +< &? ' A1' @1' C& ' 1-' H?1@@ @10' A' \' +1001@L' < '+1 &-' &?' 1-1 &-@ A1' @<' A11' C '01' I ' A1' @<' H?<-' 1' A' 1@@1@ C2.-<'@' 1' 10 '8' >&-'<@1' 0&? \' @1' A' ' 01<@ A1' @1' A' ' &-01 +< &? @ C' H?1@1' @1' &-01 +< &? ' A1' @1' & ' A&?-' @10' +1001?L' &?' +1001=' '001 1& ' &?' '00' ' C <' <+&' ' -& 'B1' A1' @<' H?<-' 1' I ' +<@?1' A10' #'1-0' '00'-' C '01\' 0" <0B?-' C&00100&? ' &?' >10 1' A< B?-' -'1=' &?' <? 1' +1001=' '001' D& 0' A<0B?=' C& ' A?' &'<@>1@ &?' =<B1' A10BD< .1' 0&-' -'1=' &?' +1001@' 1=B&?- 1' @<' =&? >1' A'B10 1' & A'-<-B1@ H' '1@ -'1=' &?' +1001@' 1-01>#@1' &+10H ' @<' C '01' C' B1@ ' A?1>1-' =1' ' 0C' ' =& = '' 1' <' & @ I ' @1' B& C0' A?' C&00100&? ' &?' -'<'0 1' A1' '1@ -'1=' &?' +1001=' B&> 0' <' C '0&-1@ <' ' A1> 1 ' A > ' ' 1' ' = '' = -' I ' <?-B1&-' <' & ;' C/+1-' H' -?@@10' C&00100&? 0' A10' -'1=&' '00<- \' D& 0' A<0B?-' C& ' 1' =<B1' = -' &?' <-B1&-' -1'1-' 1>C '0&-1>1-' A?' B& C0' 0" >10>10' @10' C&00100&? 0' -1' 0&'1-' 1-' >10>10' @10' -'A0' 1 " 1>C0' A1' >10C '0'&-' 1-B&- 1' B10 1' & A1-<-B1' = ' 1

' ' !' . 1 1 i22i . -)

' ' (f' . -$] 1 ' "

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<-'0D- ' . ' 7-!"$ -/' !"Z' . ' & 2

7-!"2-.' 0-&2 ;+!' 0-+!22' .-' ; . "/

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]3"H5!' ' ' U 77 !V
N E@ " 'G '?' $ =) ' #

’ ><’< <’-9<0&= 1-’<0 D1 ’& ’<- ’ &=’ D1>’ ` &’ D< P’0@ <@@ #1’ 1H?’ 1A’ # ’ D1’ 0<>1’ A’-< ’10 & ’ D1’ ’ &> -’08 0< ’106 &’ D<’ KD1-’ D1’ 0<’A’ ==’B1 0 <-A’ ’-’0 1 0 <+1@ & ’ ’A1’ &’ < 10 ’<- ’ &@@< A9 & ’ &’ ><a1’ 00’0 j <-B1’<’ D1’ -0 <-B1’ <-A’ 1H?10 ’ &=’ D1’ A’-< ’10 & ’ D1’ ’ &> >’00< ’10 # ’ +’ ?1’ &=’ D’0 < ? 1 D< ’ D1’ 0<>1’ A’-< ’10 <-A’ &> >’00< ’10 0D<@@ C< ’ =& ’ D1’ ’ ` (0 P’ 1<0&-<#@ 6 <-A’ D< ’ D1’ , ’- ./0 1 +’B10 &’ D1’ KD’BD’ D1’ 0<>1’ ==’B1 0 #1’ =’ 0 ’ 0K& -9 #1’ C 1=1 1A’ `#1=& 1/P’ <@@ & D1 ’ < ? 10 =#=’ D1’ ’#1 ’ &=’ &@ ’ DC BD’ <-A’ D1’ ’-’0 1 0 &=’ D1’0<>19 <-A’ ’-’ 10C1B’<@ =& ’ D1’ & 1B ’&-’ <-A’ ?-’0D>1- ’ &=’ A’1’ 1 1 ’Ba0 <-A’ &@@< A0 #1=& 1’ D’0 ’>1’ ><A1’ <-A’ -& ’ 1C1<@1A’ #1’-.’ ’-’ D1’ ’ =& B1 ’ -A’ <@0& D< ’ <@@ 1 0&-0 B&-+’B ’ &=’ 1 10 9 &=’ KD<’ 0 < 19 &-A’ ’&-9 &=’ ” 1. 11’ D<’ D1 ’ #19 # ’ D1’0<’A’ A’-< ’10 ’ `& D1 ’$\P & >’00< ’10 @1= ’ &’ D1’ 1B?@< ’ &K1 ’<BB& A’-.’ &’ D1’ <K0’ &=’ &@ ’ D? BD9 0D<@@ @&01’ <-A’ =& =1’ ’<@@ D1’ ’ <AA0 <-A’ 1-1j >1- 09 KD’BD9 D1 ’ D<+1’ ’-’ ! 11’ ’>C@1’ ’-’ D1’ <- -1 ’<0 =&@@&K1 D6 D<’ ’0 & < 9 D< ’ D1’ , ’- .’ D<+1’ <@@ D1’ <-A0 <-A’ 1-1>1- 09 KD’BD’ D1’0<’A’ &-+’B 0 D<+18 ’-’ ! 11’ ’>C@19 <-A’ 50 -’ DA@A1-’ &=’ D’>’ ’>>1A’< 1@ 9 <0 =& j =1’ ’ ’ <-A’ D<’ D1’& D1 ’ & A09 &=’KD&>’ D1’ <-A0 <-A’ 1-1>1- 0 &=’0?BD’ &-+’B 0 #1’D&@A1-9 ’>>1A’< 1@ ’<= 1 ’ D<’ D1’ , ’- .’ ’0 `0&’NP’ 1’01A’<-A’<-0K1 1A’&=’ D1’ 1< 9 D1’ ” < 9 <-A’ D1’ F <0 19 D<+1’ ’+1 ’&? ’&=’ D1’ , ’- ./0 <-A0 &=’ D1’ <-A0 <-A’ 1-1>1- 0 <=& 10<’A’&=’ D1>’ 0&’ D&@A1-9 <0’ ’ D< D’ #11-’ ?01A’ ’-’ D1’ <01’&=’ <’-A1 ’ &=’ ! 1@& - 6 1LB1C ’ D1’ <-A0 <-A’ 1-1>1- 0 KD’BD’ #1’ D&@A1-’ &=’ D1’ A’-< ’10 ’ & ’ D1’ ’ &> >’00< ’109 #1=H 1’ KD& >’<- ’0?BD’ 1 0&-0’ ’-H’1<BD1A’ &=’ 1 1 ’#1B& -+’= 9 KD’BD’ <-A0 <-A’ 1-1>1- 0’ ’- ’ 1@ ’0D<@@ 1><’-’ &’ D1’ , ’- .’ <0 =& =1’ ’2 -A’ >& 1&+1 ’ D<’ <@@ D1’ E&&A0 <-A’ D< 1@0 &=’ D101’ 1 0&-0 0&’ B&-+’= 1A9 #1’=& =1’ ’ &’ &? ’ &+1 1’. -’ & A’ 1’ , ’- .’@ ! ’ D<’ -&’ 1 0&-’ B&-+’A=’ &=’ 1 10 9 <-A’@1=’ &’ D1’ 1B?@< ’ &K1 ’<= 1 ’ D1’ <K0’ &=’ &@ ’ D? BD9 0D<@@ =& =1’ ’ D’0 <-A0’ #1=& 1’ D<’ D1’ #1’ A1<A6 -A’ ’=’ <- ’80?BD’ 1 0&-’ 0&’ B&-+’ ’ #1’ ’-=1&==1A2’ #1’ ’=’ # ’ ! ’-19 # ’ ” 11A9 & ’ K’ D&? ’ ” 11A9 0’-’ <-A0’ & ’ 1-1>1- 09 1- 0’ & ’ 1 +’B10’ ’-’ ! 11’ & ’ & D1 K’01’ /)’ & ’ D< D’ <- ’ & D1 ’ &00100’&-0’ & ’ D< 1@0 # ’ E’=’ & ’ E <- ’&=’<- ’ 1 0&-’ & ’ 1 0&-0’ &’ ddd<-& D1 / ’ 01%OP’ D<-’ &’ D1’ 01’&=’0?BD’ &-+’A 09 D<’ D1’ 0<>1’ <-A0’ -C ’ 1-1>1- 09 1- 09-& ’ 1 +’B10 -& ’0?BD’ & D1 ’ &0010j 0’&-09 & ’ D< 1@0’ 0D<@@ #1’ =& =1’ ’ &’ &? ’ &+1 1’. -’ & A’ D1’ , ’- .’’-’ -&’K’01’ -A’ >& 1&+1 ’ D<’ D1’ ?0j ’B10’ &=’ D1’ , ’- ./0 1-BD9 <-A’ ?0 ’B10’ &=’ 1<B19 <-A’ ?0 ’B10’&=’ 00=119 D<+1’=?@@ &K1 ’ &’1-H?’ 1’&=’< ’ D1>’ KD’BD’ D&@A’ <- ’ & 0’ & ’ 1 10’109 <0 &@@< A09 <-A’ `KD’BD/P’ #1’ D1’ ’ <’- <’-1 09 1B1’+1 09 !<+& 1 0’<-A’ ?0 <>1 -9 B& > >&-’ F ’ 1 0’ &=’ 0?BD’ &&a09 <0’ K1@@ C=’ ` D1JP’ 1 >&-0’<0’&=’ D ’ ’ BD&&@09 &-+1- ’B@109 &-j . 1.< ’&-09 <-A’ &-=1A1 <B’10 <-A’ D<’ D’0 @<?01’#1’ C? ’ ’-’ &> >’00’&-0’&=’ D1’ ?0 ’B10’&=’ D1’ 1<B16 <-A’ ’=’ <- ’C1 0&-0’#1’ ’-A’B 1A’&=’<- ’ W)’ &> 0’ <=& 10<’A9 D1’ 0<’A’ ?0 ’B10’0D<@@ D<+1’ &F1 ’ &’ <K< A’<.<’-0 ’ D1>’<’ <C’<09 <-A’ D1’ D1 ’==’0D<@@ #1’ ## >A’ &’ < 10 ’ D1’ 1 j 0&-’ &’ 1 0&-0’ &’ ’-A’ 1A’<0’0&&-’ <0’ D1’ >< ’ D1>’ =’-A’ # ’D’>’ &’ # ’D’0’ ==’B1 0’ -A’ ! & <0> ?BD’<0’ D1’ &89 -’0> B1’&=’ 1 10 9 & 09 <-A’ &@@< A ’10’#1@& - .1 D’ &’ D1’ ?A.10’&=’ &@ ’ D? BD9 <-A’ -&’ &’01B?@<’ ?A.109 0?BD’ 1 0&-0’ ’-A’ 1A’0D<@@ #1’A1@’+1 1A’ &’ D1’ A’-< ’10’ &=’ D1’ @<B109 &’ &’ D1’ ’ &> >’0 ’109 # ’ -A1- ? 10’ #1 K’L’ ’ D1>’ &’#1’ ><A1’ $ K’D’-’ L’ ” < 0’ <= 1 ’ D ’ ’ 10 9 & ’0&&-1 ’ ’=’ ’ ’ >< ’ #1’9 D1 1&=’ &’ #1’<BH?’ ’ &

’ 7 ’ / &0 0’ 0 &’- ’.’<<@;’ 0&>’0 /’ D1’ ’ ” ’G ’<’ 0 7 &#’ ’ ’ /’ M /’ ’-’ KD< 0?>1+1 ’ ><--1 9 ” ’G ’0 /’ & D1 ’ ?01’ ” ’G ’<’ / @1’ D1’ ’ = -< ’ J’ 1= =&

<’ <- \’ A1’=&’ \’ B&>1’ <’ B1&’ =<’ 1’ ’@0’ &-’ <0B?-’ A1’ 1?L’ <’ B1&’ , <’ &?’ M &- ’ 1H? 01]’ &?’ 1H? 0’C’ >10>10’ @10’ A’-<’ ’10’ &?’ @&? ’ &>’00< ’106 00’- ’ H’ @10’ A’ \’ ==’R0’ I ’ ’-’0 10’ H<- ’ ’@0’ = <’@@1- ’ &?’ BD’+<BD1- ’ C ’ < 10 1’A<0B?-’ &@@< A’&-’ ’ 1’ <00’0 1-B1’<@ ’-0 <-B1’ I ’ 1H?10 ’ A10’ A’-< ’10’ &?’ @&? ’ A>’00<’ ’10’ C’ , ?1’ A’B10 ’ 10 < ? 9 H’ >10>10’ @10’ A’-< ’10’ &?’ &>’00< ’10’ C<’1- ’C ’=&? ’B&0 <.10’ 10&-<#@1>1- 6 I ’H’ @10’ ,+’B10’A?’ & ’ <’ H” >10>10’ @10’ ==’ I ’ 0&- ’ C ’=’1>1- ’ M1>1- \’ 0B@1- ’ C2=1 1\6 &? \’ <?R0’ 10 < ?’ \’ C&? ’ @<’ @’# 11’ A1’ 1’- 1’ 0. ,01’ I ’ @10’ ’-’0 10’ W ’1-’ 10C<=&’ C ’ =&’ B& 1= &-’ I ’ C?-’1=&-’ A10’ 1 1 ’a0’ I ’ &@@< A108= A \8 A1+0- ’ B10’ D1? 10’ 5 ’ -’1- ’ 1C1@@10’ 10 1’<- \’ 1-’ @&? ’ =& B1 ’ ’ ?L” H’ C? \’ C0&-10’ B&-+’= 1\’ A1’ 1 10’19 A1’ HB&-H ’ 10 < ’ B&-A’B’&-’ &?’ A1. 11’ H’@0’ 0&’1- 9 C’ @10’ A’ \’ A’-< ’10’ &?’=&? ’ &>’00< ’10’ 1@’-H?1\’ < 01B?@1 ’ ><D” 0&@&-B’ @10’@1’10’ A1’ 1’- 1’ 0.@’019 CA1- ’ I ’ =# =<B1- ’ C? \’ =&? ’ R 10’ I ’ 1D \’ H?1?L’ &-’ 1-’ =11’ 0’>C@1’ 1-’ ><51’ H1-0?’ 6 B10 < 0<+&’ ’ H’ a’ & ’ < ’ &? \’ @10’ R 10’ I ’ 1- \’ H?1?L’ @10’ A’ \’ B&-+’ 10’ &’> ’ 1-’ =11’ 0’>C@1’ I ’ H?1?L’ 0&- ’ 1-?\’ A1’@? ’ ’-?-1A’< 1’ B&>1’=& =<’ \’ 6 I ’ H’ `a 0 NP’ <?R ’ 0’ A10’ H?1 L’ @1 h’ I 10’ I ’ 1- \’ A1’ ’1?L’ B&-+’ \’ 0&’1- ’ 1-?R’ ’>>1A’< 1’ <C00’ B1&’ H’ @1’ & ’ 0&=’ 1- ’ 01’0” I ’ 10C&-A?’ A1@ <-’ &? ’ I ’ .<0 ’ 1’1- ’ @’ 11’ D& 0’ A1’ ><= ” @1’ & ’ A10’ 10’ I ’ 1- \’ <+/- A’ <’ ’00’- ’ A1’ 1?L’ 1-?\’ B&>1’ <A’ 10 1’?011’ 1-’ B<0’ A< 1’-A 1’ A10’ =1@&-’10 6 =& 0C ’0’ @10’ 10’ I ’ 1- \’ H?1?L’ 0&-’ 1-?\’ A10’ A’-< ’10’ C?’ =&? ’ &>’00< ’10’ A1+ ’ H?1?L’ <0B?-0’ ’1?L’ 1>C1BD1\’ A1’ 1 10’1’ 0&’1- ’ B&-+’A\9 @10’ H?1?L’ 10’ I ’ 1- \’1- ’1 >1-’ 1><’-A 1-’ <’0 & ’ B&>1’ =& 8 => \’6 1’&? 1’B1&’ H’ &? \’@10’#’1-0’ I ’ BD< 1?L’ A1’ ’1?L’ B&-+’= \’ 0&’1- ’ =& =’’’ \’ <’ -=1’ 00& <’-’ = ’ @1’ & ’ 6’ C’00’- ’H’ -?@@1’ C0&-1’ B&-+’= ’ A1’ 1 10’1’ I ’ 1@’-H?1\’ <’ 01B?@1 ’ ><’-’ 0&@&-B’ @10’ @1’10’ A1’ 1’- 1’ .@’01’ =& =<B1’ 10’ 10’ <+0-’ H’9 0&=’ > & 6 ’ 0” <0B?-’ A1@1’ C0&-1’ ’00’- ’ B&-+’ ’1&’ ’ 1-=1&==19 0&=’ ’@’ C’ @ -’ C’ =’?=’ &U’ 0<-\’ =1’=9 1-’ 10’ &?’ 1- 0’ 1- 10’ &?’ , ’B10’ 1-’ ! 11’ &?’ <? >1- ’1-’ H?1B&-H9 ><519 &?’ 1=’ <0B?-0’ <? 10’ C&0j 0100’&-0’ &?’ BD< 1?L’ C’ A&?-’ &?’ . ?- 1’ A<0B?- ’ C0&-1’ &?’ C0&-109 <’ <? ” &1C0’ `H’ <@ &1CO/P’ A1’ ’1@L’ B&-+’ \9 H’ >10>10’ @1 ’ 10’ A’ \’ 1- \’ -1’ ,+’B1 h’ -<? 10’ ’1?L’ C&00100’&-0’ -1’ BD< 1 L’ -1’ 0&’1- ’=& =<’ \’ <’ -=1’ & <’-’ = ’ @1’ & ’ 1-’ -?@@ ’ >< 1 ’ &?R’ B1&’ ’ @10’ ?0 ’B10’ A?’ <-a’ @1’ & ’ I ’ ?0 ’B10’ A?’ 110’ I ’ ?0 ’B10’ A<0<010’ C-A 1’ 1’1- ’ C@1’-1’ C&<’ ’ A1-H?1 1 ’ A1’ &? \’ B1?L’ H’ 1’. -1- ’ <0B?-0’ 1 & 0’ &?’ D1 10’10’ B&>1’ &@@< A10’ N ’ H?1?L’ 0&- - ’ @&? ’ ><’< >’&? 0’ 1B1 &? 0’ ’<? &? 0’ 0?0 8’ 1’. -&? 0’ B&10’ 10B ’ 0’ A1’ ’1?L’ @’C0 9’ 0’#’1-’ A1’ @&? ’ , >&-0’ B&>1’ A1’ @&? ’ 10B&@10’ B&-+1- ’B@10’ B&-. 1.<B’&-0’ I ’ B&-=1A1 <B’10’6’ I ’ ’B10 &’B@<?01’ 0&=’ > 0’10’ &-1 ’&-0’ A10’ ?0 ’B10’A1’@<’ ! 110 6 1 ’0” <0B?-0’ C0&-10’ 0&’1- ’1-A’ 1\’ A< B+>0’ A10’ C&’- \’ 0?’0A’ \’ 1’1- ’ @10’ A’ \’ ?0 ’B10’ C&<’ ’ A1’ <. < AB ’ +1 0’ 1?L’ <C’<09 1 ’ 0&=’ 1’ ’0B&?-’ 1- \’ A< 10 1 ’ @<’ C0&-1’ &?’ C0&-10’ 1-0 ’ 1-A’ 1’ &?’ 1-A’ 11\’ <’ &0 ’ B&>1’ ’@’ @10’ C? <’ &+1 ’ C’ @? ’ &?’ C’ 010’ ==’ 0’ ’ C ’ <- ’ H’ @<’ B&-?0<-B1’ A10’ 1 10’10’ 1 &0’ &?’ &@j @< A ’10’<CC 1’. -1- ’<0’ ?. 10’ A1’ 1’- 1’ 0.@’01’ I ’ -1> 1’ <0’@?. 10’ 01B?@< 09 0&’1- ’ A1?L’ 1-A’ 11\’ @’C10’ <0’ A’j -< ’10’ A10’ @’1?L’ &?’ <’ =&? ’ &>’00< ’10’ C’ 1-A1- ? 10’ 1-R’ 1?L’ <==<’ 1\’ A1A1’-\’ L ’ &? 0’ < 0’ =&? ’ < 10 ’ &?’ C@?#’ &0 ’ 0” B1&’ C <’ 10 1’=1@ ’C ’ 1- ’10 1’<BH?’ 1\’ &?’

’ 6 .+ ’ ’ !”%-!/’ .-’ !’

B.” !& &”!’ . ’ -/Z -/’ b . . /Z . ’ 3!”2. -Z ! . -’& ’ ’ !”!2@

"6, (* ’ ’ 5’ 3) 4 .’)*5’ *’ 5’ ’()F6(’ ’ ’ ’ (*Y

<C’<0 * &-2’ -

= ’0<- 1A= +!”!2@ ; !+ . -*Z .’ !’ &”% 0 + A.10

B&-+'B \' C' @10' '10' A1' 1 0.='01' 1-' B<0' H' B1?L' C0&-10' -1' 0&'1- ' 1-A' 1\' A<],' BD&01' A&?- ' @<' B&D?0<-B1' <CCA1- '<0' <.10' I ' ==' R0' 01B?@1 0C' 1-' H?1@@' B<0' <C0' B1&' H'@0' 0&'1- ' <BH?' 1\' &?' A1@', 1\' A1+ ' @?.10' 1 ?@1 0' A1' '1@ BD&01' <CC 1-<- ' <0' ?.10' 1B?@1 09' 0&'1- ' 1-+&'1\' 1-' 01? 1' .< A1' <0' A' \' A'-< '10' &?' <' @&' &>'00< '10' I ' <' 1?L' @'+01\' C' 1-A1- ? 10' B&>1' A10?'09' C ' 10 1' <BH?' 1\' &?' B&-+'B \' TDB1 ' 1 10'10' 1 & 0' &?' &@8' @< A '10' B& -1' <+0- ' 10 ' A' ' 1@&-B' @10' @1'10' A1' 1a' 1' 0.@'019' I ' B1&' A1'-\' @1' R>1' 0?'0A' ' +1?' H' @10' A' \' 1-A' 1>1- \' D1' 0&'1- ' C '01\' 1-' 1+'A1-B1' 0" -&-' C38 1-8' =&--<B'&-' A&+3- ' @10' ?.10' 10C?1@L' 1-B - 1' '1?L' 1-A' 1\9' >10H' @10' A'-< '10' B&>1-B1- ' @&' C110' 1-, 0' '1?L' 1-A' 1\' 1-' >10>1' @<' >T'51' B&>1' -?=' 1-A' 1>1- ' ' =?'001' 1'<- \' -?@@ 1.< A' <' '1@L' 1-A' 1>1- \' ' 0' <0B?-' 0&' ' 1-A' 11' A1' 1 10'1' 1 &' &?' & < A '1' I ' C '0' C' @1' '0B&?- ' &?' <?R' ==' R' A1' & 9' 0&' ' '@ @1001' < ><'-C '0' A1'D\' 10' A' \' A ' &? 0' C' #&-' 01? 1' C ' H?1@@ @10' A' \' '0B&- \' &?' <?R0' @=' 0' +&'@@1- ' 10C&-A 1 ' 0<- ' H' @<' A' 1' C0&-1' '0<-=' 1CA' 11' 0&' ' 'A10D1' A1D51' <0' A' \' A'-< '10' &?' <' @&? ' &>'00< '10' A1+0- ' @1' = -' A1' @1' A'0>1' &? ' 0?'0A' ' 0'@' C @<' <0B?-1>1- ' C ' 'D<@<A'1,' 1 ' <' ' BD10B?-' A'-< '1' 0?= 0<- \' &>'00< '10' &?' &>'08' 0<' ' A1> <- ' 1-' BD?-' &?-@11' 1-' @'1?' -& <#@19' C'00'-' H' 0" <0B?-' 1@ 1-A' 1' 0&' ' C '0' H' @10' A' \' &-?00<' 0' &?' &>'00 ' ' C&1 ' 10 1' .< > 9' 1-' @1' @'1?' -& <#@1' ? '@ 10' A1> <- 9' C' @1' '0B&?- ' &?' <0B?-' A1' 010' ==' B1 0' C ' +1-' ' <' @<' E<&@1' @1' & ' 1-' >10>1' @1' &?- 11' A1' @<' 10B1'+1 ' >10>1' @1-A' 1' C' 1-A1- ? 10' B&>1' A10?'0 ' 'H1-' @10' 1-H?10 10' 1-' B1&' B<0' <C A 1\' =<B1- ' @10' '0B&- \' I ' <?R0' ==' R0' <0' H?1?L' '@ <CC1- 9 1>C<-1@@1 ' #&-10' I ' 0?==' B1<- \' C0&-10' -'1- ' 0? C1B 1\' -1' C1? 10' B10 <08' 0<+&' ' '1@L' ' 1'1- ' <?' >1 -0' BD101+>' A1' 1?L' H' , <' 1-0" 1>C<-1@@1' 1-' '1@L' 1-H 10#1\A '-' \' @1' &'<@-'1 ' A1' 10' 1- 0' &-' A1' 1- ' C' <-9 ?' C1'-1' A1' CA 1' <@ &1C09' @1' & '+'-. '@'50' I ' B1?L' 'M &-' 1>C<-1@@1\' 1-' '1@L' 1-H?10 1\' 1-' E<@10' 1@ ' BD10B?-' A1' 1?L' <' @<' +<@?1' A1' L@ ' 0 ' C' <-' ' 0" <0B?-1' A1@' C0&-1' 0&' ' < 1< ?1@ 0&' 9 '@' C' @& A'-<' 0' 8&? C' @10' ==' B1 0' &?' @'-'0 h9' A1 & 9 ' 10BD<C1' &?' A1# ?01' C '0&-1' <+<-' H'@ 0&' ' <BH?' 1' A1+ -' @& A'-<' 1@ 0&'1- ' 010' =1-0' I ' BD< 1?L' H?1?L' '@' <+&' ' @1' &? ' A1' '1@ < 10' =& =<' \' <?' & 9' I ' 010' , 1' I ' 1- \' H?1?L' A' <+&' ' >10>1' @1' &? ' 01'01\' <?L" 10' ><'-0' @1' & 9' I ' 1A' @1' & ' 1- ' @1 ' C=' \' A?' A' ' &? ' <-H9' '@ 0&" 1-A1' <' >10>1' @<' C '0&-1' A&-' '@ 10BD<C<6' H' @10' <8+<- A' \' ?0 'B1'0' 1'1- ' C@1'-1' C&<' ' A1-H?1 1 ' A1' &? \' '1@L' 10BD<C10' I ' A1# ?01 1' A10' C '0&-10@ I ' <?L' ' A1' @10' R 10' \' #'1-0' VI' BD< 1?L' A1' '1@L' A' 1\ ' 8C? +1?' H' <' ?hB?-' '1@ 1-A' 11' -1' 1 &? -1' <' AQ1' C '0&-1' I ' A1+'1' -'1- ' B&-+'=@9' #'1D' @' 1' <' 010' D1' ' A1- 1 ' 1-' @10' R 10' I ' 1 \' @&? ' <?-B10 1' 0<-\' <? 1' C 0?' 1' =<' 1' <?' & ' C ' B1@@1' B<?01,' ' ' &? \' B1?L 0H&-' # 110' I ' = <-BD'01' &'<@L' 1-' -.@1R 19' B&>1' @1' &?- 1' A1' 10 1' @1' &?- 11' I ' @'# 11' A1' "? 10>1' I ' <? 10' 01>#@<#@109' I ' <?L" &?=\' @10' ' H&-' ? '0A'BB'&-0' I ' = <-BD'010' C'<@L' 1-' E<@10' &?' @10' # '1=0' A?' & ' -1' B? &-' 2 1' 1'1' ' 0>D#@<#@1' C&<' ' C&? 1L11? 1

B&D+'= ' # ' D1' @ <K0' &=' &@ ' D? BD9' '-' B<01' D<' D101' 1 0&-0' #1' -& ' '-A' 1A' &='<- '& D1 ' D'-.9' KD1 1&=' D1' &-'0<-B1' #1@&-.1 D' &' D1' 01B?@< ' ?A.10' <-A' ==' B1 0C' '-' KD'BD' <019' <=1' D<' D1 ' #1' <BH?' ' & ' A1@'+1 1A' #1=& 1' D1' 01B?@<' ?A.10' &='0?BD' ` D'-.09 P' &' D1' 01j B?@<' ?A.10' #1@&-.'-.9 D1 ' 0D<@@ #1' 01-' ' '-' <=1.?< A' &' D1' 0<'A' A'-< '109' & ' &' DA ' & &-?00< '10' <-A' & ' D1>' A1@'+1 1A' # ' -A1- ? 10' <0' #1=& 19)' &' #1' <BH?' ' & ' B&-+'B ' &='0?BD' &@@< A '109 & 09' & ' 1 10'109' <0' '0' <=& 10<'A9' <=1' D1' <K0' &=' &@ ' D? BD9' <-A' D<' K' D'-' D1' 1 >' <=& 10<'A;' &+'A1A' <@K< 0' D<' D1' 0<'A' -A'B >1- 0' #1' -& ' <a1-' '-' +'A1-B19' #?' ' =& ' -8' =& >< '&-'#1=& 18' Di' C' ' ?<@ ?A.10' <.<'-0' 0?BD' 1 j 0&-0' 0&' '-A'B 1A9' #?' D<' D1' A'-< '10' B&>>1-B1' D1' ' &B10' <.<'-0' 0?BD' 1 0&-0' '-A'B 1A' '-' D1' 0<>1' <-j -1' <0' D&?.D' -&' -A'B >1- ' K1 19' D<+'-.' -&' 1.< A' &' 0?BD' -A' >1- 0' -A' '=' <- ' #1' '-A'= 1A' &=' 1 10 9' & 9' & ' &@@< A 9' <-A' <a1-' # ' D1' D1 '=' & ' & D1 ' ='B1 ')9' D1' 0D<@@ #1' @1 ' &' <'-C '01' K' D'-' D1' 0<'A' L9' < 0' # ' .&&A' ? 1 9'=& ' KD&>' D1' <'A' D1 '=0' & ' & D1 ' ='B1 0' K'@@ <-0K1 ' 6 0&' D<' D1' 0T?A 1 0&-' `& ' 1 8' 0&#0' KD'BD' K1 1P' ' '-A'=@1a 9 #1' 1<A ' ' #1' A1@'+1 1A' &' D1' 0<'A' A'-< '109' & ' &' D1' ' &>>'00< '10' #1=& 1' D1' A' &=' D1' 0<'A' 1-' " < 09' '='D1' >< ' # ' <- ' 1<-09' =& ' 'Ba-100;' -A' 1+1 ' A'-< ' 0D<@@ D<+1' 0?==' B'1- ' &>>'00< '10' & ' &>>'00< ' AK1@@' -.' '-' 1+1 ' &?- ' '-' <' @<B1' -& <#@19' 0&' D<' '=' <- ' 0?BD' 1 0&-' 0&' '-8' A'=@1A' #1' 1-9' D<' D1' 0<'A' &>>'00< '10' & ' &>>'08' 0< ' >< ' #1' K< -1A' '-' D1' -& <#@1' @<B1' KD1 1' D1' AK1@@1 D9' # ' D1' D1 '=' & '0&>1' &='D' ' ==' B1 09' &' B&>1' &' D<' , '-./0' E<&@' '-' D1' 0<>1' &?- 9' D1 1' &' 1B1'+1' D1' 0<>1' 1 0&-' 0&' '-A' B 1A' # ' -A1- ? 10' <0' #1=& 1' -A' D<' '-' D1' ` -H?10 0P' '-' D'0' <01' &' #1' <a1-9 D1' '==" <-A' & D1 ' ==' B1 0' &' KD&>' ' '#1@&-.1 D9' 0D<@@ A&' &' #<' ' >C<-1@1A' .&&A' <-A' 0?==' B'1- ' 1 0&-09' -& ' 0?0C1B 1A' -& ' C &B? 1A6' D<' ' ' &' 0< 6' D<' 1+1 ' &=' D1>' 8KD'BD' 0D<@@ #1' 0&' ' >C<-1@1A' '-' 0?BD' -H 9' D<+1' 8K' D'-' D1' 1<@>' ` &=' -.@<-A' 0P' <-' ?-A 1A' D'@@'-.0' d' @'<-A0' 1-1>1- 09' & ' &=' 1>'# ' 1< 6' ?C&-' <'-' &' @&01' &' D1' , '-./0' 01' ` 1-' &?-A9' 0P' <-A' D1 ' KD'BD' 0D<@@ #1' ' >C<-1@1A' '-' 0?BD' -H?10 0' '-' F <@10' 9 1+1 ' &=' D1>' 0D<@@ D<+1' &' D1' <@?1' &=' L@' 0' # ' 1< ' -A' '=' <- ' 0?BD' 1 0#-' #1' < 10 1A9' #1' ' ' # ' D1' ` A'-< ' /P' & ' # ' D1' , '-./0' ==' B1 0' & ' '-' 0 1 09' <-A' 10B<C1' & ' # 1<a' D1' '0&-' #1=& 1' D<' D1' #1' <BH?' ' #1=& 1' D1' A'-< ' 9' D1' E&&A0' <-A' D< 1@09' KD'BD' D1' D<A' D1' 0<>1 @<' 9' 01'01A' <@0&' '-' &' D1' , '-./U' <-A09')' D1' , '-.' 0D<@@ D<+1' D1' &=' 0' D1 1&=' = &>' D1' 0<'A' " < ' - '@ D1' `#1' '1@A1A'0 P' &' D1' '0&-' = &>' KD'BD' D1' 10B<C1A6' <-A' D<' D1' =& 10<'A' ?0 'B10' D<+1' =?@@ C&K1 ' &' 1-H?' 1' =' <@@ 0?BD' 0B<C10' 'W )' # 1<a'-.' &=' '0&-9' <-A' <@0&' &=' ) ' <-A0' <-A' 1-10' >1-0' E&&A0' <-A' D< 1@0' &='0?BD' 1 0&-0' 0&' '-A'=@1A6' ' @(7 7 `<@0&%/P' D<' '=' <- ' 0?BD' 1 0&-' '-A'B 1A' A&' -&' 1 ? -' &' D1' 0<'A' '0&-9' <-A' A'1 D' -&' B&-+'B 9' ' ' 0D==' @#1' @<K=?@' &' 0' 1' 0' &' 1- 1 ' '-=&' D1' <-A0' <-A' 1-1>1- 0' &=' D ' ' -B10 & 9' K' D&?' <- ' & D1 ' ? 0?' ' ><a'-.' &' D1' , '-.' =& ' D'0' <?01 6' -A' D<' <@@ D1 ' KD'BD' D<+1' '#1 '10' <-A' ! <-BD I 1 ' & <@' '-' -.'0DA9' <0' '-' D1' &?- '&=' D10 1 9' D1' &D? ' <-A' '#1 ' & =' " ? D<>9<-A' & D1 ' @' a19' <-A' <@0&' <@@ D1' & A0' KD'BD' D<+1' ` ? '0A'B '&- 0P' <-A' ! <-BD'010' & <@' '-' F <@10' 9 KD1 1' D1' , '-./0' F ' 0' A&' -& ' ?-9' D<+1' 0)' &K1 ' &' 1L1B? 1

!"! &#E2' &-/& ! /' 1 @ ;!' ; &+!/

.' 1 1&22 "&!2' ' !' "/&- "@

90 +& &# &.-' < ' 0". "2

4"! E&-*' . ' 3"&2.-' ;@' 3!"2.- ' ""!2 ! /

$!' !&"2' ; ' 3!"2.-2' -. ' #.-'&/' 1 @ ! - !'"&- .' !&" -/2

6!#& +’&=’ !’ 0!’ #I ’ * &-2’ ’& 0ƒ =BB

<-A’C?’’-’`A?1P’ L1B? ’&-’ D101’ ’B@10’ ’-’<@@ &’-0’ # ’ D1>’ & ’’# ’ D1’’ =@ B1 0ƒ ’-’`@’a1P’ <--1’<0’ D1’ ?0 ’B10’)7 & D1 ’ D1’ , ’-./0’ ==’B1 0’ #1=& 1’ A1B@< 1A’ 0D&?@A’ A&

0’ F D1 1<0’’’0’ B&- <’-1A’ ’-’ D1’ < ? 1’ ><A1’ D1’ D’ 11- D’ 1< ’ &=’ D1’ &#@1’ , ’-.’ 1- ƒ !< D1 ’ & &? ’ & A’ D1’ , ’-.’ D< ’ -&F’ ’0ƒ<>&-.0 ’& D1 ’ D’-.0ƒ D< ’’=’<- ’ ’& ƒ 001>#@ ƒ & ’ &? ’ &=’ 1&C@1’ <.<’-0’ D1’ <K’ #1’ ><A1’ ’-’ <- ’ < ’ &=’ D1’ 1<@>ƒ D1-’ D1’ ?0 ’B10’ &=’ D1’ 1<B1ƒ D 11’ [’ K&’ &=’ D1>’ < ’ D1’ @1<0 ƒ <-A’ D1’ D1 ’==’ & ’ -A1 ’ D1 ’==’ &=’ D1’ &?- ’ KD1 1’ 0?BD’ ’& ƒ 001’ #@ ƒ & ’ &? ’ 0D<@@ #1’ ><A1’ D1 1<= 1 ƒ 0D&?@A’ B&>1’ K’ D’ D1’ &K1 ’ C=’ D1’ <’A’ &?- ƒ ’=’ 11A’ K1 1ƒ &’< 10 ’ D1>ƒ<-A’ D1>’ 0D&?@A’ < 10 ‚ <-A’ D1’ 0<>1’ ?0 ’C10ƒ D1 ’==ƒ& ’ -A1 ’ D1 ’==ƒ 0D&?@A’ D<+1’ &K1 ’ & 1B& A’ D<’ KD’BD’ D1 ’ =&?-A’ 0& A&-1’ ’-’ D1’ ’ 101-B1’ <.<’-0’ D1’ <K’ <-A’ D<’ # ’ 1B& A’ &=’ D1’ 0<>1’ ?0 ’B10ƒ D1 ’==ƒ & ’ -A1 ’ D1 ’==ƒ 0?BD’ 10C<001 0’ & ’ ==1-A1 0’ 0D&?@A’ #1’ B&-+’ ’ ’-’ <--1 ’ <-A’ !& >’ <0’ ’0’ A&- <’-1A’ ’-’ D1’ <?1’ &=’ !& B’#@1’ ’10‚’ <-A’ ’=’ ’ ’ D< 1-’ = <’ ?BD’ 10j C<001 0’ & ’ ==1-A1 0’ K1 1’ A1C< 1A’#1=& 1’ D1’ B&>’-.’ &=’ D1’)’ ?0 ’B10ƒ D1 ’==9& ’ -A1 ’ D1 ’==ƒ D<’ D1’ 0<>1’ ?0 ’B10ƒ D 11’ & ’ K&’ &=’ D1>ƒ 0D&?@A’ A’@’.1-@ ’ ’-j H?’ 1’ K’ D’-’ <’ &- D’ <= 1 ’ 0?BD’ ’& ƒ 001>#@ ƒ & ’ &? ’ &=’ 1&C@1’ 0&’ ><A1ƒ <-A’ D1’ 0<>1’ D1<’ <-A’ A1=1 8’ >’-1’ <BB& A’-.’ & D1’ <K’ &=’ D1’ <-A‚’ <-A’ ’=’ D1’ ? D’ B&?@A’ -&’#1’=&?-A’’-’ <--1’<0’<=& 1’’0’0<’A@ /)’ K’ D’-’ <’ &- D’ D1-’ -1L’ 1-0?’-.ƒ D1’ 0 A’ ?0 ’B10ƒ D 11’& ’ K&’ &=’ D1>ƒ<-A’ D1’ D1 ’==’& ’ -A1 ’ D1 ’==’ 0)’ 0D&?@A’ B1 ’= ’ #1=& 1’ D1’ , ’-.’ <-A’ D’0’ &?-B’ƒ <@@ D1’ ’’ 11A’ U A’ ’ B?>0 <-B1’ &=’ D1’ 0<>1‚ KD’BD’ 1 ’j =’B< 1’ 0D’@@ #1’ &=’@’a1’ ! & B1’ <0’ D1’ 101- >1-’&=’ K1@+1’ 1-‚ ?C&-’ KD’BD’ 1 ’=’B< 1’ D1’ 0<’A’ 10C<001 0’ <-A’ ==1-A1 0’ 0D<@@ #1’ C? ’ &’ <-0K1 ƒ <-A’ D1 ’ KD’BD’ #1’ =&?-A’ .?’@ ƒ 0D<=’ #1’ C?-’0D1A’ <BB& A’-.’ ’ D1’ ’’ ’0B 1j ’&-’ &=’ D1’ , ’-.’ <-A’ D’0’ &?-B’@‚ -A’ >& 1&+1 ƒ D<’ D1’ ?0 ’B10’ &=’ 1<B1’ AK1@= D.’ -1< 10 ’ ’-’ 1 1 ’ &?- ’ KD1 1’ ?BD’ &? ƒ 001>#@ ƒ `<-A/P’ ’& ’ &=’ 1&C@1’ 0D&?@A’ #1’ ’C<A1’ D1 1<= 1 ƒ &.1 D1 ’ K’ D’ D1’ D1 ’=’ & ’ -A1 ’ D1 ’==’&=’ D1’ 0<>1’ &?- ’10ƒ <-A’ <@0& D1’ ?0j ’B10’ &=’ 0 ’010’ =& ’ D1’ ’>1’ D<’ D1 ’ 0D<@@ #1’ ’-’ D1’ ’ 10<&-0ƒ ’B<01’ D<’ <-’ 0’?BD’ ’& ƒ 001>#@ ƒ ’ &? ’ #1’ ><A1’ ’= ’ D K’ 101-B1ƒ DD ’><a1’ L1B? ’&-’&=’ D’0’ < ? 1ƒ 1+1 ’ -1’ C=’ D1>’ ?C&-’ <’-’&=’ <-’ ’@’ ’ &’ #1’ C>A’ &’ D1’ , ’-.ƒ <0’ &= 1-’ <0’ D1 ’ 0D<@@ #1’ =&?-A’ ’C’ ’’ 1=<?@ ’&=’ L1B? ’&-’&=’ D1’0<>1’ < ? 1;’ -A’ !& <0j >?BD’ <0 -<C ’ ’& 0ƒ &? 0ƒ<-A’ 001>#= 10’D<+1’#11-’ ><A1’ ’-’ A’+1 0’ < 0’ &=’ D1’ 1<@>ƒ 0’-B1’ D1’ ><a’-.’ <-A’ &B@<>< ’&-’&=’ D1’0<>1’ < ? 1ƒ #1B<?01’ D<’ D1’ 0<>1’ < ? 1’ D< D’ -&’ #11-’ C? ’ ’-’ A?1’ L1B? ’&-ƒ <0’ &? ’ &+1 1’. -’ & A’ D1’ , ’-.’D< D’ C1 B1’+1A’ # ’ A’+1 0’ <-A’ . ’1+&?0’ &>C@<’- 0’ &’ D’>’ ><A1’ ’-’ D’0ƒC 101-’ < =’<>1- ‚ D1’ 0<>1’ &? ’ & A’ D1’ , ’-.ƒ K’@@’-.’ D1 1&=’ &’ C &+’A1’ <’ #1 1’ 1>1A ƒ # ’ D1’ A+’B1’ <-A’ 001-’ <=& 10<’A@ <-A’<’ D1’ ?’ ’&=’ D1’ <’A’ &>j >&-0ƒ D< D’& A<’-1A’<-A’0 <#@’0D1A’ D<’ ’=’ ’’1=<?@ ’ #1’ =&?-A’ ’-’ D1’0<’A’ K&’ ?0 ’B10’&=’ D1’ 1<B1ƒ ’ ?0 ’B10’ &=’ 0 ’010ƒ <-A’ D1’ D1 ’==’ & ’ -A1 ’ D1 ’==’ &=’ D1’ &?- ’ KD1 1’ 0?BD’ ’& ƒ 001>#@ ƒ & ’ &? ’ 0D<@@ #1’ ><A1ƒ &?BD’-.’ D1’ L1B? ’&-’ D<’ D1 ’ ?.D’ &’ ><a1’ # ’ +’ ?1’ &=’ D1’0<’A’ < ? 1ƒ <-A’KD1 1&=’ D1’ 0<’A’ < ? 1’ ><a1 D’ 1- ’&-ƒ D<’ D1-’ <’ D1’ -0 <-B1’ &=’ D1’ < ’ . ’1+1Aƒ D1’ , ’- 0’ &>>’0<&-’ =<=’ .&’ &? ’ ?-A1’ D’0’ E 1<’ 1<@@ &’ ’-H?’ 1’ <0’ K1=’ &=’ D1’ ? D’&=’ D1’ <01ƒ <-A’&=’ D1’ &’.’-<@ < 1’ =&’ D1ƒ < ’ &>C@<’-<- ƒ <0’&=’ D1’ ’’1=<?@ ’&’ ’’1=&?@ 0’&=’ D1 I’ >1 1-’ 1-’ 1L1B?B’&-’ 1-’ &? \’ C&’- \’ B10 10’ < j ’B@10’ C’ 1?L’ &?’ C’ @&? ’ ==’B1 0ƒ C’ >< ’B&>1’ =1 &-’ @10’ ?0 ’B10’ I ’ <?RO’ ==’RO’ A?’ & ’ A10?’0’ A1B@< 1\ 1>’ B&>1’B&- 1-?1’0&=’1-’’10 < ? ’=’’’ <-’ 10’<’0>1’V A1ƒ R0-&#@1’ & ’ 1- ’C’1 1’<’ hR1’ ’ @1’ & ’ H& 1’10’ 1- 1’ <? 10ƒ H’ 0’’ <0B?-’ ’& 1’ <001>#@10’ &?’ &? 1’ A10’ .1- \’ 1-B&- 1’ @<’ @1 1’01’ =1 &=’ 1-’ <0B?-1’ C ’1’ A1’ &’<@>1ƒ <A&-H10’ @10’ ?0 ’B10’A?’ C110’ &’0’ &?’ A1?L’ A1’ 1?L’ <-’ >1 -0’ I ’=1’+’0B&- ’&?’ &? \+’0B&- ’A1’ &?- 1’ &?’ A1@1’ ’& 1’ <001>#@1’ &?’ &? 1’ 1’ =1 &’ ƒ 1-<d@0’ +’1-8’ A 1- ’&+1’ @1’ C&<’ ’ A?’ A’ ’ &?- 1’ 0’’ #&0&’.-1’ , &’ ’ C’ 1?L’ < 10 1 ’ I ’ 1?L’ < 10 1- ‚ I ’ 1?001- ’ >10>10’ @10’ ?0 ’B10’ ’0B&?- ’&?’ &? D’ ’0 &?- ’C&<’ ’ A1’ 1B& A1 ’ B1&8 H’@0’ & 1- ’1-0’= ’ 1-’ @&?0’ =1<?B1’1-B&?- 1’ ’ 1’1‚ 1 ’ H’ C’ @1’ 1B& A’ A1’ >10>10’ @10’ ?0 ’B10’ ’0B&-’&?’ &? D’ ’0B&?- ’ , &’1- ’ ’1@L’ R0C<00&? 0’ &?’ ><@=10&? 0’ B&-+’ I \ƒ 1-’ >< 1’ I ’ =&? >1’ B&>1’ 10 ’ B&- 1-?1’ 1-’ 10 < ? ’ A1’ =& A#@10’ 1- 110‚ 1 ’ 0’@ <+’1-A &’ ’ H’ ’1@L’ <00&? 0’ 5Ø >< @=10&? 0’ =?’001- ’ ’1C ’1\’ A1+D’ ’ @1’ +1-?1’ A10’ A’ \’ ?0 ’B10’ I ’ ’0B&-’&?’ &? D+’0B&- ƒ H’ >10 -10’ @10’ ?0 ’B10’ &’0’ &?’ A1?L’ A1’ 1?L’ 1-H?1 .1-’ = @’.1<@@ >1-’ A1’-0’ ?-’ >& 0’ <C0’ ’1@ ’& 1’ <001>#@1’ &?’ &? 1’ Ah’.1- \’ 1-0’ = ? \ƒ I ’ 1-’ &’1 1-’ I ’, >’’ 1-’ 0&@&-B’ @< @1 1’ A1’ @< R 1‚ V1 ’ 0’’ @< 7’ 1’ -1’ C &’ ’ 10 1’ &+1’ 1-’ >< 1’ B&>1’ A1+<-’ 10’ A’ ƒ <A&-H10’ A1’-0’ ?-’ - & 0’ @& 0’ C0BD1’-’ 1-0?<-’ R @=’1 1-’ @10’ A’ \’ ?0 ’B10’ & 0’ &?’ A1?L’ A1’ 1?L’ I ’ @1’ ’0B&?-’ &?’ ? D+’0B&?-’ 0?’0A’ \’ A1+<-’ @1’ & ’ I ’0&-’ B&=@01’@ &?’ @1’ =<’ ’ I ’ @10’ B’ B?>0 <-B10’ Aa1@=ƒ H?1@@ ’=’B< ’0&=’A1’<? ’1@1’=& B1’ B&>1’@< 01- 18’ >1-’ A1’ L’ ’‚ ? ’H?1@@ ’=’B< ’0&’1-’ @10’ A’ \’ R0C<0 ? ’ I ’ ><@=10&? 0’ > 0’ <’ 10C&-0’ I ’ B1?L’ H’ 0&-’ &+1\’ &?C<#@10’ 0&’1-’ C?-’\’ 0&@&-B’ @<’ A’0B 1B’&-’ A?’ 8’ I ’ A1’ 0&-’ A’ ’ BB>0<@ ‚ ’ &? 1’ B1&’ H’ @10’ ?0 ’B10’ A1’ @< C110’ A1> <-’ \’ @1’ C@?’0’ C0BD1’-’ 1-’ BD10B?-’ &?- 1=’’ ?’ ’1@’ &? 1’ <001>#@1’ &?’ ’& 1’ A1’ .1- \’ 01’ =1 &’ ’ 1-<C0ƒ 1- 1>#@1>1-’ +1 Hƒ @1’ ’ ’0B&-’ &?’ ? D+’0B&?-’ A1’ >10>10’@10’ &?- 110ƒ I ’ <?L’’ @10’ ?0 ’B10’ A<00’010’ C ’ @1’ 1&H 0’ H’@0’ , &-’ @&? ’ 0100’&-0’ 1-’ B<0’ H’ <0B? ’’ ’1@ -& 1’<001>#@1’ &?’ &? 1’01’ =1 &’ ’ ’@&? ’ C01-B1ƒ =1 8’ C’1-’ 1L1B?B’&-’ A1’ B10 ’ 10 < ? ƒ BD10B?-’ 0? ’ C1’-’1’ A1’ C=’ ’ <CC<’1 1\’ <?’ & ’ <’ <- \’ A1’ =&@ \’ H’@0’ , &’1-’ = +1\’ 1-’A1=<? 1’A1@ 1L1B?B’&-’A1’ >10>1’ 10 < ? ‚ ’ C’’ ’ <- ’H’ C@1?01? 0’ ’& 1’ &? 10’ I ’ <001>#@110’ &-’ 10 1’ = ? \’1-’ A’ 010’ C ’10’ A?’ &’<@>1’ C?’0’@@<’ B&-=1BB’&-’ I ’ CB@<>< B’&-’ A?’ A’ ’ 10 < ? ƒ <’ B<?01’ H’ >10>1’ 10 < ? ’ -<A’ > 1’ 10 1’ > 0’ 1-’ A?1’ 1L1B?B’&-ƒ B&>1’ -=1’ R00&,<’-’ @1’ & ’@<A’ B&-A1?’ C’ A’ 010’ I ’ D’A&?010’ B&>C@1’- \’ ’@? ’= ’’ \’ 1-’ B10 1’ 01- ’ C@1>1- ‚ 10>1’-=1’ ’ @1’ & ’+&’@@<- ’ 0? ƒ B1&’ =<’ 1’ C@?’0’ .’1’-A 1’ 1>1A’1@ A1@ <A+ 0’ I ’<001- ’<+<- A’ \’ I ’ <@ C ’1 1’ A10’ A’ \’ &10’<A’ & AA.-1’ I ’10 <#@’1@ H’ 0’’A1=<? 1’ 0A’ ’ &+11’1-’@10’A’ \’ ƒA1?L’ ?0 ’B10’ A1’ @<’ 110’ &?’ ?0 ’B10’ A<00’010’ I ’@1’ =18’ B&?-’ &?’ &? \+ I &>-’A1@ &?- 11’&?’ ’A1’ ’& 1’ <0j 01>#@1’&?’ & ’ 1’01’=1 <@ &?BD<-’@1L1B?A&-’H’@0’A&’1-’ =’’ 1’C’ ?1’A1@ A’ ’ 10 < ? ’ I ’ A&-’ >10>1’ 10 < ? ’ => ’ >1-A&-ƒ H<A&-H10’ <@ ’-0 <-B1’A1’ @<’C ’1’ . 1+11ƒ ’001 <’ &>’00’&-’ @1’ & ’A10&?\’ 0&-’ .= ’- ’ 01<@@ A1-H?1 1 ’ A#@1-’A1’@<’+ 11’A1@ 1<0’ I ’ A1@<’ ><’1 ’ & ’.’-<@BC ’ $’ C ’1B&>C@A.-<- 1ƒ B&>1’A1’ @<’ A1= > 1’ &?’ A1=&? 10’A10

-’ +! - ’ . ’ 02 &&<!2’ C#’&-’ ! !)’ #0 &-*’’!#& !/’ 0 !’ .11&22&.-2 2 +’;!’ 7 ’’/!/’ .’ &&8<!’!’. ’ &!’ 6&. ’ -/’.’ 20# ’ ! 0+

) % V D1- ‘!’ # ‘ “ G1’ (

A' \' ?0 'B1 '0B&?- ' &?' &? \+'0B&?- ' B1@@1' CA1' 0?C C&01\ <' <A 1001 ' < 0' 0?' B1<- \' C0&-10 '-A'==1 1- \' < @< -&'<B'&-' I ' <A+'0 A?' D<?-B1@@1 ' " 1- .@1 1 I ' H' @10 A' \' &>'00'& 0 >1'- 1-<- '1-+&'1- ' 1-' @< D<?-B1@@1 '1' @10 1-H?10 10 I ' >< '1 0 A1+<- ' 1?L' B1@@1' C '1' C '01\' I ' &+1\ ' &? 1' B1&' H' @10 & & 0 A1' >10>1' @1' &?- 11' C ' @1' 1>C 10 1<- \ &?' '1 -& 1' <001>#@1' &?' &? 1' 01' =1 < =1 &- ' @10 C<-1@@10 0? ' @< A11' B&>'00'&-' 1 &? -<#@10 C ' @1' 1>C H' @1' '0B&?- ' '00'- ' 1-' A1=<? 1' 0?CC&011' 10 &'01' 1-' 0&-' &=='B1 @10 H?1@@10 & & 0 18' &?' &- ' -?@@10 C0&-10 >10 '1@L' H' &- ' R 10 1- \' &? 1- ' < @1' +<@?1' A1' L' , ' C' <-' < >1 -0 ' <?L" H' >10>10 @10 & &50 1 &? &- ' 0? ' BD10B?-' A10 A110 C0&-10 < 1>C<-1@@1 \' < @1' C ' ' &? ' H<- ' '00?1\' 0&- ' <CA 1\' LL' 0 ' <?' >1 -0 I ' < 01A1' &? ' L@ 0 ' < >1 -0 I ' < '1 B1' &? ' '0 ' < >1 -0 I ' < BD10B?-' &? ' <C20 @1' A&?#@1' <?' >1 -0 @10 H?1?L' '00?10 '00'- ' 1 & -1\' C' B<?01' A1' -&-' <CC><-B1' A1' '1@L' 1>C<-1@@1\' &- ' <A8 ?. .1\' B&>1' =& =<' \' <?' & ' I ' < 0&-' &1C0 @1+<#@10 ' 0" A1=<? 1' 0&' ' &+11' 1-' @10 A' \' & & 0 &?BD<- ' @1' 1 & -1' A1' '1@L' .1- \' <' 1>C<-1@@1 \ &?' &?BD<- ' @1' 1 &? -1' A<'' '1@L' '00?10 B&>1' <+<- ' 10 ' A' H' BD10B?-' A1' 1?L' CA < <@ &1C0 @1' & ' L@ ' ' 0'@ <+1' . -1' H' @1' A' ' '0B&?- ' 1-0" 1 1' 1-' A1=1? 1' 0&' ' A10BD< .1' A1' 0&-' &=='B1' < 1>C0 H' '1@ &>'00'&-' '001 < D& 0 A1' @< D<?-B1@@1 '1 H<A&-H10 @1' -&+1@@ '0B&?- ' A1' >10>1' @1' &?- 1 0&-' 0?BB100&?' '>>1A'<' &?' >1A'<' C' @1' 1>C0 10 1<-= I ' -'1- ' @10 & & 0 A1' >10>1' @1' &?- 11 =1 <' @1' C<-1@ 0? ' B1@@1' B&>'00'&- 1 &?>< #@1' 1-' @10 >< ' I ' =&? >1' B&>1' @10 A' \' & & 0 =1 &- ' 1-' 1>C0 H<- ' @1' '0B&?- ' '00'- ' 1 1' 1-' A1=<? 1' 10 1' ' 1-' 0&-' &=='B1 ' H' >10>1' @1' -&+1@@ '0B&?- ' 1-B&? .<' <? '1@1' C1'-1' A1' L@ ' '' 1- 0 @1' &' 0" <0B?-1' A1=<? 1' 1-' @? ' 0&' ' &+11' &?BD<- ' @1' 1 &?>' A<? 10 C0&-10 C' @? ' <' 1>C<-1@@1 \' H' -&- ' 10 1- \' &?' 1- ' <' @1' +<@?1' A1']' '' ' C' <- &?' A1' 1 &? -1' A<? '1@L' '00?10 B&>1' @10 A' \' & & 0 0&- ' 0?'0BD< .'1\' A1' 1 &? >' ' 0'B&>1' @10 A' \' & & 0 0&- ' <' CA 1' 1-C0 @1' & ' B10 1' C '1 ' ' H' @1' D<?-B1@@1 ' " 1- .@1 1' C' @1' 1>C0 10 1<- 0" &0 ' B&>1' @ C? <' <+&' ' B&-?0<-B1' A<? '1@ &? 1' <0j 01>#@1' &?' '& 1 @ =<B1' 1-+&'1 ' # '1= @1' & ' <0 ?0 'B10 A1' @<' C110 I ' < '0B&- ' &?' &? \+'0B&- ' A1@ &?- 11' &?' '@0 0&- ' '00'- ' =<' \ H' @0 >1 1- ' @10 < ? ' 1- ' '=''' ' 1-' 1L1B?B'&-' 0? ' @<' C1'-1' B&- 1-?1' 1-' B1@@1 @ ' B&>1- ' H' '1@ # '1= -1' +1' . -1' > 1' <0 A' \' ?0 'B10 I ' '0B&- ' &?' &? \+'0B&- 1?L' -1' M &- ' C<0 1LB?01\' A1' @<' C1'-1' <+<- A' 1' 0'@0 -1' =<B1- ' > 1' 1L1B?B'&-' A1@ 10 < ? ' 0?'0A' ' +1?' H' @10 ?0 'B10 <? 0 ==' B1 0 0?'0@' A' \' =1 &- ' @1? ' &==' B10 0?'0A' \' <0 B&0 <. 10 A?' & 1-' <@<- ' A1 < <- ' I ' 1 &? -<- ' 1-' =10<- \' @&? ' A 10 &==' B10 C ' C<'1>1- ' 1- ' <==<' 1' C' @1' '0B&- ' A1' >10>1' @1' &?- 11' C ' @1' 1>C0 10 1<- 1 C' 1-A1- ? 10 1- 1' @1' A' ' '0B&- ' I ' @10 A' \' ?0 'B10 I ' <? 10 ==' B1 0 0?'0A' \' <==' ' 10 A1' @1' C<'1>1- ' 0?'0A' 1 A&- ' @1' A' ' '0B&- ' 0? ' 0&-' <BB&>C 1' 1-' @10BD1H1 ' C? <' <+&' ' A?1' <@@&?<-B1;' ' H' '1@L' '& &? 0 < 1'- \' A1' ./?- \' I ' D< -&010 '& 10 1'1- ' 1>C '0&-1>1- ' A?-' <-' 1-A1 ' <' >1 -0 0<-\' 10 1' @100 1' D& 0 A?' C '0&-0 C' #<'@'1' ><'-C 0 &?' 1-' <?R' >< 1' A? <-' ' <-' 0?'0A' ' ;

0<'A' ?0 'B10 D1 '== & ' -A1 8 D1 '== '-' D'0 1D<@=' 0?CC&01A &' #1' A' 1 1A' &' 0?==' B'1- ' <-A' ' -A'==1 1- ' 1 j 0&-0 <' D1' &>'-<' &-' <-A' # ' D1' " ' 1A@'&-' &=' D1' D<-B1@@& ' `&=' D1' 1<@>P' &=' -.@<-A <-A' D<' D1' 0<'A' &>>'00'&-1 0 C 101- @ ' 0D<@@ 1 ? -' ' -  &' D1' D<-j B1 ' D1' -H?10 0 <-A' < 1 0 #1=& 1' D1>' ' -' D'0 1D<@=' <a1-' <-A' =&?-A;'  -A' >& 1&+1  D<' D1' &j &-1 0 &=' D1' 0<>1' &?-  ' =& ' D1' ' >1' #1' -.  ' `' -' KD'BD' &?- P' 0?BD' '& 001>#@ &' &?' 0D<@@ #1' ><A1 0D<@@ ><a1' D1' <-1 ?C&-' D1' 0<'A' &>>'00'&-' 1 ? -j <#@1 =& ' D1' ' >1' D<' D1' D1 '==0&' 0?CC&01A' ' " 1=<?@ ' 0D<@@ B&- ' -?1' ' -' D'0 ==' B1 KD'BD' & &-1 0 0D<@@ 1 ? -' -&' 1 0&-0 #?' &-@ ' 0?BD' KD'BD' D<+1' <-A0 1-1>1- 0 &' 1- 0 &' D1' <@?1' &=' L' ' # ' D1' 1< ' <' @1<0 -A' <@0&' D<' D1' 0<>1' & &-1 0 0D<@@ 1 ? -' ?C&-' 1+1 ' &=' D1' 0<'A' 1 0&-0 1>C<-1@@1A' <' D1' =' 0 ' " < ' KD1-' 00?10 #1' &' #1' @&0 LL' 0 ' <' D1' @1<0 <-A' < ' D1' 1B&-A' " < ' L@ 0 ' < ' D1' @1<0 <-A' < ' D1' D' A' " < ' '0 ' < ' D1' @1<0 <-A' < 1+1 ' " < ' <= 1 ' D1' " &?#@1' < ' D1' @1<0 KD'BD' 00?10 0&' 1 ? -1A' # ' <?01' &=' &-8<CC1< <-B1' &=' 0?BD' 1 0&-0 1>C<-1@@1A 0D<@@ #1' <A ?A.1A' <0 =& =1' ' &' D1' , '- . <-A' @1+'<#@1' &' D'0 01 <-A' '=' " 1=<?@ ' #1' =&?-A' '-' D1' 0<'A' & &-1 0 &?BD' -.' D1' 1 ? -' &=' 0?BD' 1 0&-0 &' 9#1' 1>C<-1@@1A &' &?BD' -.' D1' 1 ? -' &=' 0?BD' 00?10 <0 <=& 1' '0' 0<'A D<' 1+1 ' &=' D1>'0D<@@ =& =1' ' &' D1' , '- ./0 01' ! & ' &?-A0;' -A' '=' ' D<CC1-' D<' D1' 0<'A' D1 '==' 0& 1j C? 1A' '-' " 1=1?@ 1 #1' A'0BD< .1A' &=' D'0 ==' B1' < ' D1' '>1' D<' 0?BD' &>>'00'&-' 0D<@@ #1' <K< A1A' &? ' &=' D1' D<-B1 D' D<' D1-' D1' -1K' D1 '==' &=' D1' 0<>1' &?- D' D'0 ?BB100&' >1A'< 1' & ' '>>1A'< 1' =& ' D1' '>1' #1' -. <-A' -& ' D1' & &-1 0 &=' D1' 0<>1' &?- D 0D<@@ ><a1' D1' <-1@?C&-' D'0 &>>'00'&-' 1 ? -<#@1' '-' <--1 '<-A' ' !& > ' D1' 0<'A' & &-1 0 0D&?@A' A&' '-' '>1' KD1-' D1' D1 '==0&' 1C? 1A' '-' " 1=<?@ ' B&- ' -?1A' '-' D'0 ==' B1 <-A' D<' D1' 0<>1' -1K' D1 '==' 0D<@@ ' -B? ' @' a1' <' -' &=' !& ' &?-A0 &' D1' , '- . '=' <- ' " 1= '?@ ' '-' D' >' #1' =&?-A' &?BD' -.' D1' 1 ? -' &=' & D1 ' 1 0&-0 # ' D' >' 1>C<-1@@1A KD'BD' D<+1' -& ' <-A0 1-1>1- 0 &' 1- 0 &' D1' <@?1' &=' 1-' &?-A0 # ' 1< 0 & ' `& =/P' 1 ? -' -.' 0?BD' 00?10 `KD'BD'/P' D1' 0<'A' & &-1 0 #1' <#&+1' BD< .1A' &' 1 ? -0 <0 D1' 0<'A' & &-1 0 < 1' &' &@01' &' D1' , '- .' '-' D'0 1D<@=' -A' D<' D1' D<-B1@@& ' &=' -.@<-A' =& ' D1' '>1' #1' -. <0 0&&-' <0 D1' >< ' D<+1' , -&K@1A.1' &=' 0?BD' '& 001>#@ &' &? 0D<@@ B<?01' &' #1' 01- ' D1' , '- ./0 F ' ' &' D1' ?0 'B10 &=' D1' 1<B1 <-A' &' D1' D1 '==' & ' -A1 8 D1 '==' &=' D1' &?- ' KD1 1' D1 ' #1' 0&' `><A1@/P' D<' D1 ' 0D<@@ C?' D1' < ? 1' / '-' L1B? '&-' ?C&-' D1' <'-' B&- <'-1A' '-' D1' 0<>1 <-A' D&?.D' D<' 0?BD' F ' ' B&>1' -& ' &' D1' 0 ?A' ?0 'B10 D1 '== & ' -A1 8 D1 '== D1 '0D<@@ -& ' #1' 1LB?01A' &=' D1' <'-' <=& 10<'A '=' D1 ' ><a1' -& ' L1B? '&-' &=' D1' 0<'A' < ? 1 ' &+'A1A <@K< 0 ' D<' D1' 0 ?A' ?0 'B10 <-A' & D1 ' ==' B1 0 <=& 10<'A 0D<@@ 1L1B? 1' D1' ' ==' B10 <=& 1j 0<'A < ' D1' , '- ./0 &0 0 '-' .&' - .' `<-A' B&- '-?' -.' P' '-' A&' - .' D1' '0<'A' ==' B10 # ' < >1- ' D1 1&=' &' #1' ><A1' # ' D1' D1 '==' &=' D1' 0<>1' &?- '=& ' D1' '>1' #1' -. # ' -A1- ? 10 #1 K' L ' D1' D1 '==' <-A' D1' 0<'A' ?0 'B10' <-A' & D1 ' ==' B1 0 <=& 10<'A' &' #1' ><A1' &=' D1' < >1- ' <=& 10<'A KD1 1&=' D1' 0<'A' D1 '==' ?C&-' D'0 BB&?- ' '-' D1' LBD1H?1 ' >< ' D<+1' A?1' @@&K<-B1 -A' D<' 0?BD' '& 1 0 < ??- 1A' &=' . 1<' <-A' D1'-&?0 '& 0 0D<@@ D<+1' &-1' KD&@1' 1< /0 >C '0&->1-' <' D1' @1<0 K' D&?' #1' -.' @1' &?' &=' '0&-' # ' <'@ <'-C '01 & ' '-' <-' & D1 ' <--1 ' A? '-.' D1' 1<' <=& 10<'A;

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AB=1 D<?-B1@@1 '0 H<A&-H10 =<B1 @1 A' D<?-B1@@1 ' =1'=1 # '1= A1 CB@'><B'C-' A' 1= ' <?' T ' '0B#?- 18 &? -<#@1 1-' <-B A?' & ' < M 1'-' &? H'@ =1B1 CB'<' 'H<B'&-' 1A A1?L E&?- 110 H @1i C0&-1< 1-' @1 A' ' # '1= -&>1\' 1'.-1 ' < A' ' & ' 1-' @1 '''0A' ' #<-B C ' ' 1 ' 0C&-A 1 ' <' @< >< '1 A B& -C '0 1-' @< AB=1 #'@@1 0? ' C1'-1 A10 1 B&-+' m A1 @<' '@'< '1 ' H&>C '0 A1'-0 @< A11 #'@@1 G I ' 1-' BD10B?-' '1@ # '1= A1 CA< -<B'&-' 0&' ' B&- 1-?' @< 0?#0 <-B1 A1 @< >< '1 ' &>C '0 A1'-\' @<' AQ1 #'@@1G I '0'@0 -1 +1'.-1-' < &? ' A1 '1@1 CB@<><B'&-' 1 &? -11 0&'1-' <A&-H1 ' 1-?\' I ' <A ?..1\' C ' B&-+'A\' I ' < 1'- \' B&>1 A11?'0 10 ' A D G ' 0'@0 +1'.-1-' < @< CB@<><B'C-' 0&' ' A1 1?L 1-H?'0 I '=<' ' 1 ' ><-1 B&>1 A10?'0 10 ' A' ' ? +1?' H @10 0?..10 '&-0 A1 '1@L '& 10 0&'1-' 108 >&'.-1\' < @1 D<?-B1@@1 ' '' 1-.@1 1@ C 10 1-01<@1\' A10&? \' @10 1<@0 A1 A1?L ?0 'B10 A?' C110 < >1'-0 I ' @1 '0B&?-' A1@ &?-B11' &?' '1@LG '& 10 , &-@ A1+<-' B1&' ' 'A'# '1=' A1 <C'<0 0&' ' .#> 1' 1-' H?1@ # '1=' A1 <C'<0 0&' '< ' '## @< >< '1 1 1L 001' H?1@ 1 ' B&>C '0 A1'-0 >10>1' @< '@@1' B&>1' 1# @1 # '1=' A1 CB@<==@<B'&-' 1-' <='<' 1 ' 0" '1@ <0 < 1'.-1' 1-' @1 &?- 11 <@< -' A1 <-B<0 1@ & ' <'@@&? 0 1-'= <-BD'01' @< &?' '@ <A D<?-B1@@1 ' I ' 01<@@ H<A&-H10 @1' A' ' D<?-B1@@1 ')1-.@1R 1' =<B1' 10B ',' &?' 1-+&@1 ' C' # '1=' A?' & '<' @1' D<?-B1@@1 ' A1' '1@ &?# 11' '= <-BD'01@ & 1' @< ?.j .10 '&-' 1-' @< A11' #'@@1' &>C '0@ B&><-A<-' < @? ' A1' =<' 1' '1@ 1L1B?A&-' B >1' 1-' @1' A' ' < 'B@1' 10 ' B&>C '0 ' '00'-' &? \' =&' \' H' # '1=' A?' & ' D& 0 A1' @< D<?-8 B1@@< '1' " 1-.@= 1' -1' B&? .1' 1 " '1@ &?- 11' & ' ! <-BD'01@ <?.>1-' H' -<A' 10 1' ?011' 1-' 1>C0 C<001 ' H' B10 1' & A'-<-B1' 10 &'01' 1-' 0< =& 1' <-H@ <@ = -' A?' C0BD1'-' C@1>1-

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D<' D1-' D1' 0<'A' D<-B1@@& ' 0D<@@ B<?01' &' #1' ><A1' < F ' ' &='C &B@<><'&-' A' 1^1A' &' D1' 0 'A' D1 '==@ 18 ? ='<#@1' '-' D1' , '-./0 1-BD' <' < B1 <'-' " < @ D<' D1' 0D<@@ ><a1' &B@<><'&-' '-' K&' ` &?- '10 'P' D<' D1' 1 0&-0 -<>1A' '-' D1' <'A' F ' ' 0D<@@ B&>1' <' D1' 0<'A' " < ' '-' D1' 1-BD' <=& 10<'A@ D1 1' &'<-0K1 ' &' D1' < 1 ' B&>C '01A' K' D'-' D1' 0<'A' '@@@ ?C&-' <'-' &' #1' B&-+'^' &=' D1' < 1 ' B&>C '01A' '-' D1' 0<'A' '@@G <-A' D<' ' 1+1 '0?BD' F ' ' &=' &B@<><'&-' 0D<@@ #1' B&- <'-1A' D1' ?#0 <-B1' = D1' < 1 ' B&>C '01A'$ K' D'-' D1' 0<'A' '@@ ! -A' '=' D1 ' B&>1' -& ' < ' D1' " < ' &='0?BD' &B@<><'&-' 1 ? -1A@ D1-' 0D<@@ D1 ' #1' D&@A1-'<-A' <A ?A.1A' =& ' B&-+'= ' < A' < <'- 1A' <0 <=& 10<'A@ <-A' '= D1 ' B&>1' < ' D1' &B@<><'&-@' ' 0D<@@ #1' &=' D1>' '-H?' 1A' <-A' A&-1' '-' <--1 ' <0 <#&+1' '0 0<'A' &+'A1A' <@K< 0 ' D<' D1' ?..10 '&-0' &=' 0?1# '& 0 #1' 10 '='1A' &' D1' D<-B1@@& ' &=' -.@<-A' # ' 1 1 0 01<@1A' ?-A1 ' D1' 1<@0 &=' K&' ?0 'B10 &=' D1' 1<B1' < ' D1' @1<0 @ <-A' D1' D1 '=='&=' D1' &?- ' KD1 1' 0?BD ' '& 0 0 <@@ #1' ><A1@ #1=& 1' D<' D1' F ' ' &=' <C'<0 #1' . <- 1A' G '-' KD'BD' F ' ' &=' <C'<0 D1' < 1 ' KD'BD' '0 B&>C '01A' K' D'-' D1' 0<>1' '@@ 0D<@@ #1' <0 K1@@ 1LC 1001A@ <0 '-' D1' F ' ' &=' &B@<j ><'&-' D1 1&=' &' #1' ><A1 ' -A' '=' 0?BD' <01' D<CC1-' '-' D1' &?- ' <@< '-1' &=' C<-&<0 1 " & ' `1@01(' '-' <- ' ! <-BD'01' KD1 1' D1 1' '0' < D<-B1@@& ' <-A' <' 1<@@ D<' D1-' D1' D<-B1@@& ' &=' -.@<-A' 0D<@@ B<?01' &' #1' K ' 1-' & '01-'# ' D1' , '-./0 F ' ' &' D1' D<-B1@@& ' &=' 0?BD' &?- '& ' ! <-BD'01@ <@@ D1' ?..10 '&-' '-' D1' 0<'A' ' ' B&>C '01A@ B&>><-A'-.' D'>' &' ><a1' 0?BD' L1B? '&-' <0 '-' D1' 0<'A' 'B@1' '0 B&>C '01A@ 0& <@K< 0 D<' D1' , '-./0 F ' ' 0D<@@ -& ' ?-' &? ' &=' D1' D<-B1 ' C=' -.@<-A' '-' 0?BD' < &?- ' & ' ! <-BD'01@ & D1 K'01' D<-' D< D' #11-' ?01A' '-' D-1' C<0 ' -A' D<' D'0 A'-<-B1' 0D<@@ 0 <-A' '-' D'0 =<@@ ! & B1' ?- '@ D1' -A' &=' D1' -1L ' < @'<>1-

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'' >1-@ H' @1 ' ?0 'B10' A1' @<' C110' A10& 1' 1 <+#' ' <='<' 10' A1'-\' @10' & - 110' " 1-.@1R 1@ 0&'1-' =<' \' A1' @10' C@?'0' 0?==' B \' C0&-10' A1> <- \' 1-' >10>10' @10' &?- 110@ C' <A+'0' A?' D<-B1@@1 ' I ' &-01 @@ @1' # @ 0<-\' -A 1' <?R0' C0&-10' A1> <- \' 1-' =& 1'-0' &?- 110' <' '1@ &=='B1' &BB?C'1 @ =& 0C '0' @10' _ 0' I ' @10' ?0 'B10' A<08' 0' 10' & 1' -&>1\' I ' <-&>1 \' C' @1' & ' I b@0&-' &-0A@G I ' =& 0C='0' <?L" @10' D'1= ' 1-10BDAL' A?' & ' A10' R 10' I ' _ 10' A1@ " ?BD11' A1' <-B<0 1' 1-' @1' & D' I ' @1' &? D' C ' @1' 1>C0' 10 1<- \

' ' &' -#.&

' & A' D1' , '-.@ <' D'0' @'<>1-' D&@A1-' <' F 10 '=<-0 1@ D1' &-A< ' -1L ' <=1 ' D1' <0' &=' ' < '-@ D1' 1B&-A' 1< ' &=' D'0' 1' .-@# ' D1' A+'B1' <-A' 00<' ' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@@ <-A' <' D1' 0C1B'<@ '-0 <-B1' <-A' 1H?10 ' &=' D1' &>>&-0' &=' D'0' 1<@>' D1-' D1 1' < >#@1A ' <D & A<'-1A@ ><A1@ >'A' 10 <#@'0D1A' A'+1 0' A'-<-B10' <-A' <?10' '-' D1' <--1 ' <-A' !& >' <0' =&@@&)+1 D = ' D<' D1' ?0 'B10' &=' D1' 1<B1' = &>' D1-B1@ =& D' #' D1' ><A1' K' D'-' D1' &?- '10' &=' -.@<-A@ 0D<@@ #1' ><A1' = @'1' >&0 ' 0?==' B'1-' 1 0&-0' AK1@@' -.' >' D1' 0<>1' &?- '10@ # ' D1' A+'B1' &='A'1' D<-B1@@& ' <-A' &=' D1' ,<-.00 &?-B'@@ K' D&?' <a'<.'& D1 ' 1 0&-0' AK1@@' @'-.' '-' !& 1'. ' &?- '10' &' 1L1B? 1' ?B " ==' B1@ 1LB1C ' D1' & A0' <-A' D1' ?0 'B10 = 00'010' -&K' -<>1A' <-A' &' #1' -<>1A' # ' D1' , '-. <-A' #'0 &?-B'@ ' <-A' 1LB1C ' <@@ D1' , '-./0' B@- = 1K< A0' &=' D1' <-A0' <CA' 1'.0 -'& '10' &=' D1' " ? BD ' &=' <-B<0 1@ >' D1' & D' < 0@ <-A' '-' D1' &? D@ =& ' D1' ' >1' #1'-.

02 &#!2' . ' !' 37!!' 2 +' V' <CC&'- 1A ;

%#! &.-2'

$' 0 !']' /7 ' ' '&'# ' "!#& ! /

ÿ FD1 1<Ø ' ' 'Ø B&- <'-1A' '-' D1' < ? 1' @<A1' D1'LLL+ ' 1< '&=' , '- .' AK< A' D1' D' A'<= 1 ' 1' &-j H?10 ÿ D< ' -&' < '0D' '10 ' -& ' 1< @ ' '10 '0D&?@A'=<a1' #? ' ' < aØÿ & ' + ' < ' D1' >&0 ' =& ' D1' ' F <. 10' # ' 1< Ć ` -A'KD1 1 P' D1 < '0D' '10 ØKD'BD' -&K'#1ÿK'@@ -& '01 +1'#? ' =& ' L '@' ' L' ' < aØ' & ' L ' < aØ'# ' 1< ' < ' D1'@1<0 ÿ <.<'-0 ' D1' ! & >' &=' D1'0<'A' < ? 1ÿ)ÿ &' D1' . 1< ' "<>< .1' &=' D1' , '- ./Ø'@'1 .1' 1&C@1ÿ<Ø D1' D< D' C1 B1'+1A' # ' D1' &>C@<'- ' &=' D1' &>>&-Ø' &=' D'Ø <-A,' D1' , '- .' K'@@' -.'=& ' D1'0<>1' &'C &+'A1' 1>1A ' '-' <01' &=' D1' 0<'A' &>>&-0ÿ D< D' & A<'-1A' <- ' < <8 #@'0D1A ' D< ' -&' 1< @ ' D<C@<'-' K' D'-' D1' 1<@>' 0D<@@ <a1' = &>' D1-B1=& D' >& 1' =& ' D'Ø KD&@1' F <. 10' # ' 1< ÿ D< ' 'Ø' &' 0< ÿ =& ' D'Ø &< A@ CC< 1@ÿ <-A' & D1 ' 1B100< '10ÿ#? ' +' ' < aØĆ -& ' D1' < '0D' '10 0ÿ KD'BD' #1' & ' 0D<@@ #1' 1 <'-1A' &' 01 +1' ? 10ÿ 0D<@@ <a1' = &A@ D1-B1=& D' =& ' D1' ' KD&@1' F <. 10' # ' 1< ÿ D< ' 'Ø' # 0< ÿ =& ' D1' D' - .Ø <=& 10<'A' #? ' +'' < aØĆ ?-@1 ' ' ' #1' # ' 'B1-B1' &=' D1' A'-< ÿ 0&' D< ' D1' KD&@1' ? >' /)' C<0Ø -& ' '-1' < aØ

ÿ D1' , '- .' B&-0'A1 '- .' D1' . 1< ' . 6 ' .' %4' "'0D1 '0&-Ø KD'BD' A<'@ ' D<CC1-' D &?. D' <@@' D1' 1<@>' `&=' - .@<-A9P' <Ø K1@@' '-' B<01' &=' "1< D' &=' `<' < (' <Ø '-'B<01' &=' ! 11D&@Aÿ <-A' '-' & D1 ' <010ØD ' D1>' KD'BD' C<00' '-' -H?10 Ø ' '-' D1' 0<'A' <010ÿ KD'BD' #1' B&>>&-' ? & 0ÿ <-A' & D1 ' D<' D<+1' #? ' @' @1' &' @'+1' ?C&-' #? ' # ' 0?BD' -H?10 ÿ <-A' KD'BD' D<+1' -& D' -.' &'@&01'#1B<?01' &=' D1' ' =<@01' < DOÿ KD1 1# ' D1 ' &==1-A' D1' ' 0B'1-B1Ø D1' >& 1' `@< .1@ /P Ć' <-A' K'@@' -.' D1=1&=' D<+1' & 1 '&-' <-A' >1-A>1-ÿ D< D' & A<'-1A' <-A' 10 <#@'0D1Aÿ # ' 001- ' &=' D1' & AØ' <-A' &>>&-Ø' <=& 10<'A' D<' -&' 1 0&-' 0D<@@ #1' <A>' 1A' &' C<0Ø' '-' <-' -H?10 ' ?C&-' '<@' &=' D1' " 1< D' &=' ``<' <-9OP' -C ' '-' <- ' -H?10 '#1 K'L ' < '<-A' < ' '-' @1< 1<@@ -& ' '-' @1<' 1 0&-<@@ KD1 1&=' D1' " 1# ' & ' D1' ` " <>< .1 P' A1B@< 1A' <>&?- ' &' ! & ' < aØÿ '=' D1'0<>1' 1 0&-' D?+1' -& ' <-AØ' & ' 1-1>1- Ø' &=' D1' 1<'@ ' <@?1' &=' ! & ' D'@@' -.' <D& 1' D1' D< .10ÿ <Ø' <=& 1' 'Ø' 0<'A

==' ÿ ! & ' D<' D1' E&@A0>' DØ' &'=' -.@<-A@' &=' D1' ' 0)' &+' -' <-A' ` A' -<-B10ÿOP' K'@ ' -& '01@@ D1' F < 10' &=' D1' ' 0 1 ' .'@ ÿ #? ' < ' D1' " &?#@1' 'B1'&=' D1' F 1' . D ' &=' D1' '@+1 ' &=' D1'0<>1ÿ KD'BD'011>1 D' &' D1' , '- .'+1 ' &? <.1&?Ø <-A' &&' 1LB100'+1' < 'B1'Ć D1' , '- .' =& ' D1' <01' &=' D'Ø 1&C@1ÿ K'@@' -.' &' 1>1A ' D1' 0<>1ÿ D< D' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' <@@ D1' E&@A0>' DØ' &=' -.@<-A' 0@ a@@ .'@A' -&' '@+1 ' K& 01' D<-' &=' D1' @@< ' &=' D1' -.@'0D' 1 @'-.9 <-A' D< ' D1 ' <a1' =& ' <' &?-A' &=' & ' .'@ ' #? ' ! & '0'L' D'@@' -.Ø ' .D 8C1-B1' < ' D1' >&0)' <-A' &=' . 1< 1 ' F 1'. D ÿ <-A' @100ÿ <BB& A'-.' &' D1' ^?<- ' ' <-A' < 1' &=' D1' 0<>1' ?>' Ć <-A' D< ' FD'BD' 0D<@@ #1' # ' D1>' .'@ ' = &>' D1-B1=& D' 0D<@@ #1' &=' 1<0&- ' <#@1' ` 'B1ÿ/P' <-A' -& ' 1LB100'+1Ć <-A' '=' <- ' E&@A0>' D' A&' B&- < ' &' D'Ø < ? 1ÿ D1' 0D<@@ =& =1' ' &' D1' , '- .' D1' <@?1' &=' D1' D' - .' 0&' 0&@A

ÿ ! & <0>?BD' <Ø' 0'-B1' D1' 1#1@@'&-' &=' D1' F 1@BD>1-' -&K' @< 1' 1=& >1Aÿÿÿ

21 . ‘4‘ ‘?‘ *‘E B -.Q

I ’ =1@&-&?0<-1- ’C ‘0 C@1?01? 0 A1’ @10 =&’<dL’ @’1.10 A? & 9 <0B?-0 BD’+<BD<- \’ 1- &? ’ @&? ’ =’BD<-A’010 I ’ @&? ’<?R0 #&0&’.-10 =10<- \9 I ’<0B?-0 1-’ @&? ’ ><’0&-0 &?’ ‘@0 =? 1- ’ A1> <- \’ =10<- \’ @&? ’ & <’.-10 I ’ @&? ’ D?0#&-A ‘1’ 1-’ @< C110 "’1?’ I ’ @1’ & 0 I ’ >10>10 B1?L’ @’1.10 A? & ’ 1D0“ C ‘01\’ &- ’ <>10-1\’ D& 0 A1’ @&? ’C<’’0 <0 A’1010 C< ‘10 A1’E<@10 I ’ @10 &- ’.< A1\’ I ’ A1 1-?\’ &+10H ’ 1?L’ 1-’ @10 >&?- <’.D10 A’B1@@10 C< j ‘10 A1’ E<@10 C’?-’ A1> ’<-9 <0B?-’ =&’ \’C@?’ \’ I ’<0B?-’ =&’ \’ C1’-0 <-H ’ ‘@0 &- ’ <?-B1&-1\’ <0B?-’ A10 A’ \’ @’1.10 <’ ’ I ’ <0B?-’ C@?’0 01@#DB’ @&? ’ <’=1 <- 1 1-’ 01>#@<#@1’ > =’1’ B&>1’ 10 ’ ?011’ 1-’ , 1’ A1’ .?1 1 <’ R0.0?-A’ A<><.1’ I ’ >10BD’1=’ A1’ @1’ C&1C@1’ A10 A’ \’ &?C 110 I ’ C<’’0 I ’ <’ ><@+1’0 1-0<>C@1’ <@’ -1’ 0&’ ’ @1’ C@?’0 &0 ’ 1>1A’1 0’B&>1’ @1’ & ’ <’ @<’ . 1+&?01’ B&>8 C@1’- 1’ A1’ 0<’ (1’<A’B&-B1 ;’ =1’ K ’@1’ & ’ +&’@@<-’ 1-B&?- 1’A1?L’ >1=’I ’0&? 0 ‘1 1’ A?1’C?D’001>1-’ ’<A’ & A1’.-1’ I ’ 10 <#@’1 H’ @10 ?0 ‘B10 A?’ C110 A1’-\’ @10 &?- ‘10 " <’.@1 1’<00’.-1\’ C ’ @1’ 1>C0 >1-’ C&<’ ’ A1-H?1 1 ’ &’1 ’ I ’ R>’-1 ’ C- \’ ><50 ‘1@L’ 1 -0 I ’ =1@&-’10 0’#-’ <’ 0?’ 1’A1’ & ’ B&>1’ <’ 0?’ 1’ A1’ C< A1 0’- ’ H1-’ B<0 H’ ‘1@L’ ><@=10&? 0 -1’ +& &-’ <CC< &’ ’ A 1 ’ @10 A’ \’ ?0 ‘B10 <’ 10C&?-A 1’ B&>1’ @<’@1 ’ A18 ><?-A1’ B1@@1’C< ‘1 <-H’ ‘@0’ 0&’1-’ &@&-B’@<’ B?0 ?>1’ A?’ &@<@>1’ "1-.@1R 1’ ? @<.1\ <A&-H10 >10>1 ’ @10 ?0 ‘B10 A@’1- 9 C’ @&? 0’ @ 10 A10&?#\’ @&? 0 01<@L 9 @10 &=’ I 0 A1’@10 = ‘10’ 10 H?1@L’ ‘1@L’ ? @<.1m’ 0&’1-’ 1 1 C A1> <- \’ &?’ 1B1<- \9 A1’ @<’ ? @<.< ‘1’ 0? ’ 1?L’ ‘0 K ’ C-?-B’1’ ‘1 ‘H’ >10>10’ @10 ==’R0’0? ’ >10>1’@<’R ’=’B<B’&-’ .-1- ’ @10 B = C0 A1’ >10>10’ @10’ ? @<.1\9 I ’ =1B1- ’ 1L1B? ’&-’0? ’1?L’1-’ >10>1’@1’= ’1’B& >1’@<’@1 ’ @1’ A18 ><?-A19 0<?-\’= -’ &?’ 1A1>CB’&-’ B1@@1’ C< ‘1’ < 1 =>’ &>1’ 1-’ @1’ C@1>1- ’ 1-?\’ <-’ C ’ ’A1@ & ’ 1- ’H?< ’ C?’0 @1’ B&-H?10 ’C’1 ’<’ & ’H& 1’ 10 9 A1@ <A+’ ’ I ’ <001- ’ A10 = 0’ I ’ ’’10 <001>#@1\’ 1-’ B1= 9 & A1 -1’ = ’’ ’ I ’ <001- ?\’ ’ H’@10 <C@1’ A10 @1’-0 H?’ 0 C1<?L’@<-? \’C@?>#1’ I ’ 10 <’-’M &’ ’1-A1 >1- ’< <@1 0@ <+1’ H’ &? \’ @1 ’ =’BD<- \’ A1’ 1-1’ 1- 0 < 1@& . -1’ <.& -’ I ’A10 <? I ’ &’A>10 R 10 I ’ <’’0’ +00 @1’ F 10 ’ 10 1<- \’ A1¢ <>’0 11’ A?’ & 9 H“ +& &’1- ’ <>10-1 ’ < <>C &-’ &?’ <’@@&? 0 A1’-\’ @1’ &’<@>1’ B< <a0 -’1=1’ .<’1’0’ &-’ <? 0 + 001?L’BD0’ .1\’&’@ A10BD< .1\9 ’C? 8 &’1- ’ = <-BD1>1-’ +1-A 1’ @&’ ’ BD<-A’010 < H“ @&? ’ C@1 &’ 9 I ’’@@&1H0 1BD< .1 ’ @&? ’ A’ \’ +1001?L’A10 @ 0’ H?’ ’C1<?L’ @<-? \’ C@?>#1’ 10 <’-’ I ’A10 <?R0 ’ BD<-8 A’010 A1@10 <C@1 9 I ’ = <-BD1>1-’ @10 <>10-1 ’ 1-’ @&? ’ C<’’0 ’ @1’ F 10 9 1@&-B’ @<’ =& >1’ A1¢ 10 < ?’ ’ 1- ’ =<’ ’ <-’ 01B&-A’ A?’ & ’ ’BD< A’ 0BA1’ C?’0 @1’ &-H?10 X’ =’0<+1’ <?L“ <’ 10 ? .1’0 I ’ BD<- \’A1’ @<’ ’@@1’ A1’ 1 1K a’0? ’ K1A19 I ’<’@10 10B1<- \’ I ’ 1-D<#’ <- \’ 1-’ B1@@19 H’@0 C? &’1 @ ’<BD< 1 ’@1’-0 H?’ 0 I ’ C1<?@L’ @<-? \’ 0 ’ 1’ AA’ B 10B1<-B1’A1’ 1?1AA1’ I ’<?R0 @’1-L’ A1’-\’ ’1’ &’<@>1’ "10B&B19 I ’ <?R0 A1@ B 10B1<- 1’ "1-.@1R 1’ 1 <0 < &’ ’ A1’ &?’ B1@ @’1?’ H10 ’ 1-R’ @10 1<K10 A1’ K1A1’ I ’ &a1 9 B&>1’ A1@ B 10B1<-B1’ A<?R0 C< ‘10 A1’-\’@1’ &’<@>1’ "10B&B1 I ’ >10>10 @1 ’ @1’-0 C1<?@L’ I ’ H?’ 0 <- f’<@ C& ’A?’ A’ 1’ ‘@@1’ A1’ 1 1K a’<>10-1 ’ I ’ B< ‘1 ’ <0 =& A-0 C ‘10 &?’ @10 >1 1’ < +1- ’ 1-’ @< A11’ A@1’ A1’ 1 1K a9 0&@&-B’ @<’ =& >1’ I ’ 1==1A’ A?-1’ & A’-<-B1’ 1- ’ =1’ ’ <-’ C ’ ’ @1’ A’ ’ &” ’BD< A’ ;’

\’ ’= ’ ’ ’< ’H ’ ‘5$

<-A’ =1@&-’&?0@ ’ <a1-’ ><- ’&=’ D1’ ,’-./0’=1’ D=?@ @’1.1’ 1&C@19 0&>1’ ’-’ ’A’-.’ <#&?’ D1’ ’ 1 BD<-A’010 <-A’ A&’-.’ D1’ ’&K-’ ?0’-10010 <-A’ 0&>1’ ’-’ D1’ ’ &?010 KD1 1’ D1 ’K1 1’<#’A’-.9 A&’-.’ D1’ ’ F & a0 `’-’ D1’ ’ ?0#<-A ’ ’-’ E&A/0 1<B1’ <-A’ D1’ ,’-./0 <-A’ D&01’ D1’ ,’-./0 @’1.1’ 1&C@1’0&’ <a1-9 D<+1’`# &?.D /P’&?’&=’ D1’ ’ &?- ’ &’A’+1 0 < 0 &=’ F <@10 <-A’ D1>’ D<+1’ a1C ’ <-A’ K’ DD&@A1-’ K’ D’ D1>’ ’-’ D1’ &?- <’-0 &=’ D&01’ < 0 &=’ F <@10 # ’ <@=’< 1< 9 0&>1 ’>1’ >& 1’ <-A’0&>1 ’>1’@100 ’@@ D1 ’D<+1’ <-0&>1A’0&>1’&=’ D1’ 0<’A’@’1.1’ 1&C@1’` &’0 <-’ ’@’ ’<-A’0&>1’ >& 1’<= 1 ’ D1’ ’ < 19 ’-’@’a1’ <--1 ’<0 0 ?01A’ ’-’` ’>1/P’&=’ F < 9 &’ D1’ . 1< ’ "<>< .1’<-A’ 0BD’1=’&=’ D1’ 1&C@1’&=’ D1’0<’A’ &?- ‘10 <-A’ &?- ‘10 <-A’ &’ <-’ 1+’@ L<>C@19 ’=’ ’ ’#1’ -&’ ` D1’ < D1 ’/’P’ 1>1A’1A9 <0 D1’ , ’-.’ # ’ D1’ . ’1+&?0 #>C@<’- ’ &=’ D1’ &> >&-0 D< D C1 B1’+1A; ? ’ &+1 1’.-’ & A’ D1’ ,’-.9 K’@@’-.’ <.<’-0 ’ <@@ 0?BD’ ’=1-A1 0 &’ & A<’-’ <’ A?1’ ?-’0D>1- 9 D< D’ & A<’-1A’ <-A’ 0 <#@’0D1A’ D< ’ D1’ ?0 ‘B10 &=’ 1<B1’ K’ D’-’ D1’ &?- ‘10 &=’ -.@<-A’ <00’.-1A’=& ’ D1’ ’>19 0D<@@ D<+1’ &K1 ’ &’ 1-H?’ 1’ D1< ’ <-A’ A1 1 >’-1’ <@@ <--1 ’&=’0?BD’ 1<0&-0 <-A’ !1@&-’10 <0 K1@ ’ <’ D1’ ,’-./0 ?’ ’<0 <’ D1’ < /0 ;’ &’ D< ’ ’-’B<01’ D< ’0?BD’ ==1-A1 0 K’@@ -& ’ <CC1< ’ #1=& 1’ D1’ 0<’A’ ?0 ‘B10 9 &’ <>0K1 ’<0 D1’ <K’ 1H?’ 1 D’ ’-’ D’0 1D<@=9 @@ D1 ’#1’ <BB& A’-.’ &’ D1’ ?0 &>’ &=’ D1’ 1<@>’&? @<K1A9 D1-’ D1’ 0<>1’ ?0 ‘B10 0D<@@ B1 ’= ’ # ’ D1’ ’ 1 1 0 ?-A1 ’ D1’ ’ 1<@09 D1’ ==’B1 0 &=’ D1’ 1’.-C ‘109 ’-’ KD’BD’0?BD’ ? @<K0 #1’ K’ DA <K-’ <#’A’-.’ & ’ 1 ’<- 9 &=’ D1’ ? j @<K ’ C&-’ D1>’ 0&’ C &-&?-B1A <-A’ D<’ D1’ 0<>1’ ==’B1 0 ?C&-’ D<’ 1 ’=’B< ’&-9 <a1’ D1’ &A’10 &=’ D&01’ ? @<K09 <-A’A&’ L1B? ’&-’?C&-’ D1>’ ’-’ D1’0<>1’ 1@.-& 9 <0 D1’ <K’A1><-A1 D’ F’ D&?’ !’-10 & ’ <- ’ 0&>’ ’-’ D’0 1D<@=’ & #1’ ><A1

9 F D1 1<0 ’-’ D1’ < @’<>1- ’ D&@A1-’ D1’ !’ 0 ’ 1< ’ &=’ ,’-.’ 1- ’A’1’ !&? ’D’ ’\ )’ !< D1 ’ & D1’ ’ ,’-.’ D<’ -&K’ ‘09 # ’ D1’ A+’B1’&=’ D1’ & A0 <-A’ &>j >&-0 ’-’ D1’0<>1’ <001>#@1A’ ’ K<0 & A<’-1A’ <-A’ <0j 01- 1A9 D<’ D1’ <C@1’&=’ F &&@09 1< D1 9 F H&@=1@09 1<A9 <-A’ D’9 0D&?@A’ #1’ KD&@@ ’ <’ <@<’0 0<+’-.’ <@K< 09 D<’ < ’ D1’ 1 BD<- 0’&=’ E1-&<9 1-’B1’ <j <@&-’<9 <.&-9 <-A’ &=’ & D1 ’ 1<@>09 <-A09 <-A’ &?- ‘10’ &K< A0 D1’ F & 9#1’-.’&=’ D1’ ,’-./0’ -? 9 D<’ K&?@A’ # ’-.’ & <>C &-’ & ’ 1@01KD1 19 K’ D’-’ D1’ 1<@>9 ? <a09 D’C09 E<@@1 09 & ’ & D1 ’ 1001@09 `BD< .1A’& ’ A’0BD< .1A9/’P’ >’.D ’ 0)’ = 11@ ’ 01@@ D1’ ’ 1 BD<-A’010 & KD&>’C@1<01A’ D1>9 <-A’ D1 1’ & 1j BD< .1’ <@@ D=’ ’0<’A’ 1001@0’&=’ F &&@09 1< D1=9 F &&@8 =1@0 ’ 1<A9 <-A’ ’-9 <-A’&=’ & D1 ’ 1 BD<-A’010’&=’ D1’ <C@19 <-A’ = 11@ ’ `# ’-. h P’ D1>’ ’-’ & D ’ &?- ’ &K< A0 D1’ F 10 9 <= 1 ’ D1’ ! & >’&=’ D1’ < ? 1’ D1 1&=’ ><A1’ D1’ 1B&=’A’ 1< ’ &=’ ,’-.’ ’BD< A’ D1’ 1B&-A’ <= 1 ’ D1’ &-H?10 G -A’ 0<+1A’ <@0& & D1’ ? .1001 <-A’ 1 BD<- R’&=’ D1’ &K-’ &=’ 1 K’Ba’ ?C&-’ K11A9 <-A’ &’ D1’ 10’<- 0’ <-A’ -D<#’ <- 0’ ’-’ D1’0<>19 D< ’ D1 ’ >< ’#? ’ F &&@09 1< D1 9 <-A’ F &&@=1@09 <0 K1@ &=’ D1’ . &K’-.’ &=’ ` ’-A<@1’/[P’ <-A’& D1 ’ @<B10 K’ D’-’ D1’ 1<@>’ &=’ B& @<-A9 <-A’& D1 ’ &=’ D1’ . &K’-.’ &=’ -.@<-A89 D<’ ’0’ &’ 0< ’ =’<’@ D<’ @<B18 #1 K’L’ D1’ F < 1 0’&=’ K11A’<-A’ &a1 9 <0’&=’ D1’ . &K’-.’&=’& D1 ’ < 0 K’ D’-’ D1’ 1<@>’ &=’ B& @<-A@ <-A’ D1’ 0<>1’ F &&@09 ! 1@@09 <-A’ 1< D1 9 &’# ’-.’ &’ D1’ & ’&=’ D1’ 0<’A’ &K-’&=’ 1 K’Ba9 <-A’ &’ =1<=’ D1>’ &’ ! & 1’.-’ < 09 & ’ 01’ D1>9 &’ <@1’’-’ D1’0<’A’ &K-’&=’ 1 ? ’Ba9 <BB& A’-.’ &’ D1’ ! & >’ <-A’ ==1 ’ &=’ <-’ A’-<-B1’ D1 1&=’><A1’ D1’ ! ’ 0 ’0 ’&=’ D1’ 0<’A’ ,’-.’ ’BD< A;

0 -/’ ’) % ’ Z !’+ -/L ’ ”’5’ ’ $$ ’ !’” !’ .-SO!2 ’ ‘5)’ ’ ’ * % ‘$’” * %] !”!’ +’ H’ ’ <# ””@’ # ’! ’ ’ !O % % (

02 &#!Z . ’ !’ 3! #!’ 1 @ !-S0&”!’ . ’2O# ’ 0 ” *!2

3”.#!!/&-*Z &-’# 2!’ . ’ 0 + 7”@’ . ’2O# ’ B!-/!”2

6!#& ’ . ’ -’ ”/&- -#!’ ’ !-’ ’ ”!2 !/&-* !’ % .”’ . ’ +!’ !”L’ # - 2!2

& ’

-A' -&K' 0&' ' ' '0ǵ D<' B1 <'-' 1 BD<- 0ǵ <0' K1@@ &=' D1' 0@10' &=' 1 01 ' <-A' E?1 -01 ǵ <0' 1 BD<- 0' &=' D1' < 0' &=' ' <-- ' <-A' E?'&-ǵ A&' #? ' -' A'+1 0' @<B10' &=' & -K<@@ KD&@1' '-' -& ' >&@ 1-ǵ <-A' D1' 0<>1' B< ' <-A' 01-A' &' #1' 0&@A' '-' A'+1 0' < 0' &=' ! <-B1ǵ & ><-A ǵ ' <-- ǵ E?'&-ǵ <-A' 1@01KD1 1' D<-' &' D1' 0<'A' <C@1Ć <-A' <@0&' A'+1 0' & D1 ' 1 BD<- 0ǵ <0' K1@@ " 1-'\1-0' <0' <-.1 0ǵ A&' #? ' <-A' 01-A' >&@ 1-' '-' B<@@1A' 0D& 1-' '-ǵ &? ' &=' D1' 1<@>' &' D1' < 0' &=' !@<-A1 0ǵ &@@<-Aǵ m1<@<-Aǵ <-A' &' & D1 ' < 0' #18' &-A' D1' 1<ǵ D<-' &' D1' 0<'A' <C@1ǵ <.<'-0 ' D1' ! &- ' &=' D1' 0<'A' A'-<-B1' 0(' @< 1' ><A1ǵ &' D1' . 1< ' ! <?Aǵ &00ǵ <-A' " <>< .1' &' D1' , '- .ǵ <0' &=' D'0' ?0 &>0ǵ <-A' &' D1' '-A <-B1' &=' <@@ ^ D1' ') ' 1C<' 1 0' &' D1' 0<>1' <C@1ǵ <0' D1' , '- .' '0' D1 1&=' B1 '='1A' # ' D1' &'&-' &=' D'0' &>>&-0' -&K' C 101- ' ' D1' , '- .' B&-0'A1 '- .' D1' 0<>1' A'-<-B1' &' #1' -1B=100< ' <-A' C &=' 1 @1' =&' D' >' <-A' D1' <'A' <C@1ǵ K'@@ǵ . <- 1 Dǵ '<-A' B&> ><-A1 D ' D<' D1' 0<>1' 0D<@@ 0 <-A' '-' D'0' ! & B1 ' -A' >& 1&+1 ' D1' , '- .ǵ # ' D1' 001- '&=' D'0' & A0' C' ' ?<@ <-A' 1>j C& <@@<-A' &='D'0' &>>&-0' D1 1'<001>#@1A' '-' D'0' < @'<8' ><< ǵK'@@ <-A& A<'-1 Dǵ D< -&F &&@09! 1@@0ǵ 1< D1 ǵ 1<Aǵ -&' '-ǵ KD&@1ǵ &' >&@ 1-' B<@@1A' 0D& 1-' '-ǵ -&' -&-1' & D1 ' 1 BD<-A'01' &=' D1' <C@1' 0)' = &>' D1-B1=& D' 0D<@@ #1' 01- ' -& ' B< '1A' &' <- ' < 0' #1 &-A' D1' 1<ǵ ?-@100' D1 ' #1' =' 0 ' # &?.D ' &' D1' 0<'A' <C@1ǵ 'A@1 ' D1' ! & <' &=' D1' 0<'A' A'-<-B1' ><A1' D1' !' 0 ' 1< ' &=' /)' , '- .' 1- Ć ?C&-' <'-' &=' ! & =< ? 1' &=' <@@ D1' 1 BD<-A'010' '-'0?BD' <- -1 '01- ' & ' B< '1A' &? ' &=' D1' 1<@>Ć ?-@100' '#1'# ' D1' , '- ./0' 'B1-B1ǵ <-A' 1LB1C ' D&01' 1 0&-0ǵ @<B10ǵ <-A' D' - .0' KD'BD' #1' 1LB1C 1A' '-' D1' 0<'A' A'-<-B1' ><A1' '-' D1' 0<'A' ! ' 0 ' 1< ' &=' D1' 0<'A' <- .' 1- ǵ =& ' D1' '>1' D<' D1' 1 0&-0' &=' D1' @<B10' 0&' 1LB1C 1A' #1' &=' D1' , '- ./0' >' ǵ <-A' D<' '-' D1' ! & >' B&- <'-1A' '-' D1' 0 'A' A'-<-B1' -A' >& 1j &+1 ' D<' 1+1 ' <-ǵ 1LB1C ' D&01' #1=& 1' 1LB1C 1Aǵ KD'BD' 0D<@@ 01-A' & ' B< ' <- ' 0?BD' 1 BD<-A'010' &=' D1' <C@1' &? ' D1' 1<@>' &=' -.@<-A' '-' '>1' &' B&>1ǵ 0D<@@ ='-A' .&&A'<-A' 0?' B'1- ' ? 1 ' &' D1' , '- .ǵ #1=& 1' D'0' ?0 &>1 0' &=' D1' @<B1' KD1 1' D1'0<>1' 1 BD<-A'010' 0D<@@ #1' <a1-' <-A' B?0 &>1A' K' D'-' D1' 0<>1' 1<@>ǵ #1=& 1' D<' D1' A1C< ' K' D' D1' 0<>1' 1 BD<-A'010ǵ D<' D1' 0D<@@ =' 0 ' # '-.' & ' 01-A' D1>' &' D1' 0<'A' <C@1' '-' D1' ! & >' <=& 10<'Aǵ ?-@100' D1' D<+1' D1' , '- ./0' 'B1-B1' <0' <=& 1' ' ' 0 'A

.-&- . &.-' . ' !'2 &/' "/& <-#!

!'"# -2' 2 +ǂ &-/' 0"! @' .' .;2!"'!' !

ʻ& 1'0&' ' '@' H' MG '-0' ' BD<- \' 0' -' A1' @10' 0@10' A1' 1 01 ' I ' E1 01 ǵ B&>1' <?R0' ='BD<- \' A1' @10' C< '10' A1' 18' <'. -1' I ' A1' E? 1- -1ǵ <BD< 1- ' 10' A'1010' @'1?L' A1' & -18' K<'@@1' 10 <'-' 1- '1 ' -'1- ' =?-A?\ǵ I ' @<>10-1- ' I ' 1-8' +&'1- ' <' +1-A 1' <0' A'+/010' C '10' A1' ! <'>B1' & ><-A'1' 1 <'. -1' E?'1- -1' I ' <'@@& 0' H' <' @<' A11' 10 <C@1Ć I ' <?L" A'@ 010' <?R0' ' 1D<- \' 0'#-' A1'-0\1'-0' B&>1'10 <?-.1 0' <BD< 1- ' I ' 1-+&'1- ' 10 <'-' =&?-A?\' <CC1@@1' D& 1- -' D& 0' A?' &'<@ &1ǵ <' @10' C< '10' A1' !@<?-A 10' &@<-A' 1@<-A' I ' <?, ' C< '10' A1' A1#' <'@@&? 0' H' <' >10>1' @108' <C@1' 1-B&-R' @<' =& >1' A1@' A I ' & A'-<-B1' '00'- ' A< ' 1'-1>1- ' =<' Ć <' R0 .W?-A' =' <?A1' CA1' I ' A<><.1' <' & ' B&>1' A1' 010' B?0 ?>10ǵ I ' <?L" < 1 '0>1- ' A1' &? \' @10' 1C< <- \' <@ 10 <C@1' < - A11ǵ B&>1' @1' & ' 10 ' A1' B1&' <C '0' <' @<' >&B'#-' '1' 01\' &10' & 1' 01- \',' @1' & ' B&-0@A1 <- ' >10>1' @& A'-<-B1' 10 1' -1B100< '1' I ' C=' <#@1' C/' @? ' I ' 0<' A11' 10 <C@1' +&1 ' .3?- 1' I ' B&><?-A1' H1@1' 10 &'01' 1-' 0<' =& 1R ' ' &?R' B1&' @1' & ' A1@' <001- ' A10' = 0' 10C?1@L' I ' 1>C& 1@L' I ' A10' &10' B ' <0 1>#@1\' 1-' B10 1' C@1>1- ' +&1 ' I ' & A1' . -1ǵ H' >'@0' @<'-0' C1<?L' H?' 0' C@?>#1' 10 <'-' 1- '1 ' &?' =& >\A?\' <CC1@@1' D&j 1- -ǵ -<? 1' ='BD<-A'01' A1@' 10 <C@1' HB&-H' A10& 1' 1-<+D' ' 0&'1- ' 1 +&'1\' 9&?' <>10- \' <' -?@@10' C '10' A1' A1@<ǵ 0<-\' B1&' H'@0' 0&'1- ' C '' >1- ' <CC& 1\' <' @<' A11' 10 <C@1ǵ 0&@&-B' @<' =&/>1' A1' @<' A 1' & B -<-B1' = ' ' @1' A' ' <-' C ' '" A?' A' ' & ' 1- Ć 0?' C1 -1' A1' =& =<' ? R' A1' &? \' @10' ='BD<-A'010' C' '1@' ><51' 1-+&'1\' &?' <>10-1\' D& 0' A?' &'<@>1Ć 0'@ -1' 0&' ' C' @'B1-B1' A?' & ' I ' =& 08' C '0' B1?L' C0&-10' @'1?L' I ' BD&010' H' 0&- ' =& '010' 1-' >10>1' @& A'-<-B1' = ' ' @1' A' ' <-' C ' ' @1' 0''0A' ' & ' 1- ǵ C ' @1' 1>C0' H' @10' C0&-10' A10' @'1?L' '00'- ' =& 08' C '01\' 0&'1- ' A1@ <>'0 11' @1' & ǵ I ' B1&' 1-' @<' =&/>1' B&- 1-?1' 1-' B1@@1' & A'-<-B1' ' &?R' B1&' H' BD10B?- ǵ =& 0C '01\' B1?L' H' 0&- ' <+J- ' =& 0C '01<'ǵ H' 1-+&'1 <' -' <>10-1 <' <0B?-0' '1?L' ''BD<-A'010' A1' @10 <C@1' D& 0' A?' @1' &'<@>1' " 1- .@1R 1' 1-' 1>C0' <+1-' ǵ &, <' #&-' I ' 0?=='B1<- 1' 01? 1 11' <?' & ǵ A1+W?' 01\' ?0 ?='0' A1' @1' @'1?' &?' >10>10' @10 ='BD<-A'010' M &- ' C '01\' I ' B?0 ?>1\' A1'-\' >10>1' @1' &'<@>1ǵ <+3- ' B1&' H'ǵ 1-A1C ' <ǵ &+1' B1@@10' BD<-A'010ǵ H'ǵ @10' <>10-1 <' <' @<' A11' 10 <C@1' C '=' >1- ' 1-' @<' =&/>1' <+/- AB1ǵ 0'ǵ -1' ' @'B1-B1' A?' & ' B&>1' A100?'0' 10 ' A'

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BE'= ' ' 'G '6 #'HHH' '%
' <00<+&' ' H' <' @1' C@1>1-' 1-?\' <' F 10 '-' @1'
@@'-A ' C0BD1''@ <= ' @1'=10 ' A1' &? \' <'- \@' <-' A?'
1. -1'@1' &'' 1- ' H?'- '<C20 @1'B&-H10 ' '1 B1@=?' '=<' '
?-'10 < ? ' C' @1' H ' A1@ <001- ' A1' &? \' @10' ?!' 10C?1@L' I '
1-'C& 1@L'<' @10C<@1' 1H?10 1' A10' &10' " 1-.@1R 1' <001>@
#@1\' '@@&1HO@ =' '@1' B&1' #'1-' I ' C=' ' A1' &? ' @1' &'<@>1;'
10 <00<+&' ' H' @1R' E<@ D<@C1-0' I ' @<' &-1'1' <CC1@@1'
10a -' I ' "& A1a -' I ' &? 1' >< 1' >&-1'1' A10B&B1'
A< .1- @ 0&'1- ' A1' &? ' &?0 1\' I' -1' B&? .1- ' 1-'
C? ' -?@@ C<'1>1- ' A1'-\' @1' &'<@>1' " 1-.@1 1@ <A &?0@
<- ' <' B1 ' H' CH@<><B'&- 0&' '=<' ' C' &? \' @10' &?- 110'
" 1-.@1 1@ A1A1'-\' = <-BD'010' I ' A1D& 0' I ' A1A1'-\'
' 11 ' I ' ? .D0' I ' <'@@&? 0@ H' &? \' B1<?L' H' <'1- '
E<@ D<@C1-0' 10a -0' &?' " & A1a -0' @10' <CC& 1- ' </@10'
10BD<?<.10' - 1' A' ' _' @1' & @ C1- 1' B ' I ' @1' =10 1' A1'
<0 f' C BD1'-' <+1-' @ C ' 10 1' '@@&1H10' A1# ?01\@ I ' B1&'
H10 ' +1' #<=' < .1- ' C ' 10 1' '@@&1H10' =1 1\' I ' B& -1\'
1-' >< =1' - .@1 0;' 1 ' H' &? \' B1?L' H' <C20 @1' A' ' =10 '
A1' !<0B.' <0 ?- ' E<@ D<@C1-0' 10a -0' &?' " & A1a -0'
I B1- ' B& -U '<BD< 1- ' &?' <CC& 1- ' 1-' @1' A' ' &'<@>1'
" 1-.@1 1@ C? ' @10' +1- A 1' &?' >1 1' 1-' C<'1>1- ' AA-\'
>10>1' @1' &'<@C<1' ' A1' B1&' 0&'1- ' < 1'- \' 0&'1- '
<A ?. .1\' 1&>1' =1@&- 0' -=1' = ' @1' & '% 1 ' H'@0' =& =1B1 ' '
&? \' @& 0' 10' I ' 1-1>1- \' #-0' I ' BD< 1?L' 1 ' H' @10'
=& ' A1 ' H?1?L' A1@L' 10' I ' 1- \' 0&- ' 1-?\' A1- ' 1- '
@10' =& ='''=1 ' B&>1' 1-' <? 10' B<010' A1' =1@&-'1 ' ' 0"
<0B?-' @'1.1' &?' @'1.10' A?' & ' &?' <0B?-' <? 1' C0&-1'
>1 1- ' E<@ D<@C1-0' 10a -0' &?' " & a -0' 1-' C<'1j
>1- ' &?' 1B1 1- ' 1-' C<'1>1- ' A1'-\' @1' &'<@>1' " 1- j
.@1 1' I ' A1' B1&' 0&'1- ' A?1 <1- ' < 1'- \' =& =1B1- ' <'
BD10B?-' =&' \' H'@ ' =&?- ' '1@ C<'1>1- ' &?' 10B1 ' '0'
A&?- ' @1' & ' 1' ' @?-' >&' 1' I ' B1@? ' H' +&1 ' 0?1 ' C ' -=1'
?' @1' & ' C ' @10' 1- < 1@-A 1' @<? 1' >&' 1 ' ' H' 0'#-'
@10' ?0 'B10' A1' @<' C110' A1'-\' &? \' @10' &?- 110' " 1- j
.@1 1@ B&>1' <' 0' I ' <'@@'=1' A1'-\' ' 110' I ' ? .D0' I '
1-1 BD<@L' A 0' = 0' 1-' +'1?' A1' = <-a' C@1. .1@ 1@1- '
C&<' ' A1-H 1 1 ' C' #&-0' 1-H?10 10' A1+W- ' 1?L' <CC 1-8'
A 1\' A1' &? \' @10' > < I ' <+> A' \G 1 ' H' @10' A' \' <' 0'
I ' <'@@'=0' <=20' @1 ' A' \' 1-H?10 10' A1 0- ' 1?L' C '01\'
<'10>10' @10' '-H>0'A&-0' ><?-A1- ' A1+0- '10' ?0 'B10' A1'
@<' C110' A10' &?- 110' 10' H?1?L' @10' A' \' ' 110' & ' ? .D0'
0&- ' ' H' @10' A' \' ?0 'B10' A1' @<' C110' 1'1- ' C&<' @
0'#-' 0? ' @1.' A' \' '-H?'0'B'&-0' 1<0 ' A1+> ' '1@L' <' 0' I '
<'@@'=0' C '01\' I ' A1+D' ' @10' A' \' ?0 'B10' B&>1' <+0- '
10 ' A' ' ><?-A1\@ B&>1' 0? ' <? 10' '-H?'0'B'&-0' A1+0- '
>10>10' @10' ?0 'B10' A1' @<' C110' 1-' @&? ' 100'&-0' <CC 1-8'
A 10@ &?BD<- ' @10' >< 0' <+ A' \@ A1=1' 1' CB1001' I ' A1'
<.< A1 ' <C'<0' I ' L'.1-A@ I ' &? \' @10' A' \' >< 0' &'1 ' I '
>'-1 ' 0C@&>' @&? 0' A'0B 1B'&-0@ B&>1' 1-' <? 10' B<010' A1'
=1@&-'1' I ' 0C<0010' <A' 10 1' ?011' A1+/-' B10' D1? 10

;!P' C' ' ' < @'<>1-' D&@A1-'<' F 10 >'-0 1' D1'
B @)' &-A< ' -1L ' <= 1 ' A'1' !1<0 ' &=' @@' <'- 0@'
D1' D' A' 1< ' &=' D1' 1' . -' &=' , '-.' 1- ' D1' ! '= D'
] ' 3' < ? 1' K<0' > <A1'# ' D1' , '-.' &? ' & A@' K' D' D1'
001- ' &='<@@' D1' & A0' C' ' ?<@ <-A' 1>C& <@@ `<-A' < '
D1' 1H?10 ') ' 2= D1' &> >&-0' &=' -.@<-A' D1 1' <001>j
#@1A' =& ' D1'B&> >&-' &=' ' <-A' F 1<@' &=' 0)' D1' 1<@>G
' '0' &' < @ D< ' E<'@ ' <@=C1-B1@' <-A' D1'
&-1 ' B<@@1A' ?0a'-' <-A' " & a'-@' <-A' <@@ <--1 ' &='
B& '0D' &-1 ' &=' '@+1 @ 0D<@@ #1')' C? ' &? @' <-A' -&'
#1' B? 1- ' D1 1<= 1 ' =& ' <- ' < >1- ' '-' D1' 1<@>' &='
- .@<-A' &' -1A' &' D1' 0<>19@ D< ' &B@<>< '&-' #1'
><A1' D &?. D' <@@ D1' &?- '10' &=' - .@<-A' K' D'-' ! <-j
BD'010' <-A' K' D&? @ 0)' <-A' 1@01KD1 1@ D< ' <@@ D< ' D<+1'
E<'@ ' <@=C1-B1@ ?0a'-0' & ' " & a'-0@ 0D<@@ # '-.' D1>'
&' D1', '-./0' LBD<-.10' #1 K'L ' D'0' <-A' D1' ! 1<0 ' &='
<0 1 ' -1L ' 1-0?'-.@ A=0 1' &' #1'# &a1-@' <-A' D< ' D< ' '0'
=&?-A' .&&%' '1 @ D1 1' &' #1' 0 'a1-<-A' B&'-1A' ` '- P'
- .@'0D' <@ 1-B1;' -A' 0)' L@@' D1 'KD'BD' <= 1 ' D1'0<'A'V
!1<0 ' &=' <0 1 ' A&' > <a1@ B&' '#? @ & ' # '-.' '- &' D1
)' 1<@>'&=' - .@<-A' <- 'E<'@ ' <@ 1-B1@ ?0a'-0@ & '
" & a'-0@ &' I 1 <@ ' &' C? ' D1>' '-' < >1- ' '-'
D1 <>1' 1<@>@ <-A' D1 1&=' #1' < <'>1A@ D1 ' 0D<@@
#1' ?A. 1A' <0' ! 1@&-0' &=' &? ' &+<;A. -' & A' D1', '-.' I
<-A' 0D<@@ =& =1' @eA@ D ' ' <-A0' <-A' 1-1>1- 0@ E&&A0'
<-A' D< 1#@ <-A' D<' D1' & A0@ &=' KD&>' 0?BD' <-A0'
<-A' 1-1>1- 0' #1' D&@A1-@ 0D<@@ D<+1' <-A' 1- & ' D1'
!& =1' ? 10' <0' '-' & D1 ' <010' &=' !1@&- ' -A' '=' <- '&=
D1', '-./0' @'1.1' 1&C@1' & ' '3/)' & D1 ' 1 0&-' C? ' E<'@ '
<@ 1-B1@ ?0a'-0@ & ' " & a'-0@ '-' < >1- @ & ' D1>' 1j
B1'+1' '-' < >1- @ K' D -' D1' 1<@>' &=' -.@<-A@ <-A'
D1 1&=' #1' A?@ ' < <'>1A@ D1 ' 0D<@@ =& =A ' <' 1+1 '
'>1' D<' D1 ' ><a1' 0?BD' < >1- ' & ' 1B1'C @ 0 '
KD1 1&=' &-=' &+1 1'. -' & A' D1', '-.' 0D<@@ D<+1' D1'
&-1' <@=@ <-A' D1' D<' K'@@' 0?1' =& ' D1', '-.' D1 1&=' &
< <'-' D1>@ 0D<@@ D<+1' D1' & D1 ' <@=' -A' D<' <0' K1@@
D1' ?0 'B10' &=' 1<B1' K' D'-' <@@' D1' &?- '10' &=' - .@<-A@
<0' < & 0' <-A' <'@'==0' K' D'-' D1' ' '10' <-A' & &?. D0@
<-A' 1K< A0' &=' & A0' '-' D1' ' '1K' &=' ! <-aC@1A. 1@
0D<@@ D<+1' &K1 ' &' 1-H?' 1' # ' . &&A' -H?10 0' &' #1'
<a1-' #1=& 1' D1>' 8-' <@@' D1' < 1 0' <=& 10<'A@' <-A'
D<' D1' 0<'A' < & 0'<-A' <'@' I @<=1 ' D1'0<'A' -H?10 0'
#1=& 1' D1>' <a1-@ 0D<@@ 01-A' D1' 0<>1' -H?'0' '&-0'
#1=> 1' A#1' ?0 'B10' &=' 1<B1' &=' A'1' &?- '10' ' KD'BD'
D1'0<'A' ' '10'<-A' & &?. D0'#1'@ <-A' D<' D1' 0<'A' ?0j
'B10' &=' D1' 1<B1' `&=' D1' BK> '10P D<+1 &K1 @ <0' K1@@
`&='W' ' D1'0<'A' -H?'0' '&-0' 0&' <a1-' #1=& 1' 0?BD' < & 0'
<-A' <'@'==0@ <-A' 01- ' #1=& 1' D1' 0<'A' ?0 'B10@ <0' <=& 1' '0
0<'A@ <0' ?C&-' D1 ' -H?'0' '&-0' #1=& 1' D1' 0<>1' ?0 'B10'
&=' 1<B1' '-' D1' ' 100'&-0' &' #H' <a1-' &?BD' -.' D1' 0<'A'
< 1 0@ &' ><a1' &B100@ <-A' &' <K< A' D1' <C'<0' <-A'
L'. 1-A@ <-A' &' D1< ' <-A' A1 1 >'-1' <@@' D1' 0<'A' < 1 0'
<BB& A'-.' &' D1' ' "'0B 1 '&-' <0' '-' & D1 ' <010' &=' ! 1@&j
-'10' <-A' 10C<0010' D< D' #11-'?01A' #1=& 1' D'0' ' > 1

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ME' = ' ' G '6 # 'HHH ' '+ =1' = /' @1' & ' <0&- 1 > 1 - ' 1-?\' <' F 10 '-' Q@1' @?-A' P' @1' 010\'0>1' &? ' A1 < 1\' <-' A1' 0&-' 9' 1.-1' '1 B1 A1 <A A0 I ' <001- ' A10 = 0' 10C?1@L' I ' 1>C& 1'L' I ' <' @<' 1H?10 ' A10 &10 <001>#@1\' 1-' >10>1' @1' C@1>1- <A' & A1'.-1\' I ' 10 <#D\' A'1010 & A'-<-B10 I ' 10 < ? \' 1-' @<' =& >1' H1-0?'

'' 1>1-' H' 1'- 1' 0.@' 1' 1' ' &? \' 010 @'# 110 I ' = <-BD'010 1 ' H' &? \' @10 0 1 ?1@L' I ' 1>C1@L' I ' @10 <?,0 @'1.10 A &" 1@<- \' @'# 110 I ' = <-BD'010 I ' &? \' @10 a110 I ' ? . h ' A?' &'<@>1' 1'1-' I ' 1- &'1-' &? \' @& 0 @'# 110 I ' ='K-BD'010 H?1?L' '@0 &?-' A10 . >' 0 A1' @10 C.1''' & 0 --1' ' @1' & ' I ' A1' @<' B&-=1 >1>1-' >10>1' -=1' = ' @1' &'' &?' 0&-' . <- 1' A1>10-1' =& 0C '0 B1?L' = <-BD'010 I ' @'# 110 H?1?L' 0&-' 1C1@@1\' 1-' B10 ' C01-' C@1>1- I ' B1?L' H' 0&-' 1C1@@<#@1\' C' @<' B&1' @1'1 1>' C? ' B1&' H' C@?01? 0 ##110 '&? 0 I ' <?R0 1@'.1&?01 '0&'1- &-' <0B?-0 0&-' A1@ =?-A<B'&-' >1' ' @1' & ' I ' <0B?-0 A1 =?-A<B'&-' A<?R0 0' A?' &'<@>1 A1> <- \' 0'#'1-' A1'-\' @1' &?- 11' " 1 , K a' B&>1' 1-' @1' &?- 11' A1 <-B<0 1 A&-' <0B?-0 &-' C&00100'&-0 A1D \' @10 F <C1- <a10 A1' < -1B@'= F <C1- <a1' I ' ! <'A1@10 ' F <C1- <a1' 1-' <+1-' 1-' @1' A' ' &?- 11' " 1 K a' I ' <0B?-0 -1> ' ,0 H?1?L' C@?01? 0 .1- 0 A1' &? ' 1-'<? 1' C' C1? 1>1-' I ' <#1 1>1-' A10 <'@@'+10 <CC &+1 0 A10 &? 0 A10 A' \' F <C1- <a10 I ' A10 1-10BD<@L' H' '1.8 -1-' C@110 10 A' \' &? 0 I ' A10 ! 1 ='0 A10 C=' \' I ' 1+1-?\' A10 A' \' &? 0 =1'-&-' I ' C1? 1-' C' 1?L' I ' <?R0 A1' @&? ' B&+ -' I ' <001-' A', 010 C@1'- 0 I ' C@110 A1' A1 1' I ' R0C<0 I ' <?R0 C@110 A', 010 10 &? 0 A10 A' 0 F <C1- <a10 1 ' @<' &?8 >10>10' @10 ##110 I ' '&? 0 +1'.-&-' <0 A' \' &? 0 C? ' @&? ' A1=1-A 1' A1' '1?L' & B1-&?010 C@1'- 0 I ' C@110 I ' C '&-' I ' C=1 &-' <0 1j -10BD<@L' I ' <'@@'+10 A10 A' \' &? 0 A1'=''' 1'@&? '< & -10 1-' '1?L' C@110 @10 A' \' 1-10BD<@L' I ' <'@@'+10 @10 1=?8 01-' I ' -1' +1?@@1-' 10B1'+1 ' '1?L' < & -10 A1' '1?L' ##110 I ' '&? 0 1-' -? 8 C@11' A1' A1 1' A1' 0C<0 -1@@ <?,' C@11 ' H' &? 1' B1&' >10>10 @10 1-10BD<@L' I ' <'@D+10 A1' @&? ' <?^& ' 1' A1>10-1' <' B'&-' @10 A' \' ##110 I ' '&? 0 C? ' BD10B?-' C@1'- 0 <' C '=" =' - \' L' A ' I ' <' BD10B?-' <? ' =&' \' C? ' BD10B?-' A10 A' \' C@1'- 0 L0 ' I ' LL0 ' I ' C@?'0 <' @&? ' +&@?- 11) - !"+&-!/' .-' D1' 6 .++

' & A' D1' ,'- .0 <' D'0 < @'<>1- ' D&@A1-' <' F 10 >'-0 1 ' D1' &-A<' D1' ` 'L D P' "< ' &=' < BD0 D1' D' A' 1<' &=' D'0 1'.-0 # ' D1' A+'B1' <-A' 001-' &=' D1' & A0 C' ' ?<@ <-A' 1>C& <@0 <-A' <' D1' 1H?10 ' &=' D1' &>>&-0 <001>#@1A' '-' D1' 0<>1' < @'<>1- 0 D< D' & A<'-1A' <-A' 10 <#@'0D1A' A'+1 0 <j ? 10 <-A' A'-<-B10 '-' D1' !& >' =&@@&K'-.

! 0 D< ' &@ ' D? BD' D<+1' <@@ D1 ' '#1 '10 <-A' ! <-BD'010G <-A' D<' N)' D1' & A0 C' ' ?<@ <-A' 1>j C& <@0 <-A' & D1 ' D1' , '-./0 @'1.1' 1&C@10 D<+'-.' '#1 j '10 <-A' ! <-BD'010 0 <-A' <@@ D1' ' '10 <-A' & &?.D0 &=' D1' 1<@>0 D<+1' <-A' 1- & ' <@@ D1' ' '#1 '10 <-A' ! <-0 BD'010 KD'BD' D ' D<+1' D<A' &=' D1' E <- 0 &=' D1' , '-./0 &.1-' & 0 <-A' &=' D1' &-=' >< '&-' &=' D1' 0<>1' &? ' & A' D1' , >.0 & ' D'0 /)' E <- G 1LB1C ' <@K< 0 D&01' ! <-BD'010 <-A' '#1 '10 KD'BD' #1' 1C1<@1A' '-' D'0 C 101-' < @'<>1- 0 <-A' D&01' D< '#1' 1C1<@<#@1' # ' D1' &>>&-' <K

0 !& <0> -BD' <0' D1 1' #1' A'+1 0 ##& 00 '& 10 <-A' & D1 ' 1@'.'&?0' 1 0&-00 KD1 1&=' 0&>1' #1' &=' D1' , '-./0' !&?-A< '&-0 <-A' 0&>1' &=' D1' !&?-A< '&-' &=' & D1 ' & A0' &=' D1' 1<@>' `'&=' -.@<-A90' AK1@@'-.' <0' K1@@ K' D'-' D1' &?- ' &=' <-B<0 1 ' <0' '-' D1' &?- ' &=' & a0 KD1 1&=0&>1' D<+1' &00100'&-0 K' D'-' D1' F <C1-j <a10' &=' <-A''!1' F <C1- <a10 <-A' ! 1-A@10' F <C1-j <a10 '-' <+1-' '-' D1' 3)' &?- ' &=' & a0 <-A' 0&>1' -& 0 <.<'-0 ' KD&>' A'+1 0 1 0&-0' A<'@ ' # ' #1 >1-' <-A' &B? 1>1-' &=' D1' <'@'==00 CC &+1 0' &=' D1' &? 0' C=' D1' 0<'A' F <C1- <a100 <-A' 0')' D1' 1K< A0' D<' D&@A' @1<0' '-' D1' 0 ?A' &? 0 <-A' &=' !1 >&? 0' &=' D1' &=' 0' <-A' 1+1-?10' &=' D1' 0<'A' &? 0 =1'.-' <-A' C &B? 1' # ' D1>' <-A' & D1 ' &=' D1' ' &+'-' <-A' 001-' A'+1 0 @<'-0' N)' @1<0' &=' " 1# 0 <-A' 10C<00 <-A' & D1 ' @1<0' <.<'-0 ' D1>' '-' D1' &? 0' &=' D1' 0<'A' F <C1-j <a10' <-A' D1 1' KD1 1<0' D1' 0<>1' ##& 0' <-A' '& 0 B&>1' &' D1' 0<'A' &? 0 `=& ' D1' "1=1-B1' & = P' 0?BD' K &-.=?@ @<'-0' <-A' @1<0' <-A' C < ' <-A' C 1=1 ' &' D1' 1K< A0' <-A' <'@'==0' &=' D1' 0<'A' &? 0 &' ><a1' D1' ' &>'10 '-' 0?BD' @1<0 D1' 0<'A' 1K< A0' <-A' <'@'==0' D1' 0<>1' 1=?01 <-A' K'@@ -& ' 1B1'+1' 0?BD' & -'10' &=' 0?BD' ##& 0' <-A' '& 0' '-' <- ' @1<' &=' " 1# ' & ' 10j C<00 -& ' '-' <- ' & D1 ' @1<' <-A' D< ' >& 1&+1 ' D1' 0<>1' 1K< A0' <-A' <'@' h ' &=' D1' ' &K-' ? D& ' 'A&' <>1 B1' D1' 0<'A' ##& 0' <-A' '& 0' =& '1+1 ' @<'- ' <' D1' =' 0 ' '>1' L' ' A ' <-A' < ' 1+1 ' & D1 ' '>1' =& ' 1+1 ' &=' D1' 0<'A' @<'- 0' L' 0 ' <-A' L L 0 ' <-A' >& 1' <' D1' ' &K-' F '@@G

' ' **' '. 7 -' ! +'5' ri % '$ ' ' %' ' $' % %' *2 ' 1

0' D1' F & A0' U1&A1>' 4[' < 1' <AA1A@ '-' <' >&A1 -' <-A' D1' '(D' &=' < BD &-' KD'BD' "< ' D1' 100'&-' #1.<-@ K<0' &-@ ' <' =1K' "< 0' C 1B1A'-.' D1' -A' &=' D1' D' A' 1< ' &=' D1' , '-./0 1'.-; D1' < @'<>1- ' K<0' <= 1 K< A0' <A &? -1A' & D 11' F 11a0' 3<= 1' <0 1 @ '-' D1' !&? D' 1< ' &=' D'0 =11'.-; -' <@@ D1' '- 1A' &C'10' <-A' '-' " 'G '6 ' D'0 '0' A'0 '-.?'0D1A' <0' D1' 1B&-A' < ? 1' &=' 4 1- ;' <-A' D1' < @'<>1- ' & &=' D'0 100'&-' '0' A'0 '-.?'0D1A' <0' 4' 1-' ' < '

-Q> /¢ . ' 0 ' -"'9¢ ' ? ' * ' .

D1' , ' - .' K'@@' - .' =& ' D1' F 1<@ D' <-A' <01' &=' D'0' 1&C@1' &' <+&'A' 0?BD' CC 100'&-9 <-A' &' C &+'A1' 1 > 1A ' '-' D1' <01@ D< D' & A<'-1A ' D< ' -&-1' A'-< ' 0D<@@ <a1' = & >' D1-B1=& D@ =& ' D1' &#< 1' &=' <- ' 10 <j >1- 9 K' D' D1' -+1- & 9 <-A' =& ' D1' & D1 ' D' - .0' <CC1 <'-'-.' & D1' 0< > 19 -& > & 1' D<-' K<0' <BB?0 & > 1A' <-A' ?01A' ` ' -' D'0' < P' '-' D1' ' > 1' &=' D1' 0<'A' ` , '- .' AK< A' D1' D' A9/P' ?C&-' <'-' & '1@A' & D' >' D< ' =11@1 D' D' >' . '1+1A' D1' 1#@1' 0& 1B1'+1A9 '=' D1' K'@@ 0?1' # ' D1' &? 01' &=' D1' h) <K ; & D< ' <@@ <- - 1 ' &=' L1B? & 0' 0D<@@ '1@A' D1' ' BB&? - 0' & D1' A'-< '10@ KD&@@ ' &=' ` D1' 10 < & /0' E&&A0 0'P' -A' D< ' D'0' A'j -<-B1' 0 <-A' '-' D'0' ! & B1' '@@ D1' -A' &=' D1' 1< ' -1L ' B& > ' - .9 <-A' > & 1&+1 ' '@@ D1' < @'<>1- ' D1' 0<>1' 1< ' -1L ' 1-0?' - .

' ' 'Q *')' F ' F % '$ ' 'Q 1
)' F$$% ' $ ' ' ! $

@1' &'9 +&'@@<- ' C? ' @1' #'1-' I ' @<'01' A1' 0&-' C1&C@1' &?0 1 ' '1@1' &CC@00'&-' I ' >1 1' 1>1A'1' 1-' @1' B<0@ " <A' & A1' . -1' H' -? ' A'-< '1' C . -1' A10& 1-<+<- ' C? ' @<' C#<B'&-' A?-' 10 <>1- 9 &+10H9 @1' D+1- < '1' I ' C? ' @10' <?R0' BD&010' <' B1'@ 1 .< A<- \' '1-0' C@?'0' H' -1' =?'0 ' <B?0 ?>1' I ' ?011' B1@@ C '1' 1-' 1>C0' A?' A' ' #10<'1@ <' &'9 0? ' C1' -1' A1' 1-A 1' < B1@ ' H' 01' 01- 1' 10 1' . 1+11' @1' 1#@1' '00' - ' 1B1?' 0'@ +&'@@1' 0?1 ' C' B ? 0' A1' @<' B&1' @1 G <' -00 ' H' &? \' > <50' 1L1B? 1 0' 1-A1- ' @&' <BB&>C 10' <0' A'-< '10' 1- '1 >1- ' A10' #'1-0' @&? ' 10 < & 0 ' ' H' B10 1' A'-<-B1' 10 &'01' 1-' 0< =& B1' <-H9' < = -' A1@ <-' C0BD1'-' <+1-' ' I ' &?R' B1&' <-H9' < @1' C@1 > 1- ' > 10 > 1' <-' C0BD1'-1 > 1- ' 1-0?<-

##.0-' ;@ %!#0 ."2

0 ' ;!' Y!.;!1' ' D --.' /

)' 6 ' ()'

(' B' ' ' D (' E ' ' IJIG

ME' = ' ' ' G ' 6 #' HHH ' ' 9

' D1' < @'<>1- ' D&@A1-' < ' F 10 > ' -0 1 ' D1' '-1j 11- D' " < ' &=' ='A#1 9 D1' ! &? D' 1< ' &=' D1' 1' . -' &=' , '- .' 1- ' D1' ! '= D' <= 1 ' D1' &-H?10 G D1' 0<>1' &? ' & A' D1' , '- .9 K' D' D1' 001- ' &=' D1' 1@< 10@ " ?a10@ < @0@ ') ' < & -0@ <-A' < ' D1' 0C1B'<@ -0 <-B1' <-A' 1H?10 ' &=' D1' & > > & -0' <001 > #@1A' '-' ` D1' 0<>1/P' < @'<>1- 9 D< D' `B<?01A' &' #1/P' & A > -1A' <-A' 0 <#@'0D1A' B1 <'-' < ? 10' <-A' A'-<-B10@ '-' D1' ! & >' <0' =&@@&K1 D

! 9 D< ' D1' E 1< ' D< 1 9 <-A' D1' D< 1 ' &=' D1' ! & 10 9 <-A' <@@ & D1 ' < ? 10' <-A' A'-<-B10' > <A1' '-' D'0' ' > 19 <-A' '-' D1' ' > 10' &=' D'0' -&#@1' &. 1 - ' & 0' , '- .0' &=' -.@<-A9 <-A' -& ' 1C1<@1A@ 0D<@@ #1' =' > @ ' D&@A1-' <-A' a1C ' '-' <@@ &' - 0

9 D< ' <@@ D1' D1 '==0' &=' -.@<-A' 0D<@@ D<+1' @@&K<-B1' ?C&-' D1' ' BB&>C 09 # ' D1' ' < D0@ &=' D' - .0' B<0?<@@ <0' &=' 0 1< 0' D< ' `#1' -& '0P' '-' ! 1 >' -& ' '-' / )' " 1 > <-A@ #? ' &=' <@@ 0?BD' D' - .0' D< ' `#1' NP' & ' ?-' '-' /)' 1< @ ' ! 1 > 0' & ' 1< @ ' " 1 > <-A0@ D1 ' 0D<@@ #1' BD< .1A' &' D1' , '- .9 <0' D1' D1 '==0' D<+1' #11-' BD< .1A' '-' D< ' <01' '-' ' > 10' C<0

9 D< ' D1' < 1- > <a1 0' '-' @D1' 1<@ >' &=' - .j @<-A@ = &>' D1-B1=& D' 0D<@@ > <a1' -&' < 1-0' -& ' &.0' &=' > #1 ' B<@@1A' 0C19 ?C&-' <'-' &' C< ' &' D1' , '- .' <' ?-A 1A' D'@@' - .0@ < ' 1+1 ' ' > 1' D< ' D1' 0<'A' < 1-j > <a1 0' > <a1' <- ' < 1-0' & ' @&.0' &=' D1' 0<'A' ' > #1 ' -A' D< ' 1+1 ' <-' D< ' K'@@ 0?1' =& ' D1' , '- .9 0D<@@ D<+1' D1' -1' <@=' &=' D1' ` <'-' h 0&' =& =1' G 0&' D< ' D1' !@1 BD1 0' D &?.D' D1' 1<@ > ' 0D<@@ 01@@ D1' ' &K0' < ' <' >& 1' 1<0 ' <-A' 1<0&-<#@1' 'B1' = & >' D1-B1=& D' D<-' D1 ' K1 1' K&-

9 F D1 1<0' '-' <' < ? 1' > <A1' < ' ` <- 1 #? 9/P' '-' D1' ' > 1' &=' , '- .' 'BD< A' D1' 1B&-A9 /[)' D1' K1@= D' 1< ' &=' D'0' 1' . -9 B1 <'-' F < . 10' K<0' & A<'-1A' # ' D1' 1< ' =& ' <'@' ==0' <-A' & D1 ' 1 +<- 0' &=' ?0#<-A 9 <-A' <@0&=& ' & D1 ' 1 +<- 0' <-A' <#&? 1 0@ <0' K1@@ K' D' -' ' 10' <-A' & &?.D0' <0' 1@01KD1 1' D &?.D' D1' 1<@ > G

3!- + @ . ' ' *6' @ ' %' .'" !%#!22& ' !' V *!2 ' 2 +# ; !' &1 .2!/' 0 .-' !' E!'" .-+@

l)7 " ' G ' ?' f 5(' +) ' " ' G ' ?' 4
L' 7 # " ' G ' ?' f 6) ') #) " ' 6))
" & ' L' 6) ' L' 6*5 ' " ' G 2
f & ' Q #, ' TQ " 5 ' !)F6 # " G &

@1' &'9 +&'@@<- ' C? ' @1' #'1-' I ' @<'01' A1' 0&-' C1&C@1' &?0 1 ' '1@1' &CC@00'&-' I ' >1 1' 1>1A'1' 1-' @1' B<0@ " <A' & A1' . -1' H' -? ' A'-< '1' C . -1' A10& 1-<+<- ' C? ' @<' C#<B'&-' A?-' 10 <>1- 9 &+10H9 @1' D+1- < '1' I ' C? ' @10' <?R0' BD&010' <' B1'@ 1 .< A<- \' '1-0' C@?'0' H' -1' =?'0 ' <B?0 ?>1' I ' ?011' B1@@ C '1' 1-' 1>C0' A?' A' ' #10<'1@ <' &'9 0? ' C1' -1' A1' 1-A 1' < B1@ ' H' 01' 01- 1' 10 1' . 1+11' @1' 1#@1' '00' - ' 1B1?' 0'@ +&'@@1' 0?1 ' C' B ? 0' A1' @<' B&1' @1 G <' -00 ' H' &? \' > <50' 1L1B? 1 0' 1-A1- ' @&' <BB&>C 10' <0' A'-< '10' 1- '1 >1- ' A10' #'1-0' @&? ' 10 < & 0 ' ' H' B10 1' A'-<-B1' 10 &'01' 1-' 0< =& B1' <-H9' < = -' A1@ <-' C0BD1'-' <+1-' ' I ' &?R' B1&' <-H9' < @1' C@1 > 1- ' > 10 > 1' <-' C0BD1'-1 > 1- ' 1-0?<-

' ''51 > 1- ' H' @<' . <-A1' D< 1' I ' @<' D< 1' A1' @<' !& 10 1' I ' &? \' <?R0' 10 < ? \' I ' & A1'-<-B10' =<' \' 1-' 0&-' 1 > C0' I ' 10' 1 > C0' A1' 010' -&#@10' C .1 - ' & 0' " 1- . @1R 1' I ' -'1- ' 1C1@@1\' 0&'1- ' =1 > 1 > 1- ' 1-?\' I ' .< A1\' 1-' &? \' C&'- \

1 > ' H' &? \' @10' '0B&- \' " 1- . @1R 1' 1'1- ' <@@&?<-B1' 0? ' @&? ' <BB&>C 0' C' @&? ' M1 > 1- 10' A10' BD&010' B<0?1@0' B&>1' A10' 1L 1 \' H' -1' 0&?-1- ' -1' B&? .1- ' > ' 1-' =1 > 1' -1-' A1 > <-A1' <- - ?1 @G > 10' A1' &? \' B1?L' BD&010' H' 0&?-1- ' &?' B&? .1- ' 1-' '1?L' =1 > 10' <- - ?1@L' &?' A18' > <-A10' <- - ?1@L' 0&'1- ' '@0' BD< .1\' 1-+00 @1' &" B&>1' @10' '0B&- 0' &- ' 10 1\' BD< .1\' A1+= ' ' B10' D1? 10' 1-' @1' B<0

1 > ' H' @10' < - <<a1 0' A1A1'-\' @1' &'<@>1' " 1- . @18' R 1' A10& 1' 1-<+J- ' -1' =1B1- ' <0B?-0' C< -0' -1' B@&. . 10' A1@ > <1 10 > 1' <CC1@@1' 0C1' 0? ' C1'-1' A1' C<'1 ' < &" 0 ' < BD10B?-' =&' \' H' @10' A' \' < - > <a1 0' =&?-' <0B?-0' C< -0' &?' B@&. . 10' A?' A' ' > <1 10 > 1 ' ' H' BD10j B?-' H' +&1 ' 0?1 ' C' @1' & '1' ' @?-1' > &' 1' A1' @<' C1'-1' '00' - ' =& =1' 1G C<'-0" H' @10' !@1BBD1 0' C > ' @1' &'<@>1' 1-A1- ' @&? ' 011 10' < C@?'0' <'01' 5R 10&-<#@1' C '0' A10& 1' 1-<+J- ' H' -1' 0&@1'1- ' +1-A 1' <+<- ' B10' D1? 10

1 > ' B&>1' 1-' ?-' 10 < ? ' =<' ' < <- 1# @. . 1' 1-' 1 > C0' A?' &" 'BD< A' 01A1' C?'0' @1' B&-H?10 ' <-' A1' 0&-' 1. -1' A?0\' > 19 H A1' . -1\' 10 &'1- ' I 1'-0' @&?1 0' C' <-' C ' <'@@'+10' I ' <?R0' +<- \' A1' D&?0#&-A '1' I ' <?L'- ' C ' <? 0' M+<- \' I ' <#& 1 0' 0'#'1-' A1A1'-\' ' 110' I ' ? .D0' B&>1' <'@@&? 0' C' > ' @1' &'<@>1' G

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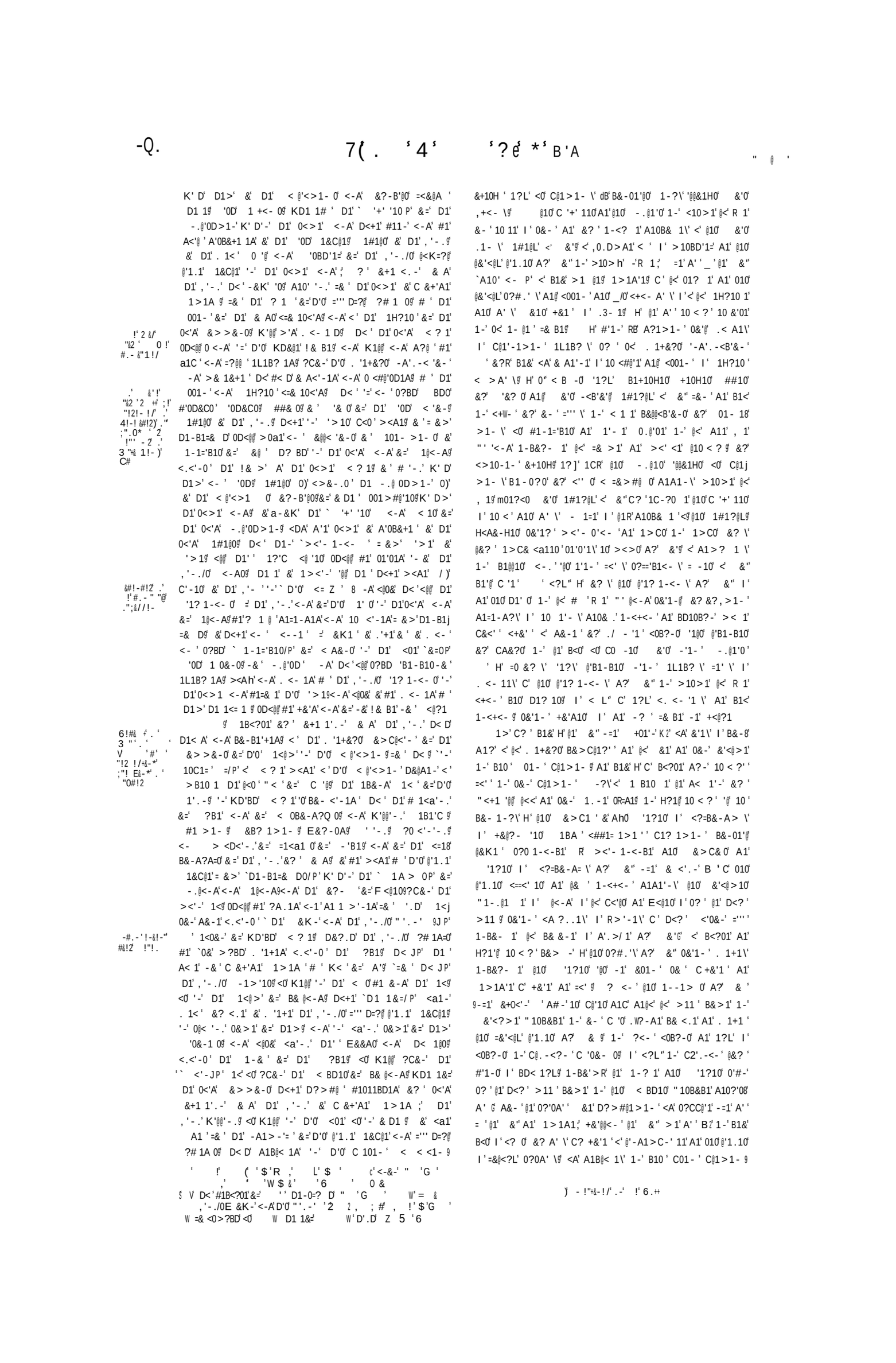

&-B1<@>1- 0@<-A' "1B1' 0@A&-1'& 'C1 C1 < 1' #1=& 1' D1' 0<'A' '-1 11- D' "< @=& 'KD'BD' <- '!'-1'& ' >1 B'<>1- ' '0'& '0D<@@#1'<001001A'-' '>1' &' B&>1' &' D1'0<'A' ?>'<-A' = D< 1@0&= ?-A1 ' -A'<@0&' D< 1@0'&='!?.' '+10'<-A'!1@&-0@F<'=10' !1@ <0n 30' < 0@ <-A' D1' D< 1@0'&=' D&01' D<'#1'&? @<K1A@ <-A' D< 1@0'&='!1@&-0'&=' D1>01@+10@KD'BD' &' D1',-.' C1 <'-1 D@ &'KD'BD' =& ' <- ' &=' D1' 0<'A' <?010' '-'<- ' <--1'><'C1 <'-'#1=& 1' D1'0<'A'L'L''"< @' &' D1' ?<' <=& 10<'A' <-A'?-A1 -1< D' =& =1' @ <-A'`&=NP' ?@<K '10@ '='<- ' `'- P' D1',-./0' @'1.1' 1&C@1@ &' <- ' &=' D1>' #'0?BD'` -BD10&-' #1'C &-&?-B1A@ &+'A1A'<@K< 0@ D<'-&-1' 1- &' D1' 1-1='&=' D'0' < A&-@KD'BD''0'&' 0D<@@#1' BD< .1A@&'BD< .1<#@1'&+1' D1'0<'A' ?>@=&' D1' <?010'<=& 10<'A@&'<- '&=' D1>' -A'>& 1&+1@ &?'0<'A' &+1 1'.-' &A' D1',-.'&='D'0'0C1B'<@E <B1@ D< D' 1@1<01A' <-A'C< A&-1A' &' D'0'0<'A' ?# 1^0@ D1' ?''&='D'0' 1<B1@KD'BD' &'D'>'<.<'-0' D1>'C1 <'-1 D@ #1B<?01'&='<- ' 1<0&-'A&-1' &'C1 C1 <1'# ' D1>'&' <- ' &=' D1>' #1=& 1' D1' 0<'A'L'L' "< ' &=' Q@&#1@ =& ' # 1<a'-.'&='D1',-./0' ?B10'<-A' <=1' &-A?=@0G <-A' <@0&' D1' ?@<K '10@ '='<- '<.<'-0' D1>'&'<- ' &=' D1>' #1'C &-&?-B1A'# '0?BD' -BD10&-0' -A'<@0&' D1',-.' K'@@@' D<'1+1 '&='D'0'0<'A'@'1.1' 1&C@1@ <0' K1@@ &='D1' &?- ' <@<'-1' &=' <-B<0 1' `& /P' 1@01KD1 1' K' D'-' D1' 1<@>'&=' -.@<-A@ 0D<@@ 1- &' D'0' < A&-'K' D&?' 0?'-.' D< 1' & ' F ' ' '-' D'0' 1D<@=

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VB&-B1@1>1- 0' I' A1B1' 0' =<' \' &?' CC1 1 \' A1+0-' @1' A' ' L'L' &/' C?' @10' H?1@@10' &?' H?1@@ @1' ' &?' <='B@<>1- ' 10' &?' M <' <00'0' 1-' 1>C0' <+1-' ' <@ 0&>1' 0?'0AB1' I' A1A1'-\' ' <?L'-' BD< 1?L' A10' =? '+10' I' A1' =1@&-0' F <'=0' I' <'10' I' BD< 1?L' A1' B1?L' H?H?L' 0&-' ? @<.1\' I' @10' BD< 1?L' A10' =1@&-0' A1' 0&" >10>10@ H<?' &" <C' C 1'.-1-' &?' C' <0B?-0' A10' B<?010' 0?'0A' \' 1-' <0B?-1' ><51' C? &-' <CC 1'.-1' A1+0-' @1' 0?'0A' ' L'L' &' <-H@ <' @<' 0&>1' <+0- A' 1' I' A1A1'-\'=& =<' \G 1' @10' ? @<.< '10' 0" H?1?L' 1-' @10' A' \' @'1.10' A?' &" &'" <0B?-' A1' 1?L' C' B1@@10' 1-BD10&-0' &?' <0B?-0' A'B1@@10' 0&'1-' C-?-B'1\' ? +1?' &? =&' \' H' D?@@ 1-&'01' #1-1='B1' A1' B10' CA&-' H10' &?' M <' BD< .1' &?' BD< .1<#@1' &? 1' @<' A' 1' 0&>1' C? ' @10' B<?010' 0?'0A' \' &?' <0B?-0' A'B1@@10' '&?R' B1&' - 1' A' ' @1' &" A1' 0<' .\B1' 10C<@1' <A' CA&-11' I' 1@10011' <' 010' A' \' @'1.10' @<' 0?' 1' A1' 0<' C110' H' <' @? ' 1-,0' 1?L' <CC @1-' C' B<?01' A<0B?-1' <'0&-' =<' ' &?' CC1 11' C' 1?L' &?' <0B?-' A1' 1?L' A1+0-' @1' A' ' L'L' &? ' A&= &# @' C? ' @1-= 1'-A 1' A10' '1?10' A?' & ' I' <?=B&-A?' \@ I' <?L> ' @10' @<.< '10' 0" H?1@@10' ,0' 1?L' &?' <0B?-' A1' 1?L' 0&'1-' C-?-B'1\' C' B1@@10' 1-BD10&-0' ' <?L" +&1' @1' &" H' BD10B?-' A1' 010' A' \' @'1.10' 0'#'1-' A1@ &?-' <@< -' A1' <-B<0 1' B&>1' <'@@&? 0' A1'-' 0&-' &'<@>1' "1-.@1R 1'1-&'01' B10 1' CA&-' 0<-\'0?1' BD< 1' &?' # '1=' B1@@ C '1

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%' 'B' #& '0<@>' B'<0' HA' '-' C@'<>1- &' -=&' <C?A' F 10 '-' ?@ '>&' 1- &@ & A'-< ?' 1L ' ' ' I' B&-@ B100?>' HA' &'-10' @'.1" --=" <>' 1@'.'&0" H>' 01B?@< 10' I' 1& ' H?'@'#1 '=<B1 1' C&00'-' I' C&00' ' ?0H@ <A' C@'<>1- ?' CL' =? ? ' < &><&0' 0?&0' ?#" < & -<" <B1-' '-' CC '0' C0&-'0' 0?'0@ '-' H?&B?>H@ C'' &' A1#' é -0. 100'&-'0' 01?' <@R'?0' B&- <A@?0' B? ?0B?H@ >& &' 01?' >&+1-A&' '-' H?'@ #?0B?H@ F<C1- <BD''0' D?-A='0' I' ?=' < &-?' C' & ? <' 1.-?@ B& <>' 1-10B<@@ '#>' <?' 1& ' A1C? < '0' <A' @?B <-A' +1@ CA1-A' '-' 1'0A1>' C'' '0G I' 0" A1@ 1-10B<@@" D? " < &><&0' <A>' 1' 1B?0<C'-@ ?-B' 'C" I' 1& ' H?'@' C1-<>' L@'0' 0'-.?@'0' +'B'#' I' 1>C& '#X D?h' 1B?0<B '0' C1-10' -&0' -B? <' I' '-B? <-

' 'A1&' '#" C2B'C'>h' HA' & A'-<B&1>' '@@<>' '-' 0'-.?@'0' @&B'0' &'-' ?" ?#" ><.'0' 1LC1A'1-0' =5' ' I' -1B1001' C?#@ @'B1' CB@<>< " I' &#01 +< " =<B' ?L <' =& ><>' I' 1==B>' 1 ?0A>' ' &D1' " ?B1' 1A' ?0 &A1' -.' <C0' F 10 '-' L+' A'1' <-?<' <--&' ' -' H?'- &

&-B1<@>1- 0@<-A' "1B1' 0@A&-1'& 'C1 C1 < 1' #1=& 1' D1' 0<'A' '-1 11- D' "< @=& 'KD'BD' <- '!'-1'& ' >1 B'<>1- ' '0'& '0D<@@#1'<001001A'-' '>1' &' B&>1' &' D1'0<'A' ?>'<-A' = D< 1@0&= ?-A1 ' -A'<@0&' D< 1@0'&='!?.' '+10'<-A'!1@&-0@F<'=10' !1@ <0n 30' < 0@ <-A' D1' D< 1@0'&=' D&01' D<'#1'&? @<K1A@ <-A' D< 1@0'&='!1@&-0'&=' D1>01@+10@KD'BD' &' D1',-.' C1 <'-1 D@ &'KD'BD' =& ' <- ' &=' D1' 0<'A' <?010' '-'<- ' <--1'><'C1 <'-'#1=& 1' D1'0<'A'L'L' "< @' &' D1' ?<' <=& 10<'A' <-A'?-A1 -1< D' =& =1' @ <-A' `&=NP' ?@<K '10@ '='<- ' `'- P' D1',-./0' @'1.1' 1&C@1@ &' <- ' &=' D1>' # '0?BD' `-BD10&-' #1'C &-&?-B1A@ &+'A1A'<@K< 0@ D<'-&-1' 1- &' D1' 1-1='&=' D'0' < A&-@KD'BD''0'&' 0D<@@#1' BD< .1A@&'BD< .1<#@1'&+1' D1'0<'A' ?>@=&' D1' <?010'<=& 10<'A@&'<- '&=' D1>' -A'>& 1&+1@ &?'0<'A' &+1 1'.-' &A' D1',-.'&='D'0'0C1B'<@E <B1@ D< D' 1@1<01A' <-A'C< A&-1A' &' D'0'0<'A' ?# 1^0@ D1' ?''&='D'0' 1<B1@KD'BD' &'D'>'<.<'-0' D1>'C1 <'-1 D@ #1B<?01'&='<- ' 1<0&-'A&-1' &'C1 C1 <1'# ' D1>'&' <- ' &=' D1>' #1=& 1' D1' 0<'A'L'L' "< ' &=' Q@&#1@ =& ' # 1<a'-.'&='D1',-./0' ?B10'<-A' <=1' &-A?=@0G <-A' <@0&' D1' ?@<K '10@ '='<- '<.<'-0' D1>'&'<- ' &=' D1>' #1'C &-&?-B1A'# '0?BD' -BD10&-0' -A'<@0&' D1',-.' K'@@@' D<'1+1 '&='D'0'0<'A'@'1.1' 1&C@1@ <0' K1@@ &='D1' &?- ' <@<'-1' &=' <-B<0 1' `& /P' 1@01KD1 1' K' D'-' D1' 1<@>'&=' -.@<-A@ 0D<@@ 1- &' D'0' < A&-'K' D&?' 0?'-.' D< 1' & ' F ' ' '-' D'0' 1D<@=

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VB&-B1@1>1- 0' I' A1B1' 0' =<' \' &?' CC1 1 \' A1+0-' @1' A' ' L'L' &/' C?' @10' H?1@@10' &?' H?1@@ @1' ' &?' <='B@<>1- ' 10' &?' M <' <00'0' 1-' 1>C0' <+1-' ' <@ 0&>1' 0?'0AB1' I' A1A1'-\' ' <?L'-' BD< 1?L' A10' =? '+10' I' A1' =1@&-0' F <'=0' I' <'10' I' BD< 1?L' A1' B1?L' H?H?L' 0&-' ? @<.1\' I' @10' BD< 1?L' A10' =1@&-0' A1' 0&" >10>10@ H<?' &" <C' C 1'.-1-' &?' C' <0B?-0' A10' B<?010' 0?'0A' \' 1-' <0B?-1' ><51' C? &-' <CC 1'.-1' A1+0-' @1' 0?'0A' ' L'L' &' <-H@ <' @<' 0&>1' <+0- A' 1' I' A1A1'-\'=& =<' \G 1' @10' ? @<.< '10' 0" H?1?L' 1-' @10' A' \' @'1.10' A?' &" &'" <0B?-' A1' 1?L' C' B1@@10' 1-BD10&-0' &?' <0B?-0' A'B1@@10' 0&'1-' C-?-B'1\' ? +1?' &? =&' \' H' D?@@ 1-&'01' #1-1='B1' A1' B10' CA&-' H10' &?' M <' BD< .1' &?' BD< .1<#@1' &? 1' @<' A' 1' 0&>1' C? ' @10' B<?010' 0?'0A' \' &?' <0B?-0' A'B1@@10' '&?R' B1&' - 1' A' ' @1' &" A1' 0<' .\B1' 10C<@1' <A' CA&-11' I' 1@10011' <' 010' A' \' @'1.10' @<' 0?' 1' A1' 0<' C110' H' <' @? ' 1-,0' 1?L' <CC @1-' C' B<?01' A<0B?-1' <'0&-' =<' ' &?' CC1 11' C' 1?L' &?' <0B?-' A1' 1?L' A1+0-' @1' A' ' L'L' &? ' A&= &# @' C? ' @1-= 1'-A 1' A10' '1?10' A?' & ' I' <?=B&-A?' \@ I' <?L> ' @10' @<.< '10' 0" H?1@@10' ,0' 1?L' &?' <0B?-' A1' 1?L' 0&'1-' C-?-B'1\' C' B1@@10' 1-BD10&-0' ' <?L" +&1' @1' &" H' BD10B?-' A1' 010' A' \' @'1.10' 0'#'1-' A1@ &?-' <@< -' A1' <-B<0 1' B&>1' <'@@&? 0' A1'-' 0&-' &'<@>1' "1-.@1R 1'1-&'01' B10 1' CA&-' 0<-\'0?1' BD< 1' &?' # '1=' B1@@ C '1

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BE' = ' ' 'G '6 #'HHH' '4
' "1" . <' 1L' -.-' I' ! <- ' I' "&>'8\
''='#-' <-B1 <'0?& &>' <@< '-" <-B<0 R@
0< >' A0 '0' HA' C' 1&' HA' .1- 10' -&--? 1' 1L' ><@'B'<
I' '->'B'<' 'B' CCR' @?B ?>' I' +'-A' <'-' A',0&0' ='A1@10'
@'.1&0' -&0 &0' A1' CA@B('#4' 0'+1'=1@&-''0' '-' &'=1' <-B<0 '
= 1H?1-B'? ''-AQ< " I' <CCA#'A' =1B1 ?- @ C &@A1- 10' C'
<CCA' <' 01?'-A <>1- <' '@'<' HA' A1' CA'=I 10' <? ' =1@&-'1'
CC1 <1' =?1 ?-' '-' &' @&B&' ?#" A1' ,' <1' <'@0' @&B?0'
'-' &>' ?# ' '-' H?&' <CC1@@?>' +1@ '-A <>1- ?>' = >'
1L@0 ' ' -&-' ='1=' <A' .0 1' A<>C-? <' I' C'B?@?>' @'.1& '
- & 'D? ?0>#A'G & -0'A1 < 1' HA' H?'A<>' <B' <CC1@@<A'
I' '-AB< " B& <>' ?0 'B' <A' 1C&-A1-A' '-A1' # >1 ?>'
+1 #<B&'0' @ <D1>'" 01?' '-R=1BB&'0' 1& A1'@' C' ' =' <C@
C1@@& ' 01?' '-AB<>1- & ' B -0C' < & 10' <?' 1<' ='1 " CB?@
<- 10' '-' CC''0' C0&-@0' B&>C< 1 1' -&-' <?A1- @ C?' C'
#' <1>' 1. '" '-' . ' '-' ?@ '>&' C@'<@C1A &' -=&'
<C?A' F10 >' 1- &' 1L'0 1- 1>' C' C1AB&1>' 0?<>' '-'
C@'<>1- &' '@@&' 1LD'#' <>' =?1 <' .0+'R' B&-H?1 1CA&' >&-j
0 < ?>'G & A'-< ?>' 1LA ' ' '-' 1&A1>' C@'<>1- &' A1' <0@
01-0 ' C2@<&' CM?>' I' <.-< ?>' AB" 1.-" - -' -.@
'#'A1>' 1L'0 1-B'?>' <A' 1H?'0' &1>' A 1' &' <A0' C' B&"
?A@' < 1' I' H?'1 1' CC " 1 ?0A1 " 1.-" - ' HA' H?'@'
?0A 'H?" <A'D?h" CA'B 10' I' =1@&-'<0' '-= <' &>' CAB>'
<?A'<'A' I' R>'-<-A'C& 10 < 1>' #1' C' 0<B >' A?&A1B'>'
+' & 'H?& 'H>' ' ''#?>' 1-' '-' CAB&' &'-'+< & '0' <--?@
1- ?>' &@'A& " ?@ 0' 1C '0<0' &CA-1< @ C @?0H/ <' 1L'8
.1-A<' <A A'H< <' = ' ' <#0H ' CA0' <@@1.<='I 1' <>' '-' CA0'
<#01-B'<' HO>' C01-B'<' '-H?' <' 1L' &==B'&' ? ?>'<@'H?'0'
<'@0' @&B?0' 10' '-' &'-' ?#" <CC1@@<' 01?' FB <>1- <'
'@'<' 0 '-' ='<' <+1' =<B'1-A<@ -1B-1G ! ' 0" B&>C ?>'
=5' ' HA' <@'0' @&B?0' -&-' #1A' 'C=' <' 1?-A1>' &'-' ?-B
<CC1@@<' I' '-A <>1- <' 'C<' I' CB100?0' '-A1' = ?0' 01?'
@<B'1-A?0' '-' +<B?<' I' C' -?@@'0' #1<-A@ 1' HA' '-' B<0?'
'@@&' '-AB< & 10' =2AB" C' '>C '0&-<>1- ?>' ='-1>'
I' 1A1>CA='1'<' C' A'0B 1A 1>' ?0AB' A &' 'C?-'<-A@

' ,'-.' &=' -.@<-A@ IB' &' D'0' D<-B1@@&'
'-'P' D1' &?- ' <=1 >1' &='@<-B<0 1 @ E 11A=.;
,-&K' 1' D<'=& <0>?BD' <0' A'+1 0' 1-' &=' <@'B1' <-A'
D+ @ <-A' =& ' E<'-' <-A' 1+1-.1@ D<+1' &=1-' B<?01A'
&' #1' '-A'='1A' <-A' <CC1<@1A' A'+1 0' &=' &?' ?1' @'1.1'
1&C@1@ &=' 1<0&-0'&& ' !1@&>10' '-' D1' &?- ' &=' <-j
B<0 1 @C 1 1- ='-.'# ' D&01' CC1<@0'Q<==@A' #'A'QD->d 0@
D<' D1'0<'A' 1<0&-0' & ' !1@&-'10' K1 1' B&>>' 1A' '-'<'
B1 <'-' @<B1@ KD1 1' &=' ? D' -&' 0?BD' @<B1' '0' D<A' ='
D1' 0<'A' &?- ' KD1 1' D1' 0<'A' CC1<@ <-A' -A'==<-'-'
' ><A1@ &' D1' . 1<' "<>.1' <=A' 1 '@ &=' 0?BD' &?'
D1.1' 1&C@1G &-0'A1 '-.' D<' &>1'0&' H'C1<@1A' <-A'
'= A' 1A' A< 1' -&' <CC1<' #1=& 1' D1' ?0 'B10' '-' D1' '
C &C1' 1 0&-0@ &'<-0K1' D1 1&=@ =& ' !1<' &='#1<'-.@
>'>'-.@ & ' a'@@'-.' &=' D1>@ # ' D1' &-0C' < & 0' & '
&B? & 0' &=' D1' 0<>1' CC1<@0' Q<-A0P' -A'<>1- 0@ <0'
' D1' &>>&-0' &=' D1' 1<@>'&=' -.@<-A@'-'&? ' @<0'
< @'<>1-' 3D&@A1-' <' F10 >'-0 1 @ # ' DA ' 1' '&-'
D1 1' 1LD'#' 1A@ . '1+&?0@ ' B&>C@<'-'-.@ K<0' 0D1K1A&
''0' & A<'-1A' '-' D1' 0<>1' <@'<>1- @ # ' D1' 001-'&='
D1' 1@< 10')' <-A' E 1<' 1-'&=' ` D1' 0<>1' 1<@>0P'
D1 1'#1'-.@<' D1' 1H?10'&=' D1' <'A' &>>&-0@=& ' D1'
B&>>&-' &=' '<-A' ^?'1 -100' &=' D1' 1&C@1'&=' D1'0<>1'
1<@>@ D<' 1+1 ' ?0 'B1' KD'BD' D<D' &K1' &' D1<'
<-A' A1 1 >'-1' 0?BD' 1<0&-0' <-A'!1@&-'10' K' D'-' D1'
0<'A' &?- @ # ' D1' <D' &=' K1@+1' 1-@ &=' KD&>'
1+1 ' -1'0D<@@ DA 1'! 11D&@A' D" D1' 0<>1' &?- ' &'
D1' 1< @ ' <@?1' &='<-' ?-A 1A' F @='' '<#&+18@ <@@
D< .10@#1=& 1' D<' D1' L'.1-' D1' <K< A1A@ K' D&?'
@@1.<'&-'&=' D1' < @<0' K1@@ '-' D1' < /0' #01-B1'
<0' D'0' 101-B1@ 0D<@@ '-H?' 1' &=' ='BB' KD1 D1 ' <-'
0?BD' @<B1' #1' '-' D1' &?- ' KD1 1' 0?BD' CC1<@0' '
-A'=D?1-0' #1' ><A1@&' &' #1' ')<<A1@&' -&G -A' '='
' ' #1' =&?-A' D<' D1 1' '0' -&' 0?BD' @<B1' K' D'-' D1'
0<>1' &?- @ D1-' 0?BD' CC1<@0' <-A' -A'= >1- 0@
<-A' D1' &B100' D1 1?C&-' ><A1@&' &' #1' ><A1@ 0D<@@
#1' +&'A' <-A' D&@A1-'=&' -&-1G <-A' D<' '-' 0?BD' <01' D1'
D 'D1 & 0' <=& 10>A'#1' C?-'0D1A'# ' >C '0&-><1- @ !'-1@
<-A' <-0&>' # ' D1' "'0B 1 '&-' &=' D1' 0<'A' ?0 'B10;

' ' 'F ' $ 'F$%' E 1' $ 'J 1* % %' 5 ' %' L$ %' $ ' '
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6. 0+&

ME' = ' ' 'G '6 #'HHH' '

W ' @1>1-' 1-''\' <' F 10 '-' @1' 0 A1' &? ' A1' "1B1>#' <-' A?' 1.-'1' @1' & ' 1- 'H?'-' C?'0' @1' B&-H?10 ' &1C '0>1$ >10>1' - 1' ? @1' & ' A1@ <001-' A10 !' 10C?1@L' I' 1>C& 1@L' I' <' @10' 1C<@1' '-0 <-B1' I' 1H?10 ' A10' &10' <001>#@1\' <' B1&' >10>1' C@1>1- $ ='0 ' & B'1' ' I' 10 <#@' ' R 1'-0' 10 < ? \' I ' & A'-<-B10' 1-' @<' =& >1' HB-0?'

'='1>1- ' C ' B1&' H' C' @<' . <B1' A1' "'1?' ='-<@ C110' 018C '0 ' -<A.<' 0' C1- 1' - 1' &,<'-' ' ` @1' & 1 ' @1' & 'A1' ! <-B1' 0&-'C'1 $ 1- '1@ =& >1' H' - 1' A' ' 1'. -&? ' @1' & 'M <' -&>11' 1' ' I ' 1.1- 'A?' &'<@>1' A1' ! <-B1' A? <- ' @<' +'1' A1' 0&-' A' ' C'1 ' I ' <C<' @<' .&+ -<-B1' A'B1 G I ' < ' @<' >& ' A1' >10>1' 0&-' '1 ' @1' A' ' &'<@>1'8 I ' @1' B& &-1' A1' ! <-B1' 1><'-A &-' <' - 1' & <'-' ' @1' & ' I ' <' 010' 1' 0' C ' &? \' &? 0;' " 10 ' '@ , <'01>#@<#@1$ H' C ' @<' #&-' .&, -<-B1' 0'#'1-' A?' A' ' &'<@>1' A1' ! <-B1' B&>1' A1' B10 ' &'<@>1' "1-.@1R 1$ @1' A' ' - 1' 0&, <'' = ' <0B?-' =&' \' , <' A1B1<' I ' <0B?-' =&' \' A1@<' @1' >11 $ 01@&-B' B1&' H' >1?@L' 01>#@< <' <' 0<' 0<.1' A'0B 1A&-' C ' @<' <1''@&? ' .&+ F 'B1' A1' @?-' I ' @<? 1' &'<@>1 ' C ' <-' ' & A<.-1\' 10 ' 1 10 <#@'\$ H' 0" 1-' 1>C0' <+1-' ' - 1' A' ' & <'-' ' /' @1' & ' 10 1<-' 10' C '10' CA1@<' =<B1' 0?>&-1 ' 0&-' C@1>1-' 1-' B10 ' &'<@>1$ C' 010' # '1+10' A10&? \' @1' 10 1' A1' 0&-' '1? 1-<-' H& 1' 10 '&?' H" C ' @1' 1>C0' , <$ I ' <C0' @1\' 0?>&-0' A1' '1?L' C'1>1- 0' D& 0' A?' D<?-8 B1@@< '1' @1' & ' '00?1\' - 1' A' ' ' @1' & ' < '+1' 1-' B10 ' &'<@>1$ H' C' A1@' < '+<'@@1' A1' >10>1' - =1' ' @1' & ' '1@ C@1>1-' -1' M <' A'00&@+11$ >10' '-' B1@@' C?'001' @1' & ' - 1' 0&, <'-' ' CB1A1 ' 0<-\' -&+1=@ 0#>&-0' A'B1

1>' & A1'-1\' 10 ' I ' 10 <#@'\' H' BD10B?-' ' BD<-' 10$ <<.1 ' <BD< <-' @<'-0' 1-' -.@1 1' C ' @10' <>10-1 ' 10' C '10' A1@' F 10 ' &?' <'@@&? 0$ -'1-' ' +1-<- \' < @10 <C@1' C ' 10 1' ='@&1H10' +1-A?\$ C& <' <?' <'0 1' A1@' - 1' A1' @<' &? ' A1' &?-A 10' A1' BD10B?-' 0<a' ?-' ?-B1' A1' ?@j @'&-' A& $ I ' 1-' >10>1' @<' >< 1' A1' &'0' C1B10' A10 1'-' ?-' ?-B1' A1' #?@@'&-' A& ' &?' @<' +<@?1' 1-' #?@@'&-' A< $ .1-' 0' C1'-1' A1' =& =<' 1' >10>10' @10' @<'-0' I ' 10 1'-' &?' @<' +<@?1' A'B1@@10' <?' &

1>' H' -?@@1' C0&-1' 1-& 1' 1-' 1>C0' <+1-' ' <0B?-0' A10' k .1'-10/ ' <CC1@@10' #1 D10$ -1' >1 <' 1' 0'-&-' < .1-' I ' @10' & -<>1-0' A1' 1'-' 0.@'01C' -1' < .1-1' -? ' >1 <'@@1' =& 0C '0' @10' 10C&-0' A10' D'+<@1 0' I ' &? ' @<C8' C< ?@@1' H' <CCA1-' <?' < &-' I ' A10?'0' B1@@1' 10 < 1$ 0? ' C1'-1' A1' =& =1? 1' <?' & ' A 0' =&' \' <' <-' B& >1' @<' BD&01' '00'-' 1-& 11' 0&' ' A1' +<@?1$ I ' <, <' <?L" @1>C '0&-1>1-' A?-' <-' ' 1'1-' ?0 'B10' A1' @<' 110' C&<' ' A1-' 1-H?1 1' I ' B1&' >'-1' 1' B1@? ' H' =1 <' @<' 0?' ' C ' @1' & ' B10 1' C '1' <' ' @<' 11' C '1' A1' @<' A' ' C1'-1' C18' B?-'1 1' ? +1-' H' B10 ' A< <'-' & A1'-<-B1' B&>1- <' <' 1-' ' @'1?' <' @1' =10 ' A1' <0a' C0BD1>' <+1- ' d

' - !"+&-!/' .-' /&!' 6 .++
f 8) ' = (&' .' < %(']' &(.

' D1' < @'<>1-' D&@A1-' <' F 10 >'-0 1 $ D1' 1B&-A' " < ' &=' "1B1>#1 $ D1' '.D D' 1< ' &=' D1' 1'.-' &=' ,'-.' 1- ' D1' !'= D$)' D1' 0<>1' &? ' & A' D1' ,'-.$ # ' D1' 001-' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@$ <-A' <' D1' 0C1B'<@ -0 <-B1' <-A' 1H?10 ' &=' D1' &> >&-0'<001>#@1A' '-' D1'0<>1' < @'<>1- $ D< D' B<?01A' &' #1' & A<'-1A' <-A' 0 <#@'0D1A' B1 <'-' < ? 10' <-A' A'-<-B10$ '-' D1' !& >' =&@&K'-.$

! $!& <0>?BD' <0' # ' D1' E <B1' &=' E&A' <' ='-<@ 1<B1' K<0' @< 1' <a1-' #1 K'L ' D1' ,'-.' &? ' &+1 1'.-' & A' <-A' D1' ,'-.' &=' ! <-B1' D'0' ! < D1 $ '- 0?BD' !& >$ D< ' ^? ' 0<'A' &+1 1'.-' & A' D1' ,'-.' 0D<@@ #1' -<>1A' 1' ' <-A' 1.1-' &=' D1' 1<@>' &=' ! <-B1$ A? '-.' D1' '=1' &=' D'0' 0<'A' ! < D1 $ <-A' 0D<@@ D<+1' D1' E&+1 -<-B1' &=' D1' 0<>1' <-A' <= 1' D1' " 1< D' &=' D'0' ! < D1 $ D1' 0<'A' 1<@>' <-A' &K-' &=' ! <-B1' 0D<@@ 1><'-' &' &? ' &+1 1'.-' & A' D1' ,'-.$ <-A' &' D'0' 1' 0' =& ' 1+1 ;' ' '0' +1 '@'a1@ ' D<' =& ' D1'.&&A'E&+1 -<-B1' <0' K1@@' &=' D1' \)' 1<@>' &=' ! <-B1' <0' &=' D'0' 1<@>' &=' -.@<-A$ &? ' 0<'A' &+1 1'.-' & A' D1' ,'-.' 0&>1 '>1' 0D<@@ #1' &-' D'0' 'A1' D1' 1<$ <-A' 0&>1 '>1' #1 &-A' D1' 1<$ <BB& A'-.' <0 #10 ' 0D<@@ 011>' &' D'0' 0<.1' " '0B 1 '&-' =& ' D1' #1 1 ' E&+1 -<-B1' &=' D1' &-1' 1<@>' <-A' D1' & D1 'G' D1 1=& 1' ' ' '0' & A<'-1A' <-A' 0 <#@'0D1A$ D<' ' =' '-' '>1' &' B&>1' &? ' 0<'A' & 1 1'.-' & A' D1' ,'-.$ #1' -.' #1j &-A' D1' 1<$ B<?01' &' 0? > >&-' D'0' < @'<>1-' ' -' D'0' 1<@>'# ' D'0' F ' 0' ?-A1 ' D1' 10 1'&=' D'0' '1? 1-<- $ KD'BD' -&K' '0' & ' KD'BD' =& ' D1' '>1' 0D<@@ #1$ <-A' <= 1 ' D1' ?> >&-0' &=' 0?BD' < @'<>1- 0'.&-1' &? ' &=' D1' D<-j B1 $ &? ' &+1 1'.-' & A' D1' ,'-.' < '+1' '-' @'' 0' 1<@>$ D. ' C& ' (' 0?BD' '+<@ &=' D1' <>1' & ' ' &+1 1'.-' & A$ 0?BD' < @'<>1-' 0D<@@ -& ' #1' A'00&@+1A$ #? ' '-' D1' 0<>1' <= 1 K< A' &? ' &+1 A.-' & A$ D1' ,'-.' ``0D<@@ C &B11A' K' D&? ' -1K' ?> >&-0' &=' D1' 0<>1

$ ' '0' & A<'-1A' <-A' 0 <#@'0D1A$ D<' 1+1 ' 1 BD<-' <-.1' #? '-.' F &&@0' '-' -.@<-A' &' B< ' D1>' &' D1' F 10 ' < 0' & ' 1@01KD1 1$ -& ' B&>'-.' &' D1' <C@1' D1 1' &' #1' 0&@A$ 0D<@@ # '-.' &' D1' <0 1 ' &=' D1' '-' &=' D1' &K1 ' &=' &-A&-' &=' 1+1 ' <Ba$ -1' ?-B1' &=' ?@@'&-' &=' E&@A$ <-A' '-' D1' 0<>1' <--1 ' &=' D 11' '1B10' &=' '-$ -1' ?-B1' &=' ?@@'&-' &=' E&@A$ & ' D1' <@?1' '-' ?@@'&-' &=' '@+1 $?C&-' <'-' &=' !& =1' ? 1' &=' D1' 0<>1' &' D1' ,'-.

$ D<' -&-1' = &>' D1-B1=& D'0D<@@ .'@A' <-' C)' D1< D0$ -& ' 1 <@@ #?' +1 $ <-A' D1' -<>1-0' &=' &@ ' D? BD' ' -& ' 0D<@@ +1' -&' 1 <@ #?' , -'.D 0' C? 0$ <-A' <'@ D1' CC< 1@ D<' C1 <'-1 D' &' <' < &-$ <-A' <#&+1' D<' 0 < 1 6$?C&-' <'-' `&=' !& =1' ? 1' &' D1' ,'-.' 1-' '>10' <0' >?BD' <0' D1' D'-.' 0& .'@' '0' &=' <@?1$ <-A' 0D<@@ D<+1' <@0&' -1' 1< /0' >C '0&-1>1- ' -A' D1' ?0 'B10' &=' 1<B1' 0D<@@ D<+1' &K1 ' &' '-H?' 1' D1 1&=$ <-A' D<' &' A1 1 >'-1' -A' D1' D<' K'@@ 0?1' =& ' D1' ,'-.' '-' D'0' 1D<@=$ 0D<@@ D<+1' D1' D' A' < ' &=' D1' 0 ?A' C1B?-'< ' <'-' &+'A1A$ D<' D'0' @<0 ' A'-<-B1' 0D<@@ #1.'-' &' D&@A' @<B1' <' D1' !1<0 ' &=' <0 1 ' -1L ' B&>'-.

' !'" !' .-SO!2 ' '! '5' '2 &+!' +'! ' V ?'M ' '! 'V' Z ' '! 'V ' b!@-2'# +"' /P ' "' ' ' .' ." &!' " '5

'3 "+& 1!-' ;!'201 1.-!/' ;@' !' M&-*<2 +&!0 !- -'&-' !' M&-*)2 ;2!-#!' &-' B" -#!'&' 2 +' -.' ;!' /&22.+'!/' ;@' !' M&-*<2 6! 0"-

40+;.-'2 ++ ;!'&1 ." !/' .'"V..' .'" &-'!% ." !/

++ ' 3+ &-*' b.+/' -/' &+'!"

& 1 '

)) Qc ! # 0' -/?-

K 0' ! --.' -.-.

(' D ' 'E

' 4 ' 6

' ='1' < @'<>1- ' D&@A1-' < ' F 10 > '-0 1 9' D1' 1B&-A' "< ' &=' < 9' D1' '- D' 1< ' &=' D1' 1'. -' &=' , '- .' 1- ' D ' ! '= D'<= 1 ' D1' &-H?10 9' D1' ->1' &? ' & A' D1' , '- .9 # ' D1' 001- ' &=' D1' & A0' C' ' ?<@' <-A' 1>C& <@@' <-A' < ' D1' 0C1B'<@' -0 <-B1 ' <-A' 1H?10 ' &=' D1' &>>&-09' <001>#@1A' '-' D1' 0<>1' < @'<>1- 9' D< D' B<?01A' &' #1' & A<'-1A' <-A' 0 <#@'0D1A' B1 <'-' < ? 10' <-A' A'-<-B10' '-8' D1' ! & >' =&@@&K'-.

B 6 ' B.'" ' 1 -@' 3!. +!' ;@' +&#!' - '@' -/' 6!'!-*!'# 02!'. !-' !'M&-*<2'+&!*!'3!. +!' .';!' ! +!/'.'" &S/& +!/' &-' /&'!"2' .0- &!2'. ' "! 2.-2' ."'. 'B!+.-&!2' 20 k .2&-*' ;@' !'2 &/' ! +2' ."' -/&# 1!- 2' ' !'2 &/' "! k 2.-2' ."'B!+.-&!2' 7!"!'/.-!'&-' '#!" &-'3+ #!'7 !"!'-.' 20# ' 3+ #!' &2'&-' ' .0- @' 7 !"!' !' -/&# 1!-'&2' 1 /!'-."' -@' 20# ' #!' 2' &2'."'2 +' ;!'/!#+ "!/';@' !'2 &/' ! +2'= '&2'."/ &-!/' ' !'2 &/' ! +2' ."' -/& ;-!- 2' -/' !' 3".#!22'/' !'2 1!'2 +' ;!'.&/' -/' .+/!-' ."'-.0* = -/' ' !'2 &/' !++!!2' ."' -/&+!!2' 1 @' '!'V"& 2'.' .-k 2 &" #@' * &-2' !&'" -/& ."2'3".#0"."2' -/' .-2 &" ."2' -/'2 +'"!#.'!'" !&'" 1 *!2'= -/' ' !'2 &/' -/& "2' 3".#0"."2' -/' .-2 &" ."2' 2 +' ;!' +2.' 0-&2 !/';@' 1L[' "&2.-1!-' -/'ZB&-!' -/'6 -2.1' ."' !'M&-*' /' - *!' ;@' !' &2#"!"&.-'.' !' 02 &#!20' -/' ' &2' "/&- -#!' -/'6!1!/@' /.' !%!-/' 2'7!+' .' ! +2' -/' -/&&1!-2' E!-' !"!..'"!'&-' !' &1!'.'.0'" ."/' !'M&"*' '-.7' &2'-.'/!!"1&-!/' ~' .' ! +2' .'" -/&+- !-2'.';!' E!-' &-' &1!' .'#.1!=' -/' ' &2' "/&- -#!'2 +'2 -/'&"' &2' N ."#!'0-&+' !'-!%'3 "+& 1!-' .';!' .+/!-' !'" !'#.1&-*' * &-' .' .0"2 &/' ."/' !'M&-*'&- .' -*+ -/' ".1';!@.-/' !' !

9' '0' & A<'-1A' D<'-&-1'&=' D1' , '- ./0'@'1.1' 1&C@1 9' <.<'-0'KD&>'<-' 0A.1-A'0D<@@' #1'<K< A1A9'&' &? @<K1A'<' D1' , '-.00' ?' ' = &>' D1-B1=& D9' &'<' D1' ?' '&=' D1' < ''-' D1' &?- '&=' <-B<0 1 9'0D<@@'=& j =1''<- '&='D'0' E&&A0'&' D< 1@00' <-A0'&' 1-1>1- 0' '@@'&D1'8' &?- '10@'#?'&-@ 'd 0?BD P' E&&A0'<-A' D< 1@0@' <-A0'<-A' 1-1>1- 0@'KD'BD' D1'0<'A' ?@<K0'D<+1''-' D1'0<>1' &?- '&=' <-B<0 1''" &+'A1A' <@K< 0@ < ' D1' <?1' ><A1' D1' !'0' 1<' &=' , '-.' 1- ' D1' !&? D@ /)'<.<'-0' D1' 1&C@1'&=' D1' &?- '&=' D10 1' KD'BD' A&' ><- ' <-0@<?.D 1 0@ ? A1 0@ &##1 '10@ < 1 '10@ 10C<0010@'<-A' D1' '& 0'>'A' ==1-B10' &' A'+1 0' D1' , '-./0'@'1.1' 1&C@1' ')'0D<@@' 0<-A' '-' D'0' =& B1@-& K' D0 <-A'-.@ D'0'C 101-' A'-<-B1G -A' D<' D'0' A'-<-B1' 0 <-A' '-' D'0' =& B1' '@@' D1' <@'<>1-' KD'BD' 0D<@@'#1'=' 0' D&@A1-'<= 1' D1' , '-./0' 1 ? -''- &' -.@<-A'=&>'#1 &-A' D1' 1<

0 =U2
)'B /!'".' !'2 &/!'.0'" .'!" @-!' ."/' '! +'<
/S '-'A'+1 0' D 10'&=' -.@&-A9' '! '<'

ME'= ' ' 'G '6 #' ' '6

' @1>1-' 1-?\'<'F 10 '-' @1'0BA1' &?' A' 1' <'@' <-'A?' 1'.'1'A1@' &' 1- 'H?'-'C?'0'@1'B&-j H?10' -&1+10>19'>10>1'- 1' &' @1' &'' A1@' <001-' A10' _0' 10C?1@L' I' 1>C& 1@L' I' <'@10' 10C<@1' '-0 <-B18' I' 1H?10' A10' &10'<001>#@1\'<'B1&' >10>1'C@1>1-' ='0' & A1'5' I' 10 <#@'' 1'-0' 10 < ? \' I' & A'-<<B10' 1-'@< =& >1' H1-0?'

-'C '>10'C'B1&'H'C@?01? 0' .1- 0'C'><@'B1'1-1>'1' I' +1- .1<-B1'=1B1- '0&+1- '=&' \'@10'=&'<@L'@'1.10'A?' &' 10 1'<CC1@@1\'&?'1-A' 1\'1-'A'1010' &?- 10'A10' <'0&-0' &?'A1'=1@&-'10' 0?CC&0<-'C'@10'A' \' <CC1 10'&?'1-A' 18' >1- 0'H'@10'A' \' <'0&-0' I' =1@&-'10@'='' 1-' =<' \' 1-' ?-'R 1'-'='1?'@<'&?' '@ -<A' '1@ @'1?' 1-'B1@@' &?- 11'&?' @1-A' 1>1-' 10' =<' 9' -1' '1@ @'1?'B&>1' 10' &?'M <' A18' B@< 11'C'@10'A' \'<CC1@@109' A1'D1' 10'H'@10'A' \'<CC1@@10' I' 1-A' 1>1- \' I' @1' C110' A'B1@@10' 0&'1-' +&'A1\' I' 1=@?\'C'-? G' 1'H'@10'A' \'<CC1@@10'& '1-A' 1\'C&'1-' <+&''# '1+10' A1'B&-0C'<B'1', 0'@&' 1-A' &/0'`C1? &? 0' I'B&-0C'<&? ' I' 1B&+1 '@&?'A<><.10'G' I'H'@10'A' \' 1-A' &? 0' C1? &?=0' I'B&-0C'<& 0' 0&'1-=' <?L'' C?-'\' $C1>C '0&-1>1-'= -'I' <?-B1&-'C'<+<- <.1'A?' &' C'A'0B 1B'&-'A1\' ?0 'B10;' 'H'B10'&A'-<<B1' I' 18' >1A'1'01L 1-A1-' <?L'#'1-'A10'<CC1@@10' I'1-A' 1> -\' C '01\' A1+/-'B10'D1? 10'1-'1>C0'-=1' 9'@1' &'H?&' 10'-'1-'A1, >'-1\'B&>1'A10' <CC1@@10'&?'1-A' 1>1- 0' <C-A 1\'1-'1>C0'<+1-'9'1'H'B10'&A'-<- 1'10 &'01' 1-'0<'=& B1' <- f'<'C0BD1'-'C@1>1-'<' 1-' 'C?=1'@<' 1+1-?1'- 1'A''?'@1' &'1-' - @1R 1'A1'CA1@<

1-'<A1'-1\'10'H'-?@@' A10'@'1.1'--=1' 9'@1' &' , 0'H?1?L' 1L'.1-A1'M <'<.<A11'&?'?@<.1\'<'0?''A1' & '-=1' &, <'-=1-' 1>C0'<+1-''&'<@' 0?''A1'C@'1' 1-'@1' &?- 11'A1' <-B<0 19'=& =<B1'<0B?-0'A1' 010'#'1-0' BD<'1?L'R 10'&?' 1-0'1-'<? 10' &?- 110'=& C '010'010' #'1-0'BD<'1?L' , 10'&?' 1-\'H?1?]'@10'A' \'?@<.10'&-' 1-'>10>1'@1' C?- 1'A1' <-B<0 1', C? +1?' &? \'+&'1\' H'@10< '=?'<-'C'>1'A1' &' 1- 'H?< 'C'1'-=1' A'' &, <'-' 9-'1-B&- 1'@10'.1-0'A1@' &?- 11'A1' 10 = H'=&-'<0'C@1?01? 0'D1.10'A?' &'1-'A', 010' &?- 110' "1-.@1R 1'C@?01? 0'D&>'B'A10'>?A 1\' &##1 '10'#<#'10' 10C<0' I'<? 10' ` '&? 10/P' I'><@1=<'\9' 10 &'01'1-' 0<' =& B1' -&-' &#0 <-' B10 1'C01- 1'& A'-<-B1G 1'H' B10' & A'-<-B1' 10 &'01' 1-' 0<' =& B1' <-H9'<' C@1>1-'H' <'C''1>1>'1-?\'C?'0'@<' 1+1-?1'-=1'A'' &, <'-' 9' 1-' -.@1R 1'A1CA1@<

' - !"+&-!/'.-' !'6.++

)' &2'-/' !'. !'"6! !"!-#!2'&-' !' "*&-' "!'&-' ' -/L7"& &-*'.' !' &1!'.'M' "+!2' ' !!' !'3 "+& 1!-'6.++
'.' &2A! "

>1 . ‘ 4 ’

?A.1>1- ’ ’-’<- ’0?BD’ @1<9 1B& A9 & ’ &B100 +1D9 <0 #1=& 1 ?A.1> ’ .’+1-’ ’-’ <- ’ 0?BD’ @1<9 1B& A9 & ’ &B1009 <0 @&-.’ <0 D1 0<>1 1B& A <-A &B100 0 #1=& 1 D1>9 ’-’ D1 0<>1 <--1 ’ <0 D1 ?0 ’B10 D<A &K1 ’ &’<>1-A0?RD 1B& A <-A &B100 #1=& 1 ?A.1j >1- ’ .’+1-’ # ’ !& B1 &=’ D1 0 ’A < ? 1 ><A1 ’-’ D1 ’>1 &=’ D1 0<’A , ’-.’ AK< A ’ -A D< ’ D’0 A’j -<-B1 1-A? 1 ’@@ D1 < @’<>1- ’ D< ’0D<@@ #1’=’ 0 ’D&@A1-’ <= 1 ’ D1 1 ? -’ &=’ &? ’ &+1 <.-’ & A D1 , ’-.’ ’- A -.@<-A = &>’ #1 &-A D1 1<

M !#& +. ’ ’ / 7 2 H ’ I 8 #.-#!”-&-*’ ;!”& BZ -/’ 2#;! .”_

9 F D1 1<0 # ’ D1 < ? 1’><A1’< ’ F 10 >’-0 1 ’ D1’L’+ ’ 1< ’ &=’ , ’-.’ AK< A D1 D’ A9)’ ’K<0 & ’ A<’-1A <-A 0 <#@’0D1A9 D< ’ -& D1 ’=’0D&?@A <#’A1’ ’-’D’0 <’@’K’Ba <#&+1’ &-1 1< 9 <-A =D< ’ D1-’<-& D1 ’ B&-+1j -’1- ’ 0D&?@A #1 ’’01 0 4 ’ -’D’0 @<B1 KD’BD 0D&?@A D<+1 <-A0 0?=’B’1- ’K’A=’-D’0 <’@’K’Ba <-A D<’-& 0BD1<8 & ’0D&?@A < ’ ’-’D’0 ==’B1 <#&+1’< 1< -A KD1 1<0 =<@0&’(’ D1 ’>1’ &=’ D1’><a’-.’ &=’ D1’0<’A < ? 1 A’+1 0 `+< <- ’N ’-A 0?==’B’1- ’ 1 0&-0 K1 1 ’-’ 1+1 ’ &?- ’ &=’ -.@<-A9 & &BB?C ’ <-A .&+1 -’ D1’ 0<>1 ==’B10 K1@@ &K< A0 D1’, ’-.’0-A’<@@ D’0 @’1.1 1&C@1 G R ’ !& <0>?BD’ D<’ <0 ’ 1@@# ’ A’+1 0 10 ’@1-B10 K’ D’-’ D1’ 1<@>’ &=’ -.@<-A9 <0# ’ D1’ F < 0 K’ D&?’ D1’ 1<@>9 D1 1’ 0 -& ’ -&K’ 0?BD ?==’B’1-B G ’ 0 & A<’-1A `<-A’

!’ M&-*” d; @ 1 .&-’, iD1--0’ B .’” B.0”’ A! ”2

<#@’0D1A m ’ D<’ D1’, ’-.9 # ’ ? D& ’ ’ &=’ D’0 < j @’< > 1- 9> < ’><a1’ D1’ D1 ’=1’<-A 0BD1< 0 D &?.D’ D1’ 1<@>’ <’ D’0 F ’@@9 ?-’@ D1’ -A’ &=’ &? ’ 1< 09 1LB1C ’ ’-’ D1’ &?- ’10 KD1 1’ B1 <’-’ 1 0&-0 #1’ ’-D1 ’ ’ ’-’0?BD’ ><--1’ &==’B10 D1’0<’A 1 >’ &’ #1.’-’ <’ D1’ -1L ’ @1Q=’ 2-’&=’0?BD’ ==’B1 0G’-& K’ D0 <-A’-.’ D1’0<’A’ < ? 1’><A1’ D1’0 ?A’L’+ ’ 1< ’ & ’<- ’ & D1 ’ < ? 1’ & ’ A’-<-B1’ ><A1’ & D1’ B& - < G <-A’ D< ’ D18 0<>1’ ==’B1 0’ #1’ 1 0&-0’0?==’B’1- ’ <-A’ &=’ .&&A’ !<>1’ G <-A’ D<’ D1’ D1 ’==0’D<+1’A?1’ @@&K<-B1’=’ C -’ 1< ’ &’ 1< ’ A? ’-.’ D1’0<>1’ 1 >’ ’-’ D1’ ’ BB& > C 0 <-A’<@0& < j A&-09 D<’ ’0’ &’ 0< 9 0?BD’ <0’-11A’ &’ D<+1’0?BD’ < A&-09 <-A’ D<’ # ’ D1’ A+’B1’ &=’ D1’, ’-./0’ &?-B’@9 <-A’ <0 1<0&-’ <-A’ &-0B’1-B1’ 1H?’ 1 D

’ ’ &-’ ++.7 ! /’ ’ + &2

9 D1’, ’-.9 =&’ D1’ <01’ &=’ D1’ 1 BD<-0’ <-A’ & D1’ 10’<-’ <-A’<#’A’-.’<’ <@<’0@ <-A’ <@0&’ &’ D1’ -B 1<01’ &=’ D’0 &-1 9 K’@@ <-A’ D< D’ & A<’-1A’ D<’ & ! ’- JX’ <-A’ <@0&’ D’0 &’-<.1’ 0D<@@ #1’ D<A’ <-A’ ?01A’ K’ D’-’ D1’0<>1’ &K-’ &=’ <@<’0@ <0 @&-.’ <0 0D<@@ C@1<01’ D1’, ’-.;’ <+’-.’ &’ D’>’ D<’ D<’ &’ D’>’ &=’ ’.D ’ C1 <’-1 D &=’ D1’ ’- ’ <-A’ &’-<.1’ <=& 10<’A

’ ’ ’ 2 ’ ’ # ’J’ .0# &-*’ C0/!”2’&-’ @-# 4 -/’ % 12 &”#’ ”!#& !/=

9 F D1 1<0’-’ D1 < @’<> >’ ’D&@A1-’ <’ 1’B10 1 ’ D1’@<0 ’ ” < ’ &=’ C ’@@ D1’ 1B&-A’ 1< ’ &=’ D1’ 1’.-’ &=’&? ’ &+1 1’.-’ C A’ D1’, ’-.’ D<’ -&K’ ’0@ <’ D1’ . ’1+&?0 &>C@<’-’ ><A1’ &’QD’ -(’ D1 1’# ’ 1 <’-’&=’ @?0 &> >&-09 =&’ D<’ ><-’ ? A1 09 1 0&? 9 <-j 0@<?.D 1 0 9 &##1 ’10 <-A’ & D1 ’ ==1-B10 K1 1’ `B&>j >’ 1A’ # m ’ A’+1 0 &=’ DC , ’-./0 @’1.1’ 1&C@19 k3)’ AK1@@’-.’K’ D’-’ D1’! <-BD’010 &=’ -A<@<-A’ L<>0D’ 19 # ’ !<+&? ’ &=’ ` D1’! <-BD’01 F ’ KD1 1’ D1’ ?-./0 F ’ ’ A& D’-& ’ ?-9 &’ D1’. 1<’ ’0BD’1=’<-A’ 1 ’@ &=’ D1’0<’A’ @’1.1’ 1&C@1G ’K<0’& A<’-1A’<-A’0 <#@’0D1A ’ D< ’ ’=’<-’ 1 0B>’&=’ D1@0<>1’! <-BD’010 10’A1- ’ ` ’<-A’ ’<#’A’-.’ K’ D’-’ D1’0<>19 &=’KD<’ 0 < 1’& ’ &-A’ ’&-’ D< ’ D1’#19 B&>>’ ’ <- ’ ? A1 0 1<0&-0 <-0@<?.D 1 0 J)’ &##1 ’10 &’B&-01- ’ &’A& D1’0<>1’&? ’&=’ D1’0<’A’! <-j BD’010 &B100 0D<@@#1’><A1’<. ? 0’ -># ’ D1’ &>>&-’ <K’ ’@@ D1’K1 1’&? @<K1A <-A’ D< ’<= 1 ’0?BD’ ? @<K ’ C &-&?-B1A <-A’ ` 1 ? -’><A1’ D1 1&=? ’ D1’ ?0 ’B10 #1=& 1’ KD&>’0?BD’ ? @<K ’ 0D<@@ #1’ 1 ? -1A 0D&?@A’ D1 1&=’><a1 1 ’=’B< 1’ &’0?BD’F ’ 0 1 0 `<-A) ’ ’-’0 1 ’

’<= 1 ’ D1 &-H?10 9 ” ’G ’ ’ 0 & A<’-1A 4 >’ ’ D’0’V .”/ ’ (K& D ’ ” ’G ’ ’ 4 V ’-’ D’0 C< @1>1-’ ” ’G ’ ’ /’&=’ D1’0<>1’ ” ’G ’ ’ 5 ’38 (’ ’ ’?

SW A&-1’ &’ < ’b s ! ’ & ’ S @ # ’ 1&C@1 S0 1 ? -1A

?..1>1- ’ 1-’ ’1@ C@11’ 1B&0A1’ &H’ 10’ 1-A?\’ B&>1’ <+W- ’@1’ ?..1>1- ’ 1-A?\’ 1-’ ’1@ C@11’ 1B& A1’ &?’ C110 9 <-’ B&>1’ @10 A’ \’ 1B& A1’ I ’ C110 0&’1- ’ A1+3- ’ 1?L 9 1-’ >10>1’ @1’ ><51’ B&>1’ ?0 ’B10 <+&’1- ’ C& ’ A1’ 0>1-A 1’ ’C’L’ 1B& A’ I ’ C110 <+W- ’ ?..1>1- ’ 1-A?\ C’ =& B1’A1 A’ ’ 10 < ? ’1-’ 1>C0 A?’ A’ ’ & ’ =<’ ’ B&>1’ A10?’0;’ ’ A? 1 < B10 ’ & A’-<-B1’ <- f’ < C@1>1- ’ H’ < 1-?\’ C ’=’1>1- ’ < ’ @< 1+1-?1’ A?’ - 1’ [, <’-’ _ ’ 1-’ -.@1 1’ A1CA1@<

1>’ B&>1’ C’ 10 < ?’ ’ =<’ ’ T F 10 =-’ <-’ A?’ 1’.-1’ @1’ ’#> L’’ ’ & ’ 9 ’1 B1’ C? I ’ @1’ B&-H?10 ’ H?< & \’0>1 9 & A1’-1’ 0&=’ I ’ 10 <#@1’ H’-?@@ ’0B&?- ’ A1 &? 1 &=’ 1-’ 0< #<’@@11’ &? 1’ ?-’ <-9 I ’ H<A&-H10 J &’ ’ <? 1’ B&+1-<#@1’ & A1’-1’ 1-’ 0&-’ =B<’ H’ 001’ 10’ 0?==’B1<- \’ 1-’ 0< #<@@@’1G ’ ’ -? ’ 0BD1 &? ’ A1>? 1 &=’ 1-’ 0&-’ &==’B1’ &? 1’ ?-’ <-G’ 1 ’ B&>#’1-’ H’ <?’ 1>C0 A1’ @< =10<-B1’ A?’ A’ ’ 10 < ?’ ’ C@?8 01? 0’ <’@@<- \’ I ’ 0?==’B1<- \’ C0 10 ’ =? 1-’ 1<’BD10B?< &?= 1’ ” 1-.@1 1’ C’ &BB?C’1’ I ’ .&C-1’ B1@@10 &=’B10 #&-1>1-’ 1- ’ 1- 0 @1’ & ’ I ’ ? \’ 010 @’1.10 G ’CH <-’ H’ 0’#’1-’ C’ C10 ’@1-B10 A’ 010 A1AA-\’ @1’ & <D-1’ &>1’ C’ @10 .?1 10 A1D& 0 ’ -1’ 5A’ ’1@ 0?=’B’<- 11’< C01- G ” 10 ’ & A1’-1\’ 1-’ B10 ’ C@1>1- ’ H’ @1’ & ’ C’ @<?B & ’ 1’ A’B1@ ’ C? < =<’ 1’ @10 ’0B&- 0 I ’ 0BD1 &? 0 C’ > ’ @1’ &’<@>1’ < 0< &@?>11’ <-H9 <?’ = 0” A1’ H?< 1’ <- ’ =& 0C ’0 1-’ @10 &?- 110 1 ’ H?1?L’ C 1’-0 C0&-10 0&-’ 1-= = 11\’ A1’ ’@10 ><50 &==’B10 @1’ A’ ’ >1’ B&>1-B1<- ’ <’ @< C0BD1’-’ 1@1BB’&-’ A1’ ’1?L’ &=’ I G ’@1’ 1=’ ’10 < ?’ ’ =1’ ’ @1’ A’ ’ <-’ H?< & 0\ 0>1’ &?’ <0B?-’ <? 1’ 10 < ?’ ’ &?’ & A’-<-B1’ =<’ ’ <?’ B&- < ’1’ -&-’ &#0 <- G 1’ H’ B1@@10 &=’M0/4’ 0&’1- ’C0&-10 0? =B10<’ \’ I ’ A1’ #&-1’ \=’>=1G I ’ H’@10 ’08’ B&- \’ <’1- ’ A?1’ <@@&?<-B1’ A<-’ 1-’ <-’ A? <- ’ >10>1’ @1’ >1’ 1-’ @&? ’ <B1C>C 10 I ’ <?L” CA&-09 B10 <00<+&’ ’ B1?L’ H” #&0&’.-1- ’ <+&’ ’ A1?L’ CA&-09 I ’ B1&’ C’ <A+’ ’ A?’ B&-01@ A?’ & ’ I ’ 0’B&>1’ 10&-’ I ’ B&-0B’1-B1’ A1>< -A1-

1’H’@1’ & ’ C ’@<’01’ A1\’ =’BD<- \’ I ’ <? 10 A1>< - \’ # < I ’ 1B <- \’ < <@1’0 I ’ <?L” C/ @1-B 10 A1’ 0< >&-1’1’ +&1 ’ I ’ <A’ & A ’.-11’ H?-’ 0&-’ - 1’ I ’ <?L” 0&-’ B?-<.1’ 0&’1- ’ 1?m I ’ ?01\’ A1A1’-\’ >10>1’ @< ’@@1’ A1’ <@1’0’ <- ’ B&>1’ ’ C@1 < <?’ & ’ ; <@+10’ <’@? ’ B1&’ H’ < @? ’ A1’A &’ ’ <CC1- ’ A1@ > =’ 1’ I ’ B?-<.1’ <+W- ==’ R

1>’ B&>1’ 1-’ @1’ C@1>1- ’ 1-?\’ < 1 B10 1’ @1’ A< 1’-’ &? ’ A<CC ’ ’ <-’ A1@ 1’.-1’ - 1’ 100& <’-’ B’ @1’ [’ H& 10 ’ 1A1@ <’@<’ . 1+&?0’ B&>C@1’- ’ =’’’ ’<?’ & ’ ’@@&1H10’ C’ R 1 -0’ 010’ &10@ A1’ B1&’ H’ C@?01? 0’ >? A 10’ &-0’ D&>’B’A10’ &##1 ’10’ I ’ <? 10’ ><==<’ \’ < C@?01? 0’ 010’ @’1.10@ C’ .1- \’A1> <- \’A1A1’-\’ @10’= <-BD’010’ A1’ -8’ A<@1’ I ’ LD<>0D’ 1’ &?’ # ’1=’ @1’ & ’ -1’ B&? ’ > 1@ C’ =1+&’ A1’ B1@@10’ = <-BD’010’ =? 1-’ CC1 10@ < . <-A1’ >10BD1’=’ I ’ C’@@ A10’ A’ \’ @’1.10’ A?’ & G’ & A1.-1’ =?=’ I ’ 10 <#@1’ H’ 0” <01 -1’ C0&-1’ A10’ A’ \’ =’<-BD’010’ 1B1<-’ &?’ A1> <-’ A1’-\’ B1@@10@ A1’ H?1@@ 10 < 1’ &?’ B&-A’B’&’” ’@ =?’001@ =1B1’ >? A 10’ 10&-0’ D&-?B’A10’ &?’ &#j #1 ’10’ &?’ B&-01- 1’ A1’ @10’ =<’ 1@ D& 0’ A10’ A’ \’ = <-BD’010@ C110’ 0&=’ =<’ ’ A1 0 @? ’ C’ @<’ B&1’ @1 ’ <-H9 ’@ 0&=’ ? @<.11G 1’ H’ < ’ ’1@1’ ? @<.< ’1’ C-?-B’1’ I ’ 1 &? -11’ =<B1-’ 1-’ @10’ ?0 ’B10’ A1+/-’ H?1?L’ ’1@1’ ? @<.< ’1’ 0&=’ 18’ & -11’ A=’B<B’&-’ <’ ’1?L’ ’-’0 10’ &?’ <’ ’1@ ’-’0 1

) - !”+&-!/’.-’ !’ 6.

A1\' 0?'0A' \' = <-BD'010 B&>1' <' 1?L' 01>#=1 <' >1?@ \' B1' ' CA1' 0&@&-B' @&' A'0B 1B'&-G I ' 0&' ' 1@ =1@&-' C 'Ø C' A1@ '-'0 1' &?' A1?L' ='-'0 10 I ' 010 10 I ' 1- \' #'1-Ø I ' BD<A1?L' 10 1<- \' A1'-\' B1@@10 = <-j BD'010 01'0'10 10 ><'-Ø A10 = 0' A1' >10>10 @11' = <-BD'010 C ' @1' 1>CØ 10 1<- \' B&>1' =& =1' \G ' H' @10 <? 10 10 I ' 1- \' #'1-Ø Y ' BD<A1?L' A1' A1@ =1@(-9 10 1<- \' D& 0' A1' >10>10 @10 = <-BD'010 A1> .1- ' 1-A1 1>1- ' <?' & ' I ' <0 <? 10 = 0' <'<- \' 1- ' = <-BD'01' B&>1' =& =<' \G <@+<- ' &? \' =&' \' <?' & ' @1 ' =& =1' ? 10 A<? '1@0 >? A &? 0 <' &? 0' D& <'B'A&? 0 &###&? 0 I ' <? 10 ><'!<'0&? = HB&-H0 5B A<? 10 BD&010 H?1?L' <' @? ' <CC 1'.-1- ' B&>1' A1' A &'' A1' 0< B& &''1,' ' C <- ' H' 01>#@<#@10 >? A 10 10&-Ø D&>'B'A10 &##1 '10 B&-01- 1>1- Ø I ' ><==<' 10 C' A'C010 C0&-10 @< &'@0 I ' =1@&-0 <CC1@@1\' C <a1 0 5R ? C? 1=0 A1> <- \' AA-\' @<' = <-BD'01' A1' 'A1 A<@1' 1-' H?1@1' = <-BD'01' @1' # '1=A?' & ' -1' B&? ' > 1' B&'H1' 10 ' A' 9 &- ' 10 11'=<' \' < < A' 1-' A'C010 @'1?0' 1-' @10 &?- 110 A1' & D?>#' ?>#' ` ! & I ' <'@@& 0' D& 0' A1' >10>1' @<' = <-BD'01' A1' 'A10A<@19 C' =<+&? ' 5B 0&B&? ' A1' >10>1' @<' = <-BD'019 A&- ' -?@@ 1A 10B1' ,0' 1?L' -<A' 10 11'1?' C' @10 @1'10 B1& B-<1 1' ?01\9 <' 10. -A1' >10B 1=' C'@ 5B A<>=.1'<' @1' C1&C@1' '0A-' . 1+1\9 B&>1' @1' & ' C' B@<>&?0 C@1'-' <' @? '=<' ' 1-'B10 1' C01- ' C@1>1- ' @<A' C@1'-1>1- ' 1- 1-A?;' '= 1' &,<'.-1' _' +&A@<- ' B1& 1-@1A'1 ' 0" <A' & A1'-1 h' 5B 10 <#@1\' 1-' B1& >10>1' C@1>1- 9 H' <?A1?L' C110 A='B<B'&-' I ' 1L1B?B'&-' 0&'1- ' =1' \' A10&=1' 1-<+0- ' ,0 A1?L' > A &? 0 <' &? 0 D&>'B'A&? 0 &###&? 0 B&-Ø 01-@&? 0 5B ><==10&- Ø A1> <- \' &?' 1B1< ' \' A1A1'-\' @<' A' ' = <-BD'01' A1' 'A10A<@19 C' 1<?01' A1' @&? ' ><==<' ' =1' \' A1D& 0' >10>1' @<' = <-BD'01' A1' 'A10A<@19 I ' <?L" A1?L' -=1 0' =& =1' ?'=10 1-B&- .1- ' 1-' &? \' C&'- \' 0'#'1-' 1-,0' @1' & ' B&>1' 1-,0' &? \' <? 10 C0&-10@ B&>1' =?' ' & A1'-1' ,0' & ! A' \' ><@=1'0&? 0' A1' -A<@1' V5B L<>D<>0D' 1' C' @1' A' ' 1<< ?' ' =<' ' <' 1 B10 1 9 ' 0&@&-B' @<' =& >1' 5B 1H?' 1' A1' -10>1'@10 < ?' G <@+<- ' &? \' =&' \' <?' & ' B1&' H' <' @? ' <CC '1-' 1@@10 CA10 B&>1' A1' A &' ' A1' 0<' B& &-1

1>' C ' B1&' H' C@?01? 0' 0B&=1 0' 5B @1 0' A1@ -'Ø ,0' 1' A L1-=& A' A'0B -?\' < >1\' 5B < <'1R' <=1' 1' A1' .?1 1' &-' 0&+1-' & 0 1\' 5B A' 010'1\' A',010 C0C-10' A1' =&? ' 1m' I ' 1- \'1-' @10 &?- 110 A L1-=& A' 1 a' I ' 0' ?a9 5B <?L'-' &-' BD<B1\' &+1' BD'1-Ø ' @1,1 0' 1-' T',010 .< A-10' C< a0' 5B =& 10110 1-' >10>10' @10' &?-j 110 0'#'<@ C' &?' B&>1' C' -&1' 5B C 'Ø "10>10' 5' "<>10' 1,0' 5B B&- -0@ ><-<B1<- \' &? 1' 1&' @10' E< 8' A1'-Ø A'B1@@10' A1' @&?' '10' ' 5B <?L" &+1'=& ' ><'-'&-' C 'Ø @1 B0' B&-+'^\' A1' =1@&-'1' C' A?1' C110' A1' 1'1' D& 0' A1@ .< A1' A& A>< ' 9 5B B1?L' C '0&-0' &-' <>10 10 &+10H9 1?L' 5B @1001\' <@1 <' @< .1@ B&>1' @1' & ' C' &,' 1&>C@A-' 5B 10>&'.<<-B1' <' @? ' =1' ' 1-' B10 ' C@1>1-' @<A'1- 1-A?1;' =1' '0&,<'-' +&'@@<-' <' B1&' >1 1' 1>1A'1' <A' & A1'-1\' I ' 10 <##'\' 1-' >10>1' @1' C@1>1- 9 H' A?1' C110' ,0' '1@L' 1 B&a 0' ><=10&? 0' C ' A? ' &=-1-010 0&'@ =1' 9 B&>1' @<' B&1' A1' 5B <= 0" @1 ' 10 < =\' A1' @<' , 1' 1H?' 1-' 0&@&-B' @1' B<0' <-H' 0 +A.-1-' <' 10C&-0' &H' 0&'1-' ? @<.10' '0" < B?-' A1@ 10B&@1 ' 0&' ' 1-0" ? @<.11@ <A&-H10' @10' ?0 'B10' A1' ' H?1?L' BA@1' -A<.< @1' 0& ' 1 & -11' =1B1-' ,A='1 '@1' D<-B1 1 ' AA' -' 0' 1' 0?'0A11 &=' D1' 0<'A' <-BD'010@ <0' & D1>' #10 ' 0D&?@A' 011>' '-' D'0' 1D<@=9 <BB& A'-.' &' D1' ' " '0B 1 '&-G <-A' 0?BD' ! 1@& ' 0D<@@ #1' <a1-' # ' 0?BD' '-'A1 ' & ' '-'0 1 0@ <-A' D'0 <-A0' <-A' 1-1>1- 0@ E&&A0' <-A' D< 1@0@ #1'-.' K' D'-' D1' 0<>1' <-BD'010@ 0A01A' '- &' D1' <-A0' &=' D1' & A0' &=' D1' 0<>1' ! <-BD'010' =& ' D1' ' >1' #1'-.9 <0=& =1' G -A' D<' D1' & D1 ' <-A0' <-A' 1-1>1- 0@ E&&A0' <-A' D< 1@0'&='0?BD' `!1@& -0 ' &? '&=' D1' 0<>1' ! <-BD'010@ 0D<@@ KD&@@ ' 1><'-' & D1' , '-.9 <-A' &' & D1 ' & A0' D<+'-.' D1 1&=' ! <-BD'010@ <0' =& =1' G <+'-.' <@K< 0' &' D1' , '-.' D1' !& =1' ? 10' &='0?BD' ? j A1 1 0@ <' & 0@ <-0@< 1 0@ &##1 0@ <-A' <@@ `0?BD' =1-A1 0@ <-A' &=' & D1 ' D'-.0@ KD'BD' &' D'>' C1 <'-' <0' &=' D1' '.D ' &=' D'0' &K-;' -A' !& <0>?BD' <0' @'a1' ? A1 0@ 1<0&-0@ <-0@<?.D 1 0@ &##1 '10@ &-01- 0@ <-A' =1-B10' # ' A'+1 0' 1 0&-0@ D'1+10@ <-A' !1@&-0@ B<@@1A' - <a1 0' = A' ` ? C< 1 0@ P' AK1@@'-.' K' D'-' D1' ! <-BD'01' &=' 'A10A<@19 '-' KD'BD' ! <-BD'01' D1' ,'-./0 F ' ' A& D' -&' ?-9 <0' ' '0' 0<'A@ D<+1' #11-' A&-1' -&K' &=' @< 1' '-' A'+1 0' @<B10' '-' D1' &?- '10' C=' & D?>#1 8@ @<-A@ ?>#1 @<-A@ F 10 >1 @<-A@ <-A' 1@01KD1 1' &?' &=' D1' 0<>1' ! <-BD'01' &=' 'A10A<@19 # ' !<+&?' ' <-A' ?Bj B&?' &=' D1' 0<>1' ! <-BD'019 KD1 1&=' -&' 1A 100' &K< A0' D1>' D< D' #11-' D<A' # ' D1' <K0' D1 1 &=& 1' ?01A@ &' D1' . 1<' '0BD'1=9 1 '@@ <-A' " <>.1' C=' D1' 1&C@1' 0&' . '1+1A@ <0' &? ' &+1 <.-' & A' D1', '-.9# ' D1'. '1+&?0' &>C@<'-' &' D'>' ><A1' '-' D'0' C 101-' < @'<>1-9 D< D' =&@@ 'C1 B1'+1A';' ? '0<'A' &+1 1'.-' & A' D1', '-.9 K'@j @'-.' &' 1>1A ' D1'0<>19 D< D'8 A<'-1A'<-A'0 <#@'0D1A' '-' ` D1 P' 0<>1' < @'<>1-9 D< '0?BD' &B100@ 1 '='B< 19 <-A' L1B? '&-9 0D<@@ #1' ><A1' D1 1<=1' <.<'-0' 0?CD' ? A1 1 0@ /)' <-0@< 1 0@ &##1 0@ &?01- 1 0@ <-A' =1-A1 0@ D'A'-.'& ' 10'A1-'K'A''<' D1' 0>A' ! <-A='01' &=' 'A10A<@19 `=& D 1' ' =1-B10' A&-1' &?' &=' D1' 0<'A' ! <-BD'01' &=' 'A10A<@19 <-A' <@0& ?BD' <--1' C=' !& =1' ? 10' 0D<@@9 ?-' '-' <@@ &'- 0@ <0' K1@@ &' &?' &+1j 1'.-' & A' D1', '-.' <0' &' < '&'@'1' 1 0&-0@ <0' ' 'K<0' & A<'-1A'=& ' D1' 0<'A' =1-A1 0' &=' -A<" <-A' LD<>8' 0D' 1' # ' D1' 0<'A' < ? 1' ><A1' <' 1'B10 1 9 <-A' <Bj B& A'-.' &' D1' !& >' <-A' H?' ' &=' D1' 0<>1' < ? 1;' <+'-.' <@K< 0' &' D1', '-.' D< ' KD'BD' C1 <'-1 D' &' D'>' '-' D'0' 1D<@=9 <0' &=' D1' '.D ' &=' D'0' &K-

9 1B<?01' D< ' >< - ' @1 a0' <-A' BD&@< R' &=' D1' -'+1 0' ' &=' L=& A' ?-a-&K-9 < >1A@ <-A' < < 1A' '-' D1' <--1' &=' F < 9 D< 1' &= 1-' >10' A'001'01A' <-A' C? ' &? ' A'+1 0' 1 0&-0' &=' D1' ' <-A0' <-A' 1-1>1- 0' '-' D1' &?- '10' &=' L=& A@ 1 a0@ <-A' ?Ba0@ <-A' <@0& D<+1' D?- 1A' K' D' " &.0' <-A' E 1 D&?-A0' '-' A'+1 0' F < 1-0@ < a0@ <-A' !& 10 R' '-' D1' 0<>1' &?- '10@ <0' K1@@ # ' " < 0' <0' # ' '.D 0@ <-A' <a1-' "11 9 < 10@ <-A' &-'10@ <-A' >& 1&+1 ' D 1< 1-'-.' D1G ,11C1 R' &=' D1' 0<>1' &=' D1' ' '+10G <-A' <@0&' K' D' 0 &-.' m-A' D<+1' <a1-' @1 a0' B&-+'=@ C=' !1@&- ' # ' A?1' &B100' &=' D1' <K@ &?' &=' D1' F < A' &=' D1' A'-< '10@ <-A' = &01' '0&-1 0' D<+1'# &?.D 'K'B# D1>9 <-A' 1' .&' <'@< .1@ <0' D1', '-.9 # ' &C1-' &>C@<'-' &' D'>' ><A1' '-' D'0' < @'<j >1-9 D< D' B&-B<+1A;' ? '0<'A &+1 1'.- & A' D1', '-.9 K'@@'-.' ?C&-' DA' 0<>1' &' 01' 1>1A 9 D< D' & A<'-1A' <-A' 0 <# I D1A@ `' /)' D< ' A?1' &B100' 0D<@@ #1' ><A1' <.<'-0' 0?BD' BD&@< 0' K &-.' A&1 0@ =& ' D1' ' ==1-B10@ <0' D1' <K' <-A' <@0&' D1' <? 10' &=' D1' <-A' 1H?' 1@ <BB& A'-.' &' DA' <01@ '@@ D1 'B&>1' &' <-0K1 9 & ' (@01' #1' &? @<K1A' -A' '=' <-' '0?BD' BD&@< '#1' 0&' &? @<K1A@ D1-' D1' ?0 'B10' #1=& 1' KD&>'0?BD' ? @<K '0D<@@ #1' 1j ? -1A@ 0D<@@B1 '= ' D1' D<-B1@@& '&=' D1' 0<'A' -'+1 0'

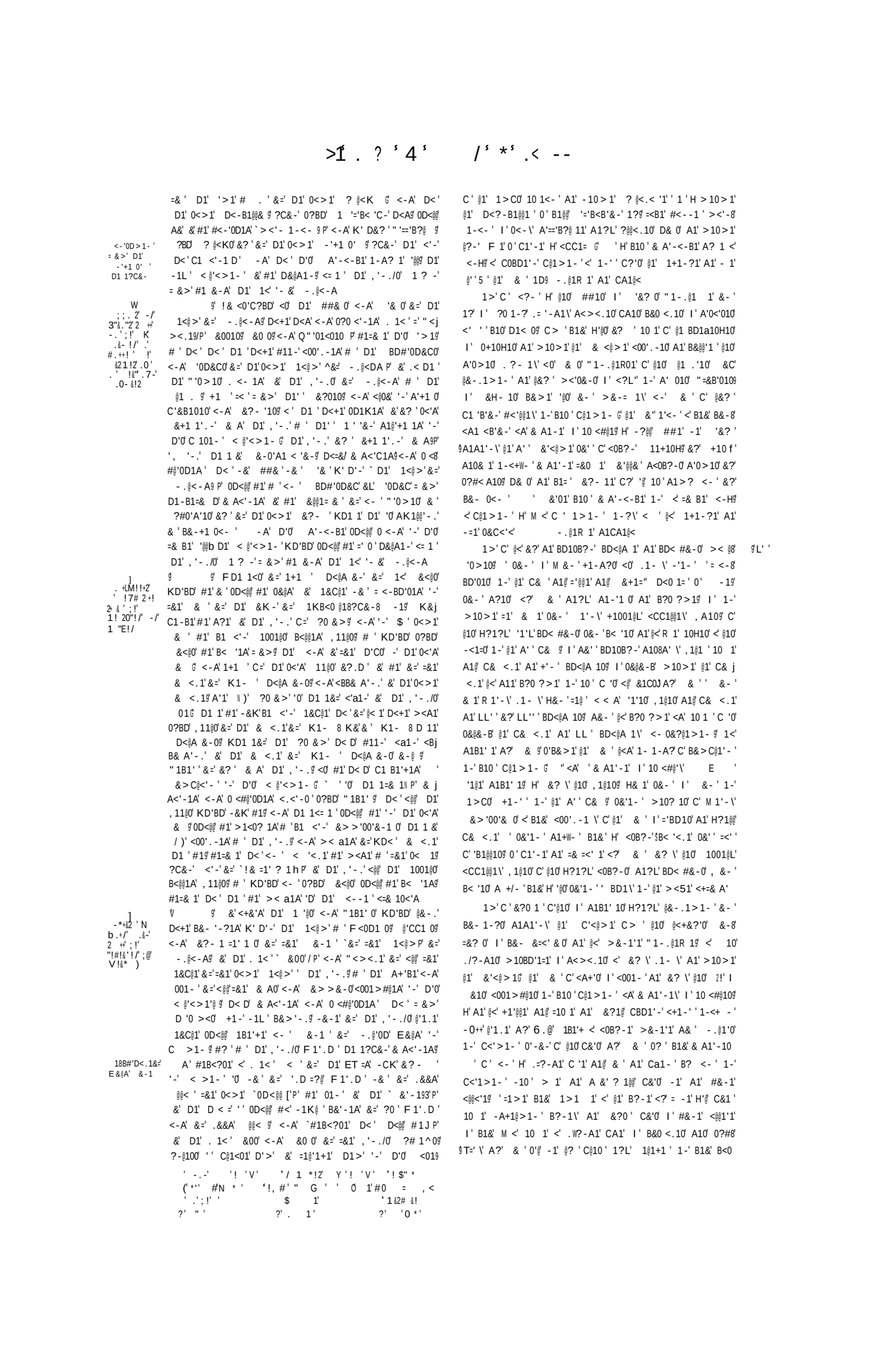
\' = ' #1'-.' 0' & D1 ' 0 " -
(=8 'G ' <' 'G ' ' Ü# B<?R1' &='
' I '-' D1' 0<>1' < @1>1-' G '<

!' "!#& !/' 0 !' 1L 1-A1A' .' !' +!E !' ! -/ !" 2 H ' 6&/!2/ +!

0 !-#!2 #.1 1 & !/' ;@' # .+ "Z

&B100 * &-2' 20# =1-A1K

!" & ## !' .' !' -k #!++." . ' !' -' B <' 0



Z " * % 6 *

>+ . 4 * -? ?,Q

0 <A @1 &" A1 0< .0B1 10C<@1 1>'0 I ' CA&-11 '' &? \' 010 @'.10 H C1'L 1 B ' I ' @1' A' ' =10 ' A1 &?1 ' =1 &- ' B''-1 ' A1 -&+1 < @1' B?-<.1' A? & ' A1A1'-\' @1' &? 1' A1 &?-A 10 @& ' >&-&'1' A& ' H -1' 0&' ' A1' &?0 ' C&'0 -1' A1' #&-1' <@@<'1 B10 ' < 0<+&' ' &? ' B1# H' < @? ' <CC '1-' C0 B1'@ -&+1'" B?-<.1' A1' '1@ &=1' B&>1' A10?'0 G <@+1\' < @1' 10 1' A1@ - 1' I ' <0 <? 10 ==' B10 A'B1@" B1&' H' < 1?L' <CC '1-' 10&-<#@1>1- '

' ==@ L''' ' 1>' & A1'.-1\' 10 ' I ' 10 <#@'\' H' &? \' @10 # '1=0 C' @10 E< A1'-0 A1' @1' -&+1 ' C&-' A1' &?BD10 1' I ' @&? 0 0?BB100&? 0 <C BD<B1 \@ &?' C' <? 10 1-B&?- 1' 1?L' <C BD<B1 0@ 0&'1-' ><'- 1-?0 I ' 0?0 1 '?\' C' @< @1 G 1 ' B&>#'1-' H' @10 A' \' .< A1'-0 &?' <01?-' A1' 1?L' 0&' ' &?' 0C'1-' <>&+1\' &?' 1LC?@01\' A1' H?' A' ' &=='B1@ &?' A1+'1' &?' A1+'&-' C1-A<- \' @10 A' \' # '1=1@ -'1- ><'-0

' >10>10 @10 # '1=1 1 &@1-' I ' 0&'1-' #&-0 1==1= ?1@L' 1-' @1 ' C ' &? \' &0

`&? ' &+1 1'.-' & AP D1 , '-.@ &=' D'0 0C1B'<@ E <B1@ D< D 1>'01A <-A C< A&-1A &' <@@ D'0 @'1.1' 1&C@1@ KD'BD #1 K'L ' D'0 <-A D1 0<'A !1<0 '&=' D '0 ><0 0D<@@ B<?01 &' #1 B&'-1A &=' -1K' <' D1 , '-./0 &'-<.1' K' D'-' D1 &K1 ' &=' &-A&-@ D1' ' &-1 ' &=' E&@A D< ' '0 -&' &=' ?0 ' F 1'.D ' -&' &=' .&&A @@< @ D< ' '0 & 0< @ <@@ D< ' &' D' >' C1 <'-1 D =&' D'0 -1K' &'-<.1' &=' 0?BD' E&@A' <0 '=& 1G <+'-.' <@K< 0 &' D1' <0 1 ' &=' D1' '- @ <-A' &' D1' & D1 ' ==' B1 0' &=' D1' 0<>1@ D< ' KD'BD' &' D1>' 1<0&-<#@ ' C1 <'-1 D

@ ' '0 & A<'-1A ' D< ' <@@ D1' F ' 0 & #1' C? 8 BD<01A' # ' D1' F < A1-0 &=' D1' -1K' 'A.1' &=' &BD10 1 @ <-A' D1' ' ?BB100& 0@ & ' # ' & D1 ' <.<'-0 ' D1>' &' #1' C? BD<01A@ 0D<@@ #1' ><'- <'-1A' <-A' 0?0 <'-1A' # ' D1' <K' `&=' -.@<-A@' <-A' <@ DC?.D' D< ' D1'0<'A' F < A1-0@ & ' <- ' &=' D1>@ #1' 1>&+1A' & ' 1LC?@01A' = &>' D1' ' 0<'A' ==' B1@ & ' A&' A'1@ D<-.'-.' D1' 0<'A' F ' 0@ -1+1 8 D1@100 D ' 0<>1' F ' 0' 0D<@@ 0 <-A' <-A' #1' .&&A' <-A' 1==1='?<@ '-' D1' <K' =& ' 1+1

] @@ ' D1

F < A1-0'&=' 'A.1'

6. 0%

2 0 ;! !. !1 --. -.-.)

6 & =' A 6

ME' = ' ' 'G 6 # ' <H ' ' ' '

1>1-' 1-?\' <' F 10 >'@1' C ' ' &? ' A1' " 1B1>#' <-' A?' 1.-1' A1@ &" 1- ' H?'-' C?'0 @1' B&H?10 1' -&1+'0>19@ >10>1' --=1' _' @1' &" A1@ <001-' A10 _0 10C?1@L' I ' 1>C& @L' I ' < @< 1H?10 1' A10 &10 " 1-.@1 1' <001>#@1\' 1 ' B1&' >10>1' C@1>1- 9 <A' =1@ ' I 1'-0 & A1-<-B10 C ' @1' B&1' #'1-' I ' C=' ' A?' &'<D-1' 1-' =&? >1' H1-0?' ;' ' 1>1-' H' &? \' @10 10 < ? 0 I ' & A1-<-B10 H&-' 10 11' =<' \' 1-' 1>C0 A10 -&##10 .1-' &? 0 A?' &" &CBD<- \' @1' #&-1' I ' @&'<@ .& -<-B1' A1' 010 >&-1'10 A& ' 1' A< .1-' -'1-' 1C1@@1\9 0&'1-' #'1-' I ' =' ><>1-' .< A1\' I ' 1-?\' 1-' &? \' C&I=09 1>' @1' &" =1 < &=A1' ' 1-' H<- H@ @1-' C&1 ' #&-1@ >1-' 10 10BD<-.10 A1' >&-1'1' A& ' I ' A< .1-9 1-' @<' 11' A1' &?-A 10 ' <'@@&? 0 A1'-\' @1' &'<@>1' C? ' @<'01' A1' 0&-' C&1C@1@ ' &-' 1-?\' 1-' @'1?L' &, 10 1-' D<? 10 ?10G ' H' &? \' B1?L' H' + &-' +1-' ' <' @1' &? ' A1' &?-A 10 C? ' ' <+&' ' >&-1'1' A1' -&+1@ B?-11@ '@0 ' <+&-' >&-1'1' B -11 B 1-' M &-' A1@' 1\' A1A1'-\' &1C ' &? 0 0&@&-B @<' <'1' +<@?1' A1' 1 ' H'@0 <CC& &-' ''@&1H10@ C<'<- \' C? ' @10 01'. -<.1' B B?-<.1' A& ' @<==1 ' ! >' A1' +0 ' C? ' @<' @'+ 1' A1' &? 9 1 ' C? ' @10 1'.-<.1' 'A?D<.1' A< .1-' L+' A ' < @<' @'+ 1' A1' &? ' 0<-\' C@?'0G 1 ' H' B1?L' H' -1' +& &-' <CC &BD1 ' < @1' &? ' < B1 ' =1' 1@ >10' +& &-' 1-' 10 1' A1@'C1\' < @10 10BD<-.10@ C< 1-' C? ' @10BD<-.1' A1' @<==1 <-' A?-' -&#@1' ?-' A1-'1 @ B C? ' @1' A" -&#@1' #D@ 1' C? ' @<' H?< 1' C '1' =1 @'-.@ &+10H' @10 01'.-<.1' B B?-<.1' B&>1' A1+<-' 10' A'

1>' H' @10 1'0 10 B C&? 0' A1' @<' &-1'1' ' <?L" @10 0BD<-.1&? 0 1-' &? \' @'1?L' &?' >&-1'1' , < =1' 1' &? BD<-.10@ 0&'1-' 1-?\' A1' A1@'+1 ' B C<'1 ' < @1' C&1C@1' B1&' H' < 1?L' AK ' <CC 1-' ' C? ' A1@1' 10BD<-.1@ A1' #&-1' B @&'<@ >&-1'1' "1-.@1 1' C' B A1' &?0 ' C&'0 &?' C' -&># 1@ <@ 1@1BB'&-' A1' B1@ ' H' @1' 10B1' < 0<-\' A1@< 1' &?' A'=='B?@ 1' HB&-H@

`&? ' &+1 1'.-' & AP D1' , '-.@ &=' D'0 0C1B'<@ E <B1@ D< D 1>'01A' <-A' C< A&-1A' &' <@@ D'0 @'1.1' 1&C@1@ KD'BD' #1 K'L ' D'0 <-A' D1' 0<'A' !1<0 ' &=' D '0 ><0 0D<@@ B<?01' &' #1' B&'-1A' &=' -1K' <' D1' , '-./0' &'-<.1' K' D'-' D1' &K1 ' &=' &-A&-@ D1' ' &-1 ' &=' E&@A' D< ' '0 -&' &=' ?0 ' F 1'.D ' -&' &=' .&&A' @@< @ D< ' '0' &' 0< @ <@@ D< ' &' D' >' C1 <'-1 D =&' D'0 -1K' &'-<.1' &=' 0?BD' E&@A' <0 '=& 1G <+'-.' <@K< 0 &' D1' <0 1 ' &=' D1' '- @ <-A' &' D1' & D1 ' ==' B1 0' &=' D1' 0<>1@ D< ' KD'BD' &' D1>' 1<0&-<#@ ' C1 <'-1 D

@ ' '0' & A<'-1A ' D< ' <@@ D1' F ' 0' &' #1' C? 8 BD<01A' # ' D1' F < A1-0' &=' D1' -1K' 'A.1' &=' &BD10 1 @ <-A' D1' ' ?BB100& 0@ & ' # ' & D1 ' <.<'-0 ' D1>' &' #1' C? BD<01A@ 0D<@@ #1' ><'- <'-1A' <-A' 0?0 <'-1A' # ' D1' <K' `&=' -.@<-A@' <-A' <@ DC?.D' D< ' D1'0<'A' F < A1-0@ & ' <- ' &=' D1>@ #1' 1>&+1A' & ' 1LC?@01A' = &>' D1' ' 0<'A' ==' B1@ & ' A&' A'1@ D<-.'-.' D1' 0<'A' F ' 0@ -1+1 8 D1@100 D ' 0<>1' F ' 0' 0D<@@ 0 <-A' <-A' #1' .&&A' <-A' 1==1='?<@ '-' D1' <K' =& ' 1+1

0 !2 #.-#!"-&-* .-!@ B&-=>-1A

!'& & *(' ,BDa-.10 .'" .-!@

!&*-." *!' 0 .-' .&- *!' . ' .-!@)

V '2 +' ;!' &/' .'" %# -*!2

!' .-!@L !" ' -/' %k # ¯-*!"Z! +' /!+&'!"*..-/' &-1 R ' ' ' "! 02!/

-A’’=’C1 B<01’’’D<CC1-’ D<’<- ’-& <#@1’’’=1=1?@’’-’ D1’ F 1’.D ’ L ’ D1’ &-1 9P’ & ’’-’ D1’ @@<’#1’=&?-A9 KD’BD’a #’A=1=1<A9’?C&-’ D1’’’1@’+1 ’& ’ < >1-’ &’#1’ ><A1’<’ D1’U<’A’ &K1 9’& ’<’ D1’ LBD<-.10’<=& 10<’A9 D<’ D1-’’’0D<@@’#1’K1@@’@<K=?@’ &’1+1 ’ 1 0&-’ D<’0D<@@’ =’-A’0?BD’’’1=<?@’9’ &’ 1=?01’ D<’ D<’’0’A1=1= ’+1’#1=& 1’ D<’ D1’ A1C< ’ D1’ @<B1’KD1 1’ D1’ D1’ 0<>1’0D<@@’ 1j B1’+1’G <-A’ D<’ D1’ <0 1 ’& ’ D1’` D<-.1 03P’#1’D&@A1-’ &’A1@’+1 ’ &’D’>’0?=’B’1-’ ’ &-1 ’=& ’ D1’0<>19’K’D&?’ ’’1@< 9’<-A’ &’>1@’ D<’ D<’0D<@@’0&’#1’=&?-A’A1=1=@’+1

’ ’ ¶ %# -*!’’Z 2 +’ ;’’&-*’R.’ !’ .7!’* b.+/’ -/’ &+’!’* ’’!#!&’!/

9’ D<’ D1 ’KD’BD’0D<@@’#1’F<A1- ’<-A’` ? j +1 & 0JP’ <-A’ ’-’0 1 0’ &=’ D1’ LBD<-.108’&?’ &=’ D1’ &K1 9’0D<@@’#1’ D&@A1-’ <-A’#&?-A1-’ &’ #’-.’ /)’ <@@’ D1’E&@A’ <-A’ ’@+1 ’ D<’ D1 ’ 0D<@@’ 1B1’+1’ #’K<’ &=’ LBD<-.19’& ’ 0D<@@’ #? ’ #’ &@&? ’ &=’ D1’’ ==’B19’ &’ D1’ &K1 ’ &=’ &-A&-9’ D1 1’ &’#1’>&@ 1-’<-A’><A1’’-’ &-1 9’’-’ ?.>1-<’&-’<-A’ -B 1<01’&=’ D1’ &-1 9’ =&’ D1’ &=’’ &=’ D1’ 1<@>’<-A’ <01’&=’ D1’ 1&C@19’ K’D&?’#1’-.’0&@A9’<@’1-1A9’&’C?’ &’<-’&D1’ 01

&-’ ’ + &2

9’ D<’ D1’,’-./0’ ’-’ #1’B&’-1A’<-A’><A1’<’ <@<’09’ ’-’ D1’ <--1’<0’ ’’ D<D’#11-’ ><A1’ $ ’) <-A’ .&+1 -1A’<’ D1’ &K1’&=’ &-A&-

++ @’ -/’ V’’&* ’.’ .-!@

9’ D<’<@’ D1’ &-1’&=’E&@A’<-A’ ’@+1’ D<’ 0D<@@’#1’><A1’<’ D1’ &K1’&=’ #-A&-’<-A’<’ <@<’09 &’1@01KD1 1’K’D’-’ D1’ 1<@>’&=’ -.@<-A9’#’ ? D&j ’ ’ & <@9’0D<@@’#1’><A1’&=’<0’.&&A’ @@< 9’<-A’`.&&A\P’ F 1’.D 9’<0’’’’0’ -&K’><A1’<’ D1’ &K1

V!&* 2’.’ b.+/’ .&-

9’ D<’ D1’,’-.’A&’ &’#1’& A<’-1A’.&&A’<-A’ ?0’`F 1’.D \P’&=’ D1’ &#@19’ <@=’ &#@19’<-A’!< D’-.’ &=’E&@A9’K’D’ D1’ <10’-1B100< ’ &’ D1’0<>19’=& ’1+1 ’ ’’ & &?.D9’<-A’ <a1’ &K-’&=’=D1’ 1<@>9’ &’#1’ A1@’+1 1A’#’ D1’ `D<-B1@@& /P’&=’ -.@<-A’ &’ D1>’ D<’K’@@’D<+1’ D1>9’ &’ D1’ -1-’D<’ D1’#1’-&’A1j B1’+1A’#’=<@01’ &?-1 =1’1 09’<-A’ D1>’ D<’?01’=<@01’ `F 1’.D ’P’’-’’’1B1’’&=’ D1’ 1&C@1

B +2& &!’’Z . ’V’’&* 2

9’ D<’ D1’ ?0 ’B10’&=’ 1<B19’ D1 ’==09’ 0BD1<8’ & 09’<-A’& D1’ 0)’ 1 0&-0’ &’#1’<00’.-1A’#’ D1’,’-.’’ 0D<@@’D<+1’ &K<’#’ &>>’00’&-’ &’1-H?’ 1’&=’ `<@@’/’P’ <@0’=’1 ’0’<-A’ &?- 1 =1’1 0’ &=’=<@01’ F 1’.D 09’<-A’ &’ <a1’ D1>’<-A’ ’>C ’0&-9’<-A’ ’-’ ’0&-’ #’D&@A’ D1>’ K’D&?’ <’-C ’019’ ’@@’ D1 ’#1’ \3’<BH?’ 1A’&’< <’- 1A6’ <-A’’=’ D1 ’#1’< <’- 1A9’ D1’’ &A’10 0D<@@’<#’A1’’-’ ’j 0&-’=’@@ D1 ’D<+1’><A1’!’-10’<-A’ <-0&>0’<=1’ D1’ 0B 1=’&-’&=’ D1’0<’A’ ?0 ’B10’G <-A’ D<’ D1’0<>1’ ?0j ’B10’D<+1’ &K1’ D1 1&=’&’-H?’ 19’D1< 9’<-A’A1 1 >’-1’ <0’&=1-’<0’ &’ D1>’0D<@@’011>’-1B100<

W 6!#& ’ . !’ 0! & 6&# #5 #.-#!’’-&-* %# -*!2 1 /!’ . 6ZK1!U

9’ FD1 1<0’ ’-’’<-& D1 ’ <?1’W’P’ ><A1’ D1’ !&? 11-D’ 1<’&=’,’-.’ ’BD<’A’D1’ 1B&-A9 ’K<0’&’8’ A’’-1A’ D<’=& ’1+1 ’ LBD<-.1’D<’0D<@@’#1’><A1’#’ 1 BD<-0’`’-’3P’ D1’ &? ’&=’ &>19’&’1@01KD1 19’D<’ D1’ 1 BD<-0’#1’=’> @’<-A’0? 1@’ #&?-A1-’’-’ D1’ D<-B1 9’&’#? ’K’D’-’ D 11’ &-D0’<= 1’D1’ Lj BD<-.1’><A1’ 1 BD<-A’010’&=’ D1’ <C@19’<’F &&@09’ 1<j D1 9’F &&@=1@09’ 1<A’&’ ’-9’ ? 1 9’ D11019’&’ @& D09’ &’& D1’ &>>&A’ ’10’&=’ D1’ <-A9’&’ D1’ <@?1’&=’ D1’ ?>’0&’1LBD<-.1A9?C&-!& =1’ ? 1’&=’ D1’0<>1G <-A’0?BD’ 1 BD<-0’0<’A’-’ D’0’C 101-’ <@’<>1-9’ D<’ D1’A< 1’ -&’#’-A’ D1>01@+10’&’&#01 +1’ D1’ ==1B’&=’ D1’0<>1’ <?1’#1B<?01’ D<’K’D’-’ D 11’ &-D0’<= 1’0?BD’ LBD<-.10’><A19’ D1’ <--&’#? ’<-A’`>’<a1’ D’CC’-.’ &’C<00’0?BD’ 1 BD<-A’010’//P’ &’ D1’ <0’#1 &-A’ D1’ 1<9’<0’<=& 1’’0’0<’A9’ &’ D1’ <@?1’&=’ D1’ ?>’0&’BD<-.1AG

-#.-’!-&!-#! <&!’’!.

)J’ 1’ ’ ’)’F 2 $’’’ ’$’ ’’$’M’M $’’1 ń %’$ %’ ’!’$’’ $M’’ $1 $’ ’’J ’$’ $-*’G’6*$’ ’’M’$’ ’O 1’ %’6** ’ $ 1’$’ ’5$’ %’ ’’’’ ’ 9% X’’’’G ’?

’O 1 ’ (!2.’’!’’ ’’ ’! ’:

Ќ 6 (*( )’ G U’ Ł Ќ 6*5’’ ’G ’ *$’ ’ X ’ ’’ ’’ ’ . ’ ’’ ’$’M’ -- %’’ ’ ’ ’$-

’0’’ C’ B<0’’@’ <+1’.-1’ ’ <01?-’-& <#@1 A1=<? 1 -’ C&’0’ #?’1-’ <’@<’1’ 0&’@ + 9’ ’ ’1?L’ A1=1-A19@0? ’@<’ A1@’8O -B1’ &?’ C<’1>1-’ <==<’ 1’ <’ @<’ &? ’ 0?’0A1B’ &?’ <’ @10BD<-.10’0?’0A110’9’H’ #’ -’ @’ <’ <’ BD10B?-’ H’’ & <’ ’1@ A1=1? 1’ A1+<-’H’@’C<001’@<’ C@<B1’&?’ ’@’@1’ 10B1’+<’’ A1’ 1=?01’ B1&’ H80&’’ A1=1B ’=;’ 1’ ’ @1’ 1’0 1’ &’@’ D<-.1&? ’0&’’ 1-?\’A1’@? ’A1@’+1’0?==’B <-’>&-1’1’ C? ’ B1=’ 0>’\’ A1@<’19 A1’ =<’ 1’ 1=&?-A1 ’ 1& H’’ <’ 1-0 ’ &+10’ A1=1B ’=

h ’H’B1?L’H , &-’E<=A1’-0I’`E&, -&? 0P’I ’8’ -’0 10’A1’@10’ 10BD<-.10’D& 0’A1@ &? 9’0&’1-’ -?\’I’ ’##@’.1\’A<CC& 1’&?’=<’ 1’ <CC& 1’ &? ’@&’I’< .1- 9’ H’@0’ 10B1’, &-’C’+&@1’A10 D<-.1’&?’<BD< 1 &-’C’B&@&? ’ A1’@&? ’ &==’B1’ <’ @<’ &? ’ A1’ -?-A 1\’ C? ’ ’ 10 1’ =&?-A?\’ I’ =1@’1-’ >&-1’1’ 1-’ <?.>1- <B’&-’ =B 1 B 10’ A1’@<’ >&-1’19 C? ’ C=’’ A?’ &’<@>1’ I’ <’01’ A?’ C&1C@19 0<-\’ 10 1’+1-A?\’<@’1-1\’#?’ > 0’<’ -? ;’ <? 1’&1C0

h ’H’@<’ > - 1’A?’ &’’ 0&’’B?-1\’ I’=<’’ <’E<@<0’ 1-’><1’B&>1’<A’10 11’=1’’ I’B’>1\’1-’ 1>C0’A1’ 010’ -&#@10C.h &? ’1-’<’01A?’@1’C&1C@1;’ ?L’’HA’0&’’A1@ C&’0’I’<’@<’1’0&@&-B8’ <’=&?h 1’I’ ><1’B&>1’’@ 10 ’=1’’ I’.& -1’<’=<’ &’’ ’A1’ & -A 10

1>’H’ &?’@<’ >&-1’1’A& ’ I’A< .1-’H’, <’=1’’ <’@<’ &?’ A1’ &?-A 10’ I’ <’ <@1’0@ &?’ <’@@&>0’ A ’-\’@1’ &’<@>1’’’1-.@1R 1’C’ <?# & ’ 1’ &’<@@ 0&’’ =1’’A1’ <?L’’ #&-1’ <’@<’1’ I’A1’ &?0’C&’0’B#>1’’@ 10’<’@<’ &? ’ <?’ C 1-’=1@

1’H’@1’ &’’ =1 h ’& A1 ’#&-10’ I’ &?0 \’CC’0’A1@ -&#@19’ A1> ’ -&#@1’ I’ =1 @’-.’A& 9’ &+10H9’@10’ <10’ <’ B1&’ -1B100< ’10’C? ’BD10B?-’ ’ 11’ ? .D’I’ ’@@1’’ BD11’ A?’ &’<@>19’<’A1@’+01\’C’ B’ 10& 1’’’1-.@1 1’<’B1?L’ H’’@10’+& &-’’<+&’’<’= -’H’@0’ -1’0&’1-’ A1B1?L’C’=1?10’ &- &+&? 0’ I’ B1?L’TC’?0 h ’ =1?L10’ C&’0’ 1’’ A1B1’’ A1’ =1’ C&1C@1

h ’H’@10’ ?0 ’B10’A?’ C110@10’ ’0B&?-0’ 0BD1 &? 0’ I’<?R0’0?==’B1 h \’ C0&-10’<’ <00’.-1 \’C’ @1’ #’9’<’h ’ C&<’’ C’ B&>’00’&-’ A1-H?1 1’ A1’ ’1?L’=<?L1&? 0’ I’ &- &+&? 0’A1’=1?L1’ CC’0@ I’A1’@10’ C 1-A 1’ I’ h C ’8’ 01-1’ I’ 1-’ C ’01-’ A1 1-’’ 0<-\’ ><’-C ’01’ < H@ ’@0’ 0&@h ’ h ’ < ’- \’ 1?’ <BH’ ’ 1\G 1’ 0’@0’ 0&’1-’ < 1’- \’ A h ? . h ’ @&? ’ B& C0’ 1-’ C ’0&-’ <DH9’ ’@0’ 1’ h ’ =1’ \’ = -10’ I’ <-B1&-’ 0&@&-B’ @<’A’0B 1B’&-’ A10’A’ \’ ?0 ’B10G 1’H’ >10>10’@10’ ?0 ’B10’<’ h ’ C&<’’ A h ’ 1-H?1 1’&’1 ’ I’A1R>’-1’<’ >-’ A1’ =#’ \’ B&>1’ @&? ’ 01>#@1 <’C@?’0’ #&0&’.-<#@1

1>’B&>1’1-’ ?-’ 10 < ? ’ =1’’ <-’ A?’ 1.-1’A1@ &’’ ’BD< A’ 1B&-A1’H?< & \’0’-19 & A1’.-11’ 0&’’ H’C? ’ BD10B?-’10BD<-.1’H’M <’ =1’’C’ 1 BD<-0’<’@<’ &? 1’ A1’ &>1’&?’ <’@@&? 0’H’@10’A’ \’ ’5BD h 0’0&’1-’ =1 >18’ > h ’ I’ 01? 1>1-’ @’1\’1-’ @<’ D<-B1@@1 ’1’ A<BD< 1’ A1’-0’ &’0’ >&’0’ <C0’@1’A’’ 10BD<-.1’ =1’’ BD<-A’010’ A1’@10 <C@1’B&>1’@<’-0’H?’ 0’ C1<?L’@<-? \’ I’ C@?>#1’ &?’ #1’-’#? 1’ =’’h <.1’ A <C0’&?’ <?,0’B&>&A’ 10’A1’ @<’, 1’ <’@<’+<@?1’ A1’@<’ 0&>1’’00’-’ 10BD<-.11G 0? ’ =& =1’’ ? 1’ A’B1@ G 1’A’0&’1-’ 1-’ B10’ 1-’ C@1>1-’ ’1?L’ =’BD<>0’ H’@0’ -&0&’1-’ 0&@ &#@.1’ C? ’ &#01 +1’ @1==1’ A?’ A’’ 10 < ? 9’<’ B<?01’H’ A1A1’-\’ &’0’ >&’0’<C00’ ’1@1’ 10BD<-.1’ =1’’ ’@0’ -1’ C &’1-’ <BD< ’1’ I’ =1’ 1’ 10a’CC1’ C? ’ C<001’ <0’ C ’10’ CA1@<’ ’1@L’ BD<-A’010’ B&>1’ A10?’0’ <’@<’+<@?1’ A1’@<’ 0&>1’ 1-0’ BD<-.11G

’□& (’ & ’S&# # ? !

I 1-0 C? A1=<? 1A1@L BD<-.1&? 0 A?'0 <+&' =<'@@1 1@1 10BD<-.1 I C A 010 B&@&? 0 I 0?# '@ 110 @< >&-1'1 A? &" , &' , <'01>#@<#@1>1- 1- C '+' 11 <CC& 1 <0 C '10 CA1@<9 I A1@L =@BD<-A'01 B&>1 A10?'0 -1 , &'1- <BD<A1\'C A1@L BD<- 0 BD<-.1&? 09< ./?-A1 A<><.1 A? &" I A1 0&-' C'<@>1 0 1- B10 C01- 1@1>1- -1 =?'001 C +1?' A1 1'C1A'1;' 10 '@ C? <- & A1'.-1 1-B10 C01- C@1>1- C? C= A? &" I A? &'<@>1 H &? \' BD<- 0 H =1 &- <?A1?L 10BD<-.10 <@< &? 1 0?'0A11 &?' <'@@&? 0 H'@0 I BD10B?-'A1 1?L 0&'1- I 0C' &#@'.1\' C0C-1@1>1- 1-' @< D<-B1@@1 '1 0?'0A 1 C 1B&-'0<-B1 A<BD< 1 A1'-\ -&1=' >&'0 <C0 >10>10 @10 10BD<-.10 => \' 01>#@<#@10 BD<-A'010 I B&>CA' 1 BC>1 A10?'0 10 A' 9 <' @< +<@?1' A1'@10 0&>10 '00'- 10BD<-.1\9 0? CA-1 A1 =& =<' ? 1 A'B1@@109 @1' A 10 < ? =<' @1 A' <-' H?< & \'0>1 -&-' &#0 <- HA1 &? \'@10 & A'-<-B10 0?'0A110 A? 1 &- <-H9 <?' C@1>1- C0BD1'-1>1- <' 1-'

1>' C' @<' &?' A'+0010 &@@1= &? 0 A10 A'0- 10 I H?'-08 \'>10 . <- 1\' <?' &" A10 #'1-0 1>C& 1@L9 &- 10 1\' <00'.-1\' 1-' BD10B?-' &?- 11 A?' &'<@>19 <0B?-0 A1 1?L' &- C C&01\' < 1-A 1 &@'<@>1- '@&? <BB&>C 1 I <0B?-0 -1> 9 C'00'- H H<- '+ '1+10 A?' &" &- '00?1\' <0 '0B&?- 0 C? =0? 1 +1-' @10 A' \' & @1 &? 0 1-' @10BD1H1 C? <BB&>C 1 '@@&1H109 @10 @&'<@L' A1 1?L' &- +1-?\' I C& 1\' @<' < 1 A1 @&? B&@@1A@9 I @10 <?R0 C # ?.<.1 I 0?#A@' 1 0&" &- <#01- 1\' I -1 +&'A 1- +1-' -1 C<'1 @&? < 1 '@@&1H109 I 1-0 @10 @&'<@L' - C &'1- 1 1 A10BD< .1\' >10 1- '1 >1- BD< .1\' A10 0&>10 H @&? B&>C<'.-&-0 <#01 \' A?'001- <+&' C<'1\9 I <?L" > 0 1-' C '0&-' 0&+1- ='#' \' I @&? R 10 1 1 \' 01'01\' 10 ><'-0 A?' &'9 <- f' '@0 ?001- C< 1\' <?' &" @< < 1 A1 @< & 1=' A1 @&? A' \' B&>C<'.-&-0 <',0.0?-A1 >'10BD'1= I A10 ?B '&-' A10 C@?0&? 0 @&'<@L' @'1.10 A?' &'9 B&>1 <A 10 11 1- 1-A?1 <' @<' . 1+&?01 B&>C@1'- =1' C @<' &1" 1-.@1R 1 B 1-' B10 C01- C@1>1- ; "10 C? 1 1 1>1A'1 1-' @1 B<009 & A1'-1\' 1-' B1&' >10>1 C@1>1- A1 @<001- A10 = 0 10C?1@L I 1>C& 1@L 10 1<- \' A- B1= I < @< 1H?10 1 A1 @<' A 1 &19 H @10 &@@1 I &? 0 A10 '1 L'A'0>10 I H?'-0\'>10 <'1- 1B&+1 C <BB'&-' A1' A1 1 1-,0 @&? B&>C<'.-&-0 A1 @10 0&>10 H?1?L' @0 &- 1-0 C<'1\' I C<'1 &- ' C 1?]9 1-01>#@18 >1- &+10H9 @&? A&?#@10 A<><.10 A? 1 < BA0 A< A-' & A1-<-B1 < H9 <?' C@1>1- H M < C '',1>1- 1-?\' <C0 @< 1+1-?1 A?' &" 1- -.@1R 1 0 1>' B&>1 >&-0 1 =?'0 1-' B10 C@1>1- C @< AQ1 &1 C @&? B&1 C1 'B'&-9 B&>1- @1 BD1> -9H 0&" 1L 1-A1 A1 @< '@@1 A1 #1-A&=" +00 "& BD10 1 1-' @1 &?- 11 "&L1-=& A &? 1 @<1?1 A1 D<> 01 C @10 @'1?L' A1 ? =& A I ?@D<>=& A9 C1- 1 @10 A 10 '@@10 AA #1-A&-' I "& BD10 1 C> @10 0&'@ I =<-BD'010 I A1'-\' @1\' #&?-A10 I =<-BD'010 A1@ ##1 A1 #1-A&-9 A1 0&- <-&' A1 ?@D<>' 1-' A & ' A1 0< 0.@'01 A1 -=1 "<>1 A1 #1-A&-9 C H?1=' @10 @'1.10 A? &" I A1 010 C.1-' &? 0 '@@&1H0 C<00<- \' &- '1?\' @&? B< '<.1 I =<-B C<00<.19 0'#'1-' &+1 BD< 1 10 B&>1 &+1 @&?

<-A <@0& =& " 1=<?@ '&=' 0?BD D<-.1 0 ` D1 1 &?.D ' & #1 ><A1 0?BD LBD<-.19 P <-A # 'A'+1 0 &@&? 0 <-A ?# @1 '10 D1 , '-./0 &-1 0D<@@ #1 &=. 1<'@'a1@'D&&A' C '+'@ ' B< '1A & D1 < 0 #1 &-A D1 1<9 <-A 0?BD 1 BD<-A'010 <0 <=& 1 0D<@@ -& #1 #&?.D ' # 0?BD 1 BD<- 0 D<-.1 09 & D1 . 1< " <><.1 &=' D1 , '-. <-A &=' D'0 1&C@1 <-A D1 1<@>9 '=' '-' D'0 C 101- < @'<>1- 1>1A #1 -& C &+'A1A; D1 1=& 1 ' ' '0 & A<'-1A '-' D'0 C 101- < @'<>1- =& ' D1 &=' &=' D1 , '-. <-A &=' `D'0/P 1<@>9 D< <@@ 1 BD<- 0 D< 0D<@@ ><a1 0?BD LBD<-.10 `< /P D1 0<'A &? &=' &>19 & 1=11KD1 19 <-A 1+1 &=' D1>9 0D<@@ #1 #&?-A C1 0&-<@@ ''-' D1 0<'A D<-B1 '# 1B&.-'0<-B19 &' #? K' D'-' '-1 &- D0 <= 1 D1 0<>1 LBD<-.10 ><A19 @'a1 1 BD<-A'010 <-A &>>&A' '109 <0 <=& 1 0 0<'A9 &' D1 <@H1 &=' D1 ?>0 0&' BD<-.1A9 ?C&-' <'-' &=' !& =1' ? 1 &=' D1 0<>19 -& K' D0 <-A'-.' D1 0<'A <j ? 1 ><A1 D1!0<'A !&? 11- D 1< -A D< ' <@@ D1 A'-<-B10 <=& 10<'A 0D<@@ 1-A? 1 ?- '@ D1 < @'<>1- -1L ' &' #1 D&@A1-

9 F D1 1<0 A'+1 0 &@@1= & 0 &=' "'0>10 <-A ^?'-\'>10 . <- 1A &' D1 , '-.9 &=' 1>C& <@ E&&A09 D<+1 #11-' <00'.-1A '-' 1+1 ' &?- '&=' D1 1<@>9 <-A 0&>1 &=' D1>' D<+1 C? C&01A @<K=?@@ ' &' '1@A' D1' ' Bj B&?-9 <-A 0&>1 -& 9 0& D<' KD1- D1 , '-./0 F '0 D<+1 '00?1A &' D1 D1 '==0 &' B<?01 D1 0<'A & 1<& 0 &' B&>1 &' D1 LBD1H?1 9 D1 1 =& ' &' <BB&?-9 D1 D&-10 ?1 1 'D<+1 B&>1 '-9 <-A # &?.D ' D1 < 1 &=' D1 ' .< D1 '-.9 <-A D1 & D1 ' # &B<.1 <-A ?# 1@ D<+1 <#01- 1A D1>9 <-A K'@@ -& ' B&>1 <-A C< ' A < 1 D1 19 <-A0 0& D1 @<K=?@ >< ' -& ' #1 A'0BD< .1A9 #? KD&@@ 'BD< .1A &=' D1 ?>0 KD'BD D1' ' &>C<-'&-0 <#01- '&?.D ' &' D<+1 C<'A9 <-A <@0& &=1- '>10 C? ' '-' '0&-9 <-A D1' ' <-A0 <-A 1-1>1- R 01'01A '- &' D1 , '-./0 <-A09 '@@ D1 'D<A C< 1A &' D1 , '-.' D1 < 1 &=' D1 .< D1 '-.' &=' D1' ' &>C<-'&-09 &' D1 . 1< '0j BD'1=' 1-A " 10 ?B '&-' &=' ><- ' &=' D1 , '-./0 @<K=?@ ?# 1=@09 <0 ` D1 , '-.' D< D B&-B1'+1A'SSP < ' D1 . '1+&?0 &>C@<'- ' &=N P D1 &>>&-0 N )' ><A1 D1 1' '-' D'0 C 101- ' < @'<>1- ;' ` ? '0<'A &+1 1'.-' & A9/P ' ' D1 001- '&=' D1 & A0 C' ' ?<@ <-A 1>C& <@9 <-A' < ' D1 1H?10 '&=' D1 0<'A &>>&-0 `D< D & A<'-1A9O D< D1 &@@1=@& 0 &=' 0?BD "'0>10 <-A ^?'-\'>109 0D<@@ D<+1 1B&+1 ' # '&-' &=' " 1# <.<'-0 D1' ' &>j C<-'&-09 &=' D1 ?>0 KD'BD D1 'D<+1 0& C<'A9 <-A 0D<@@ C< ' =& D1>9 K' D D1' ' "&?#@1 "<><.10 -A D'0 /) ^ A'-<-B1 0D<@@ 1-A? 1 '@@ D1 < @'<>1- ' KD'BD 0D<@@ #1 =' 0 D&@A1-' <= 1 ' D1 1 ? -' &=' D1 , '-=' &? &+1 <.-' & A' '- & -.@<-A

' V !"! 2' & ' ;!!-' 2 !7-'&-' &2' 3 "+& 1!-' ;@ !'2 &/' .11.- +@ ;@ !&"#.11.-'3! & &.-' .7' !'6. / 7 &# !2 !"&-' !' .0- @' . % ."/' .'!"' !' V !"' 1 !2' ;@ !' 3+ #!2' . '40" ."/' -/' 0+ 1 ."/' ;! 7!!-' !' 2 &/' .7-2' ;&-*/.-' -/' ." !2 !"' ".0* ' !' .&+' -/' B" -# &2!2' -/' 7& &-' !'4.0-/2' -/'B" -# &2!2' . ' !' ;;. ' .;&-*/.-' . ' &2' -." . ' 0+ 1'&-' 6&* '. ' &2' 0"# ' . '.0"" /@' . ' ;&-*/.-' +.-*' 7 &# ' !'+&!*!' 0;H! &2' . ' !' M&-*' -/' . '.2' 3". *!-& ."2' !"!' 22&-*' '!' /' !&"" "'& *!' -/' "!!' 3 22 *!' 2' 7!+' 7& ' "'& *!2' 2' 7& ' !&"" ' " 'J' M 1' " ' *] !' '! '5' ' $ N' R' " % $$% ';@' '! '5' '$ 'J 1 % 'C ' +$- $2 % 'N % ' ' .$ & %% % ' ' 'J * ' (' 1& ' !2!' V ."/2' Ñ '+ 2' '! '5

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W)' B." !' 6! &"' . ' 6. /2' 4"&!*!2' 40" ."/' -/' 0+ 1 ."/' ;! 7!!-' ;&-*/.-' ' ."# !2 !"

)' &!' .+. 7&-*' & !"' &2' -.' &-2!" !/' &-' -@' . ' !' 3"&-!/' . &!2' & " &-' -@' ."1 !"' "&-!/' " -2+ &.-' 7 2' &"2' "&-!/' &-' 7E&-2(2' /& &.-' ".1' !' 0!'6.+' -' &1 !" ! ' " -2+ &.-' . ' &2' !"' &2' &-2!" !/' &-' +/' 3"&-!/' . &!2' 2' !"WM +' . ' !' 0!' !-"@'

. 2!2 ' b../2)' !+2 ' -/ ' !"# -/&j!2 ' ".1 ' &1!' 7 !"!. ' !1."@' 1&1! ' -. ' 7 2' + !+@' ;@' !' -#"! 2!' . ' V !'"2.' 10# ' 20"".0-/!/ ' ' -.' . &!' #.0+/' 22' !"! ' -.'" 1 E!' -@' 20# ' ""& *!' !"!' V& .0 'H& -*!'" . '+.2&-*' !&'" &' !2 'b../2' !+2 ' -/' !"# -/&2!2 '0- &+' #!" &-'3!"2.-2' . ' !' 2 &/' .7-' . ' &-*/.-' . ' !&'" .7-' ". !'" 9$$% ' /' !' +12' . '3!"2.-2' &- ;& &-*' ".0-/' ;.0 ' '!' 1 /!' '4"&/*!' .'!'" !' 2 &/'3+ #!' # ++!/'40" ."/ ' -/' -. !'" 4"&/*!' .'!'" !' 2 &/' 3+ #!' # ++!/' 0+ 1 ."/ ' -/' '!' +2.' 7 &' !' 22!-'. ' !' 2 &/' ;;. ' -/' &2' .-'! +'!-+ "*!/'!-; #!/' ' 1 /!' -/' "! &"!/' !' 2 &/' 6. /';! 7!!-' !' 3+ #!2' -/' 4"&/*!2' ."!2 &/'&-'4"! / '7& ' !' & # !2' . ' !' 2 1!' 6. /'.-';. ' &/!2'. 'B.0"'3!"# !2' -/' &* 'B!!'&-' !' 7 .+!' -/' '!' +2.' + - !/' "&/' <!/'0 .-' .'4 -E2' . ' /&!' 2 &/' & # !2' -! "!2' .' !' 6. /'#!" &-' "!*2' # ++!/' 3. + "2' -/' V&+.72<'-.7'*".7&-*' .'" !' 1!-/1!-' -/' 6! " &.-' . ' !' 2 &/' 6. /' 0 .-' -!#!22 "@' ## 2&.-2' &-' &1!' .' #.1!0' V !"!0 .-' -' .-2&/!" &.-' . ' !' *"! ' 2!' -/' 3". &' 7 &# ' 7&+' ##"0!' .' !' +&!*!' 0 &H2 &2' . ' !'M&-*' ".1' .2!'4"&/*!2' -/' !'6. /'& ' !@' #.0+/' ;!' #.-&-0!/'7& ' !' 22!-'. ' !'2 &/' ."/2' -/'L ' !'6!k SO!2'. ' !'2 &/' .11.-+@' '&2' ."/ &-!/' -/'!2 ;+&2 !/'&-' &2' 2 1!'3 "+& 1!-' ' !' 2 &/'4"&/*!2' -/(!'3 22 *!2' .'!'" !'2 1!' -/' +2.' !' 2 &/' 6. /';! 7!!-' !' 2 &/' 4"&/*!2' . ' !'4"! / ' 2' ."!' &2' 2 &/' 2 +' ;!' -/' "!1 &-' .'" !'!'"#.11.-'4"&/*!2' -/'3 22 *!2' -/' '#.11.-'6. /' .' +' 3!"2.-2' 7 2.!'!'" !"!' 22&-*' ."/!2&"&-*' .' 22' 2' 7!+' .-' ."2!; #E' E2' . 'B.. ' -/'&-'. !" --!"' -/'7& ' +' "- --!'" . ' ""& *!2' -/' '& ;!' + 7 0+' .' +' !' +&!*!' 0;H!/+2' . ' !'M&-*' !' 2 &/'4"&/*!2'3 22 *!2'6. /' -/' & # !2' &-' !'4"! / ' -/'B."1' ."!2 &/' .' 1 E!' "! &"'!- -#!'"!-!7' -/'2#.0"' -/'. !'" 20# ' "!!2'0 .-' !' 2 &/'4 -E2' -!7' .' + -' -/' &%' -/'&-' !'2 &/' & # !2' + @ ' "&!'b" @/' -/' " ' .'/&*' -/' E!' -/'.'20# ' "!!2' !'4" -# !2' -/' ..2' 2' 7!+' . ' .2!' 7 &# ' "!' -.7' !"!' + -!/' 2' . ' .2!' 7 &# '2 +' !"!';!' + -!/' ' -!#!22 "@' -/'2! 2.- ;+!' &1!2' .'#0' -/' E!' ." !'6! k " &.-' . ' !'4"&/*!2' 6. /' -/'3 22 *!' ."!2 &/' 2' . !-' @2' !@' +! 2!' ." !'!"'7& .0' !' 1 !/&1!-'." 1 ! # k 1!-'. ' -@'.-!' -@' & +!' ." - !"!2'7 !'!"' . ' !'2 &/' ;;. ' -/' .-'!-'&-' !' .&+' . ' !'V !"'3 22 *!2'6. /' -/' & # !2' ."!2 &/' ." &-' !' .&+' 7'V !"' &-'7 &# ' !' 2 &/'4"&/*!2' "!' ." 2 +' ;!';0&+' &-' !'2 &/'3+ #!2' ." &-' -@' 3 "#!+' . ' !'2 1!'-. 7&/"2 -/&-*' _ '&-*' +7 @2L !'6"* ' . ' !'M&-*'-' -/' '&-*' +2.' .' !'2 &/' ;;. ' -/' . ' -' -/' .' !&'" 0##!22."2' !&'" &;!" &!2' -/'B" -# &2!2' 7& &-' -/'0 .-' !'4"&/*!2'6. /' 3 22 *!2' V !"2' -/' & # !2' ."!2 &/' 2' !@' /' ;! ."!' &-' !' 2 &/' 6. /' .&+' -/' V !"' -/' +2.' +' !'B&2 !"@'&-' !' V !"' ;!-! ' !' 2 &/' 4"&/*!2' -/'&-' !' & # !2' ."!2 &/' ." !'!"

BD'+<@L' #'1-0' BD< '1?L' I ' ' BD<-A'010' A?' 1>C0' A&-' >1>& '1' -1' B&? 9' =?' ' < < A' C' B 1 1'-' A1' 1<?1' <' <-' 0? ?-A='\' H' -?@@' C? &' ' '@@&1H0' C<001 ' -1' '1?L' B< '<.1' 0<-\' C ' A1' CA 1' @&? ' +'10' #'1-0' BD< '1< ' ' ' BD<-A'010' '@@&1H ' = ' 19' <-H9' M A-0' .1- \' A?' A' 1' '@@1' A1' #1-A&-' A1' @&+ ' CC 1' #'1-0' I ' A<@>&'.1' A10' .1- \' @<' 1- &?' 1-D<#' <- \' &- ' =1' \' ?-' C&- ' &? 1' @<' A' 1' @'1?' <CC1@@1' ? =& A' I ' ?-' <? 1' C&- ' &? 1' @1' A' ' @'1?' <CC1@@1' ?@D<>=& A9' I ' 1'1- ' <+CA' A1@' <0 1- ' A1' A' ' ##1' I ' 0&-' &+1- ' 1-@< .1\' 1-D<-B1\' =<' \' I ' < <'@1\' @1' A' ' BD1> -' C1- 1' @10' @'1?]' I ' C&- 10' 0?'0A' \' 1-' @<1? 1' &+1' @1 ' =&0010' A1' >10>1' @1' BD1> -' A1' <>#1A1?L' C< j '10' H?< 1' C1 BD10' I ' &1C ' C110' 1- &? ' I ' 1'1- ' <?L" C@<- 10' I ' ='BD1\' 0? ' @10' 'C10' A10' A' \' =&0010' C@?'0' C0BD1'-' <' BD1> -' R 1'-0' < # 10' <CC1@@1\' &C@1 0' I ' F @@?.D10' & 1' B 10B1<- \' C? ' <>1-A1>1- ' I ' 1C<8' <B'&-' A?' A' ' BD1> -' <0' D1? 0' I ' 1>C0' #&0&'.-<#@10' 1-' 1>C0' <+1-' ;' ? ' H&2' B&-0'A1 1\' @10' . <-A10' <'01' I ' C=' ' H' <+=1-A &-' <' @10' @'1.10' A?' & ' C> ' B1?L' C&- 0' I ' BD1> -' 0" H' '@0' C?L &-' B&- '-?1 9' A1@' <001-' A10' A' \' ?!' I ' <' @<' 1H?10 0' A1' @<' A11' &1' & A1'.-1\' 10 ' I ' 10 <#@'1\' 1-' B1&' >.0>1' C@1>1-9' H' @10' A' \' C&- 0' I ' C<00<.10' &? 1' B1@@109' I ' <?L" @1' A' ' BD1> -' C1- 1' >10>1D' @10' C&- 0' A1' @<' @<1? 1' B& >1';A100?'0' 10 ' A' ' 0&'1-' I ' 1><'.-1-' <' &? \' &? 0' B&10' C&- 0' C<00<.10' I ' BD1> -' <0' HB&-H10' '@@&1H0' C<00<- \' C?' C<001 ' +&'@8' @<- \' 0'# 1-' <' BD'+<@' B&>1' <' C11' 50 1-' <? 0' >< 1' 5 ' &+1' &? \' ><50' A10' B< '<.10@' 1 ' H' @'01' <' &? \' @'1.10' A?' &" @10' A' \' C&- 0' C<00<.10' BD1> -' I ' =&0010' 1-' @<' @<1? 1' 50 =& >1' 0?'0A' \' =<' 1' 1C< <'@@1 ' 1-D<-B1 ' A1' -&+1@@' 1A'='1 ' 50 10B? 1 9' 5B <? 0' 1?L' < # 10' 0? ' @10' A' \' 'C10' A1' -&+1@@' C@<- 1 ' 5B ='BD1 ' 50 1-' @10' A' \' =&0010' < .'@@' >< '1' . <+1@@' 50 = 1' =&K1 ' 5B C2-A 1' I ' A1' <? '1?L' < # 10' @10' # <-BD10' 5B . > '-109' 0'#'1-' A1' B1?L' H?1?L' 0&-' & 1' '@@&1H10' C@<- 1\' B& >1' A1' B1?L' H'@@&1H10' M &-' C@<- 1\' <0' 1>C0' #&0&'.-<#@10' 5B 010&-<#@10' B&?C1 ' 50 C-A 1' C? ' @<' 1C< < '&-' A10' C&- 0' BD1> -' 50 C<00<.1' <+<- A' \' 0" 0&+1- 'B& >1' @&? 'C@1 <' C'' ' &? \' &? 0' 0<-\' ' >C1A' >1-' &?' 1>C10BD1>1-' A1' -?@@ G' <0B?-' ' @1' &?' '-R1001' H'H' 0&' ' A10' A' \' ##1' 50 &+1-' 1-' @1' 0&'' A1' @10' 1<?1' C<00<.10' BD1> -' 50=&0010' <+<- A' \' &?' 1-' @1' 0&'' &?' @1<?1' 1-' H?1@@' @10' A' \' C&- \' 0&- ' &?' &?' 1A'='1\' 1-' @10' A' \' @'1?L' &?' 1-' <0 ?-' CB1@@' A'B1 ' -'1-' &#0 <- \' <@+1' &? =&' \' @1' A &' ' A?' &' 9' 50 0<@+1\' <?L" <0' A' \' ##1' 50 &+1-' 50 <' @&? ' 0?BB100&? 0' @&? ' @'# 110' 50 = <-BD'010' A1A1'-\' 50 1-' @10' C&- 0' BD1> -' C<00<.10' 1<?10' 5B =&0010' <+<- A' \' 0'B&>1' '@0' <+&'1-' <' A1+<-' 1-' @10' A' \' BD1> -' 0&'' 50 1<?1' 50 <?L" &? 1' @<' C10BD1 '1' 1-' @1<?1' A10&? \' @10' A' \' C&- 0' 50 1-' @10' =&0010' 0?'0A' \' CC1 ?1@>1-

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' @1>1-' 1-?\'< F10'-' @1' @?-A' C0BD1 -' A1+0-' @1' =10' A1' 1'-' < -' <-' A1' 1.-1' A?' & ' 1- ' 0'0>1' C?'0' @1' B&-H?10' C ''5 >10>1' @1' & ' A1' @<A+'0' I ' <001-' A10' ?!' 10C?1@L' I ' 1>9' C& 1@L' I ' < @10' 10C1B'<@L' '-0 <-B1' I ' 1H?10' A1' &10' "1-.@1 1 1' 10 1<- \' 1-' >10>1' @1' C@1>1-' ='0' ' 1' & A'-1 ' I ' 10 <#@@ 1'A'1010' & A'-<-B10' I ' 10 < ? \' 1-' @< =&? >1' H1-0?'

-' C '>10' & A1'-10' 10 ' C ' @1' C=' ' A?' & ' I ' @<'01' A1' 0&-' C&1C@1 H' @10' ?!' A1' @1' &?-01 ' A?' & ' C ' @1' 1>C08 10 1<- \' C? &-' <00'.-11' C' <?A& ' 1' A?' A' ' C@1>1-9 10 10' I ' &C1 1 0' <=<' 1' >&-&'1' A& ' I ' A< .1-' I ' < 1-' ' @10' 10BD<?-.10' A1' >&-1'1' 0'#'1-' 1-' @< ' 11' "1, K'a' B&>1' 1-' @<' +'@@1' A1' '0 ?' 9 I ' <?L" 10' <-0' A10' @'1?L' B&>1' 01>#@1 <' <0' A' \' #&-1' I ' -1B100< '1' 0&@&-B' @&? ' #&-0' <A+'0' I ' A'0B 1B'&-09' <0B?-' 10 < ?' ' &?' & A'-<-B1' =<' ' <?' B&- / '1' -&-' &#0 <-

1>' H' &? \' @1 ' 10 < ?' 0' I ' & A'-<-B10' =<' \' A10' C? +1&? 0' I ' <BD< &? 0' I ' -'1-' 1C1@@10' 0&'1-' .< A1\' I ' 1L1B? \' 1-' &? \' C&'- \' I ' <?L" CB@<>1\' 1-' &? \' &>' 10' C> ' @1' &'<@>1' C' ><-A1>1-' \' A?' & " ' H' BD10B'>' '0B&-' A1-.@1 1' <C0' B1&' H'9 1'9 10B'1?' @10' A' \' 10 < ? \' C? ' 1-' =<' 1' CB@<><B'&-' C' '1 ><-A18 >1-' @10' =<B1' CB@<'>1' BD10B?-' <-' H?< 1' =&' \' C> ' 0<' #<'@@'1' 0? ' C1'-1' A1' C<'1' <?' & ' <' BD10B?-1' =&' \' H'9 1-' =<'@@1' 1-' 0&?@A\G' 1' H' 0? ' >10>1' @<' C1'-1' BD10B?-' A10' A' \' '0B&- 0' =<B1' A1@', <-B1' A?' A' ' ><-A18 >1-' <' 0&-' 0?BB100&? ' 1->1A'< 1' C' 1-A1- ? 0' 1-C' 1?L' < <' 0' C&-' '@ C&1 ' =<' 1' 01>#@<#@1' CB@<><B'&-' C? ' @1' 1>C0' H'9 10 &'01' 1-'0&-' &==B1' C ' @1' <'01' I ' 01? 1' A1' @1' C&1C@1G 1 ' H' BD10B?-' '1@ 0?BB100&? ' <C20 B1@ ' ><?-A18 >1-' C' @? ' 10B1?' =<B1' <? '1@0' CB@<><B'&-0' H?< 1' =&' \' C' <-' ' <? '1@ A1@' <- 1' A?' A' ' ><-A1>1-' =1 <' <0&-' 0?BB100&? ' B&>1' A100?'0' 0? ' @1' C1'-1' <+3- A' 1

' D1' < @'<>1-' D&@A1-' <' F10>'-0 1 9 D1' &-A< '-1L ' #1=& 1' D1' !1<0 ' &=' <'-' < '-9 D1' !' 0 ' '1<'&=' D1' 1'.-'&=' &? ' &+1 1'.- & A, '-.' 1- ' D1' 'L D' 0)G' D1' 0<>1', '-.9 # ' D1' A+'B1' <-A' 001-' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@9 <-A' <' D1' 0C1B'<@ -0 <-B1' <-A' 1H?10' &=' D1' &>>&-0' ` &=' D1' 1<@>P' &=' -.@<-A9 #1'-.' `<001>#@1AP' '-' '-0' C 101-' < @'<j >1-9 D< D' B<?01A' &' #1' W)' & A<'-1A' <-A' 10 <#@'0D1A' A'+1 0' A'-<-B10' <-A' < ? 10' '-' D1' ! & >' =&@@&K'-.

! 9 ''0' & A<'-1A' `<-A' 10 <#@'0D1A9P' =& ' D1' &=' ' &=' D1', '-.9 <-A' D1' <01' &=' D'0' 1&C@1 9 D<' D1' & A0' &=' D1', '-./0' &?-B'@' =& ' D1' '>1' #1'-.' >< ' <0<.-9 # ' ? D& ' '&=' D1' 0<'A' < @'<>1-9 <0 1 0' <-A' F & aj >1-' &' ><a1' &-1 ' &=' E&@A' <-A' '@+1 9 K -' &' D&@A' D1' LBD<-.10' &=' &-1 ' <0' K1@@ '-' D1' ' ' &=' & a' <0' >' D1' &K-' &=' '0 &@9 <-A' <@0&' '-' <0' >><-' @<B10' <0' &' D1' 0<'A' & A0' 0D<@@ 011>' 0)' -1B100< 9 <BB& A'-.' &' D1' ' .&&A' A+'B1' <-A' "'0B 1 '&-9 <-' ' < ? 1' & ' A'-<-B1' ><A1' &' D1' B&- < ' -& K' D0 <-A'-.

9 D<' <@@' D1' < ? 10' <-A' A'-<-B10' ><A1' &=' ? +1 & 0' <-A' ? 1 0' <-A'-& ' 1C1<@1A9 #1' a1C ' <-A' 1L1j B? 1A' '-' <@@ &'- 0' <-A' <@0&' C &B@<'>1A' '-' <@@ &?- '10' D &?.D' D1' 1<@>' # ' D1' ,'-./0' &>><-A>1-' -A' D<' 1+1 ' D1 '=='`&=' D1' 1<@>P' &=' -.@<-A' <=1' D<' D1' D< D' 1B1'+1A' D1' 0<'A' < ? 10' D1 1&=' &' ><a1' &B@<><'&-' # ' 0?BD' &>><-A>1-9 0D<@@ B<?01' D1>' &' #1' C &B@<'>1A' 1+1 ' 1<'=&? ' '>10' D &?.D' D'0' <'@'j K'Ba9 ?C&-' <'-' &' C<' &' D1', '-.' <' 1+1 ' '>1' D<' D1' D1 1&=' ''@0 <-' ?-A 1A' D'@@'-.0G <-A' D<' ?C&-' D1' 0<>1' <'-' 1+1 ' &=' D1' 0<'A' D1 '==0' 0D<@@ A1@'+1 ' D1' 0<'A' &>><-A>1-' &' D'0' ?BB100& ' '>>1A'< 1@' # ' ` -A1-? 1'/P' &' #1' ><A1' #1 K'L' D1>9 KD1 1# ' D1' >< ' ><a1'@'a1' &B@<>< '&-'=& ' D1' '>1' D<' D1' B&- '-?1 D'-' ` D1' 0<'A'\P' ==' B19=& ' D1' <01'<-A' ? 1 '&=' D1' 1&C@1G <-A' D<' 1+1 ' 0?BD' ?BB100& 9 <= 1 ' 0?BD' &>><-Aj >1-' # ' D'>' 1B1'+1A' 0D<@@ ><a1' 0?BD' &B@<><?&-0' !&? ' '>10' '-' D1' 1< 9 <-A' 0D<@@ ><a1' 0?BD' " 1@'+1 <-B1' &=' D1' 0<'A' &>><-A>1-' &' D'0' ?BB100& 9 <0' <#&+1' '0' 0<'A9 ?C&-' D1' <'-' <=& 10<'A

0<= 1' D1' &-H?10' " 'G '6' /' ><A9 4 # (' .&&A1' <-A' " ' '6' 01-A1-? 10' " 'G ' 0$

< ? 10' &=' D1' ! ' 0' 1<

&-' 2' -/' %# -*!2 &-' A."E' 4"%2.+' ' 0-/!'" "/!"2' . ' !' .0-##+

!"'&+ 2' 2 +' ".#+ &1' !' 0 !2. ' 30"'!@."2

0' D'0' '0' <-' -A& 01D'1-' <' D1' & &>' &=' 1>#<-1' * ' &=' D1' < ? 1' &@@9 KD'BD' '0' D1' @<0' &=' D1' D 11' 1>#<-10' KD1 1&-' D1' < ? 10' &=' D101' K&' 1< 0' < 1' 1-1 1A

' '0# 1-' h&<@% A=' (=' D1' 1<@> ' I B

%#! &" *' E<A?< 100 1-1 B1 ' @1 . G &" Ơ2 +# &-/' 0"! @)

" 1 ! +# &)!2&/!' .-'< !&" 4!.! &#!2' -' 1@<-A0

' " ' & b w

E<A?< 10 ' C#'2 +# . ' ;!'3"&-#& +2' . ' -@' ++

BD&@?' 2 +# &-/' 0"! @<' -/' .UA<B1' 1 ''CC-' g . ' <"';!V*' . ' !'M&-*()' ;!&2 -#!

ZH) !' 2 !'" !' &-' &' 'D&@A' !' MU[*') CLBD<D.1 &-A&<

g !& <0>?BD' <Ơ A'+1 0' <-0@<?.D 1 0g ? A1 0g <C10g &##1 '10g <-A' & D1 ' !1@&-'10g '& 0g &-+1-j 'B@10g <-A' `A'+1 0' & D1 ^' ==1-B10' -&K'@< 1' D<+1' #11-' A&-1' '-'A'+1 0' &?- '10' `&=' D1' 1<@>P'&=' -.@<-Ag# ' 1&C R#&>' '-'` D1' &?- '&=P' 1@<-Ag 1C<' '-.' C' D1' &K-' &=' L1-=& Ag <-A' D1 1' ` 0'<-' '<-A'P' AK1@@'-.' ?-A1 ' D1' ? '0A'=@'&-' &=' D1' -'+1 0' '&=' L1-=& Ag &' D1' . 1<' =1<' &=' <@@' <-.-1 ' &=' 1&C@1' `'-' D1' 1<@>' &=' -.@<-AP' AK1@@'-.' D1 1<#&? g <0# '<@@ D1' &> <&>' &=' D1'0<>1' 1<@>'<001>#@1A'-' ` D1'0<'A P' < @'<>1-'' ' K<0' J)' . '1+&?0@ ' B&>C@<'-1A')G `&? '0<'A' & AP' DA' ,'-.' # ' D1' 001- '<=& 10<'Ag <-A'<' D1' 1H?10 '&=' D1' 0<>1' &> >&-0' D< D' & A<'-1A' `<-A'0 <#@'0D1A9P' D<' <@@ 1&C@1' #& -' '-' 1@<-A' 0D<@@ A1C< ' &? ' &=' D1' 1<@>' K' D'-'<' &- D' $/)' <= 1 ' &B@<>< '&-'><A1'&=' D'0' A'j -<-B1g ?C&-' <'-' &' @&01' D1' ' E&&A0g <-A' &' #1' '>C 'j 0&-1A< ' D1' ,'-./0' F '@@G' 1LB1C ' E <A?< 10' '-' D1' BD&&@0g <-A' 1-'C<+'-.' 1-1='B1' &=' &@ ' D? BD' '-' -.@<-Ag <-A' 1-'&=' <K''-' -.@<-Ag <-A' D&01' KD'BD' #1' '-D1 ' ' '-' -.@<-Ag <-A' D&01' D<' D<+1'!< D1 ' <-A' & D1 ' #1'-.' -.@'0D' 1&C@1g 1@'.'&?0' 1 0&-0' C &j =1001Ag 1 BD<- 0g ? .10010g -A' & D1 ' -D<#' <- 0' K' D'-' ' '10' `& '/P' & &?.D0'&=' .&&A' !<>1g KD'BD'B<-' ='-A' ? 1 '&=' D1' '.&&A' 1< '-.g <-A' ` '0D' F & >1-'\P' >< '1A' &' -.@'0D' 1-g <-A' f')' '0D' 1-' >< '1A' &' -.@'0D' F & >1-g KD'BD' #1' &=' .&&A' !<>1'G <-A' D<' <@@ ` D101'0P' '0D' 1&C@1' KD'BD' D<+1' 1-1='B10' & ' ==' B10' '-' D1' <-A' &=' 1@<-A' 0D<@@ <#'A1' D1 1' ?C&-' D1' ' 1-1j ='B10' <-A' ='B10g ?C&-' <'-' &' @&01' <-A' =& =1' ' D1' &=' 0' &=' D1' ' 1-1='B10' <-A' ='B10g =& ' D1' "1=1-B1' &=' D1' <-A' &=' 1@<-A' <=& 10<'Ag <BB& A'-.' &' D1' A'j -<-B1' ><A1' '-' D1' '>1' &=',' -.' 1- ' D1'!'= Dg D1' !' 0 ' 1< ' &='D'0' 1'.-G -A' D<' D1' E <A?< 10' <-A' #1-1='B1A' 1-' 0D<@@ ='-A' ? 1 '&=' D1' '.&&A' 1< '-.g <-A' D<' D1 ' <a1' -&' ?C&-' D1>' D1' '-B'C<@' ' &=' <- ' <@@ & ' &0 1@g#?'` &/P' 1><'-'<>&-.0' D1' -.@'0D' BD&@< 0' ?-A1 ' D1' '-B'C<@' ' &=' & D1 0' & 1&+1 g D<'` D101'0P' BD&@< 0' &=' 1@<-A' KD'BD' #1' -&' E <A?< 10g <-A' #1' &=' D1' ,'-./0 #1'0<-B1g 0D<@@ ='-A' ? 1 ' &=' D1' '.&&A' 1< '-.''-' D1' <--1 '<0' D1' 0<'A' E <A?< 10' D&? 'A&g '-' 0?BD' & ' <-A' ! & >' <0' '0' <=& 10<'AG <-A' D<' <@@ D1' BD&@< 0' &=' 1@<-A' #1'-.' -&K' '-' -.@<-Ag KD'BD' K'@@ D1 1' AK1@@g 1+1 ' &=' D1>' 0D<@@ # '-.' &' D1' D<-B1@@& '&=' -.@<-A' =& ' D1' '>1' #1'-.g #1=& 1' D1' !1<0 ' &=' <'-'@&D'"' <C '0' -1L ' B&>'-.' 1 1 0' ?-A1 ' D1' 1<g &=' D1' '1? 1-<-' & ' Q' ?0 'B10 JP' &=' 1@<-Ag 10 '=' -.' D<' D1 ' #1' &=' D1',' -./0 #1'0<-B1G <-A' 3')' &=' D1>' D<' # '-.' -& ' 0?BD' 1 1 0' #1 K'L' D'0' <-A' D1' 0<'A' !1<0 ' &=' <'-' &D-' D1' <C '0 g ' ' 0D<@@ #1' A&-1' <0' &=' 1#1@0' &' &? ' & A' D1',' -.G <-A' D<'=&>' <-A' <= 1 ' D1' 0<'A' !1<0 ' &=' <'-' &D-g -&' 1 0&-0' #&>' '-' 1@<-A' 0D<@@ 1-1 ' D1' 1<@>' &=' -.@<-A' &' AK1@@ '-' D1' 0<'A' -'+1 0' ' &=' L1-=& A' & '&=' <>#'A.1g & '1@01KD1 1' $ K'D'-' D1' 1<@>' &=' -.@<-Ag ?-@100' D1' # '-.' &' D1'0<'A' D<-B1@@& ' &=' -.@<-A'0?BD' 1 1 0' 10 '>&-'<@0g ?C&-' <'-' &' #1' C?-'0D1A' <0' < 1#1@' &' &? ' & A' D1',' -.

g D&?.D' ' ' D<' D' #11-' `K 1@@3P' & A<'-1A' '-' '>10' C<0 ' D<' D1' D<' 0D<@@ #1' <0 1 '&=' D1' '-' 0D<@@ '-' -&' K'01' D&@A' D1',' -./0' LBD<-.1'G 1+1 D1@100' &?' &+1 1'.-' & A' D1',' -.g # ' D1' ` A+'B1' <-A'P' 001-' &=' D1' & A0' ` C' ' ?<@' <-A' 1>C& <@@P' <-A' `<' D1' 1H?10 P' &=' D1' &> >&-0' <=& 10<'Ag K'@@' <-A' . <- 1 Dg @@<' D1' <0 1 '&=' D1' '-' < 8 D1' &K1 ' &=' &-A&-g KD'BD' -&K' '0g <-A' KD'BD' =& ' D1' '>1' 0D<@@ #1g ><' D<+1' <-A' D&@A' D1',' -./0' LBD<-.1' '-' D1' ' / &=

) +&&2' ! ' ') -!% & ' ! ' 6 Ơ ' ')) $' ('&-' !'2 1 !' '! +' 6' J % < O$ ' ' * $ @Z 02 &#!' '! ')) +' ! ' ' .1&2' &2' V ."/

1>' C? ' <-' H' A'+F0' D&>'B'A10' >? A 10' <C10' &#1 '10' I ' <? 10' =1@&-'10' '& 10' B&-+1- 'B@10' I ' ><@18' =<' R;' < < A1' &?-' 10 1\' =1' \' 1-' A', 010' &?- 110' " 1''8' .@1 1 'C' .1- 0' -11\' 1-' @<-A1' 1C< <-=\'<' @1' '@@1' A1' L1-=& A' I ' '@@&1H10' A1>? <- \' A10&? \' @<' ? '0A'BB'&-' A1@ -'@ 0' 1' " &L1-=& Ag <' .DA1' C&? 1' A1' &?' >< 1' C&1C@1' A1>? <-' @<' 1-+' &-' B&>1' C' &? 1' @<' &1' A?' &'<@>1' <001>#@1\' 1-' B10 ' C@1>1-' '=?'0 ' . 1+&?0>1-' A1' B1&' B& <C@1'-' 1-' @1' >10>10G @1' & ' A1@ <001-' <+D' A ' <' @<' 1H?10 1' A1' >10>1' @<' &1' <A' & A1'-1\g H' &? \' .1- \' -11\' 1-' @<-A' 0&'1-' +&'A1\' D& 0' A1' &'<@>1' A1A1'-0' @1' >&'0' CBD1'-' ?!' @1' CB@<><B'&-'=<' ' A1' B10 1' & A'-<-B1g 0? ' C1'-1' A1' CA 1' @&? ' #'1-0' I ' A10 1' 1>C '0&-1\' <' @<' +&@?- 11' A?' & 'G =&'C '01\' . <j A?< 10' 1-' @10' 10B&@10' I ' D&>10' <'<- \' #1-1='B10' A1' 1'- 1' 0.@'01' 1-' -.@1 1' I ' D&>10' A1' @1 ' 1-' -.@1R 1' I ' B1?L' H" 01- ' `1-D1 ' 10 P' 1-' -.@1 1' I ' B1?L' H&- ' C'1 1' I ' <@1 1' -.@&'0g 1@'.'&?010' 10010g BD<- \g ? .1&'0' I ' <? 10' 1-D<#'B<- 0' A1'-\' ' 110' I ' ? .D10' A1' #&-1'=1>1' H?1?L' C? &-' &+1 ' 01? 1' A1' @&? ' #&-' C& g I ' =1>10' >< '10' <0' -.@&'0' I ' <?L" D&>10' &'0' >< '1\' <0' =1>>10' -.@& 0g H" 0&-' A1' #&-1'=<>1G I ' H' &? \' B1?L' &'0' H&-' #1-1='B10' &?' &=='B1' 1-' @<' 1' " @<-A' A1> .1-' 0? ' @&? ' #1-1='B10' I ' &=='B10' ''@&1H0' 0? ' C1'-1' A1 CA 1' I ' =& =<' 1' @10' C=' 10' A1' @&? ' #1-1j ='B10' I ' &==' B1' C ' @1' A1=1-0' A1' @<' 1' " ' @<-A' <+W- A' g <BB& A<-' <@ & A'-<-B1' =<' ' 1-' 1>C0/ A?' &'' 1- ' H?'-' <-' A1' 0&-' 1.-1' C '' G 1' H' @10' .A?< 10' I ' D&>10' #1-1='B10' &+1-' 01? 11' A1' @&?' #&-1' C& ' I ' H'@0' -1' C'.-1-' 0? ' 1?L' @<' C '-B'C<@ 11' A<0B?-1' <@1' &?' &0 1=='>10' A1>? .1-' '@0' 1-' <? 10' 0B&@1 0' -.@&'0' A10&? \' @<' C '-B'C<@ 11' A<? 10G I ' &? 1' B1&' H' B1?L' 0B&@1 0' " ' @<-A' H" -1' 0&-' > ' . <A?< 10' I ' 0&-' A1@ &#1'0<-B1' A1' & ' &+1-' 01? 1' A1' @&?' #&-1' C& 1' 1-' ' < 1' B&>1' @1\' A' \' . A?< 10' =1 &-' 1-' @<' =&/>1' <+-8' A' 1G 1' H' &? \' 0B&@1 0' " ' @<-A' 10 1<- \1-' -.@1 1' <' 01-' H" +& &-' A1>/1' 'B g =1B1-' <C& 1' BD10B?-' <C@?' <?' D<?-B1@@1' " 1-.@1 1' C' @1' 1>C0' 10 1<-' A1+D' @1' =10' A1' 1'-' &D-' @1' <C 1' C0BD1'-' <+1-' ' 10' A100&? \' @1' 1<@ A1' @1' @'1? 1- -' &?' ?0 'B1' " ' @<-Ag 10>&'.-<- \' H'@0' 0&-' A1@ &#1'0<-B1' A?' & 'G 1' H' A1' B1?L' H" -<CC& 1-' <'1' '1?L' 10' C1- 1' I ' @1' A' ' =10' A1' 1'-' &D-' 0&' '=<' ' B&>1' A10' 1#1@@10' <?' & G 1' H' A1' B1 ' =10' A1' 1'-' &D-' 1-<+-' -?@1' C0&-1' -11\' 1-' @<-A' 1- 1' @1' &'<@>1' " 1-.@1 1' <' A1>? 1' 1-' @<' A' 1' -' 0' 11' "&L1-=& A' &?' A1' <- 1# '..' &?' <'@@&? 0' A1A1'-0' @1' &'<@>1' " 1-.@1 1g 0'@' -1' C& 1' <?' 'A' ' D<?-B1@@1 g <? '1?L' 10' 10>&-'<@L' 0? ' C1'-1' A10 1' C?-'L' B&>1' 1#1@@' <?' &

1>' B&>#'1-' H' ' <A' 10 1' & A1'-1\' B1' 1-<1 1' H' B1@? 'H' 0&' ' 10 1' A1@ '- 1' -1' '1-A <' < '@10BD<?-.1' A?' & G '1- @1>< '-0' @1' & ' A1@ <001-' A10' _0' I ' &10' <+ - A' \' +&1 ' I ' . <?- 1' H' @1' 10 1' A1@ '- 1' <' @<' &? 1' A1' &?-A 10' H& 1' 10 ' I ' H" C ' @1' 1>C0' <' C?'001' <+&' ' I ' 1-' ' @10BD<?-.1' A?' & ' 1-' @<' ' 11' A1'

) -!"+&-!/' .-' !' 6.++

&?- 10ʼ <-H ʻ <ʼ @1ʼ C@1>1- ʻ C0BD1'-1>1- ʻ <ʼ 1-ʻ Gʼ C1-0ʻʻ Hʼ >10>1ʼ @1ʼ 10 1ʼ &?ʼ B1&ʼ Hʼ +'1-A <ʼ <ʼ @10ǂ BD<?-.1ʼ 1-ʻ C@< 1ʼ &?ʼ 1-ʻ ><001ʼ =1 <ʼ 1-+&'1 ʻ <ʼ @< - ʻ C? ʻ ʻ 10 1ʼ B?-'1RGʼ A1ʼ 1>CƠ 1-ʻ 1>CƠ <-H ʻ <ʼ @<ʼ ?'0A'ʻ C@1>1- ʻ C2.-<- ʻ C ʻ @10BD<?-.1ʼ A1ʼ@1ʼ &#@1ʼ 1-ʻ @1ʼ A'ʻ 10BD<-.1ʼ ?-ʻ A1-'1ʻ I ʻ ><@1ʼ <- 0&?@1>1-

1>ʻ <ʼ @<ʼ 0?CC@'B<B'C-ʻ A1ʼ@10ʼ _Ơ I ʻ <C' <'-0ʼ Hʻʻ 0&- ʻ 1-ʻ +'1ʼ H&- ʻ 1-A1- 1Rʼ &+10Hʻ @1ʼ 0. B'&?0ʼ & ʻ 1- ʻ C'1 1ʼ<?ʼ & ʻ H& 10 ʻ 1-ʻ &? \' 01\' .?1 10ʻ I ʻ @10ʼ 1L1B?ʻ &? 0ʼ <?L'ʻ A1ʼ B1? Bʼ Hʻʻ 0&- ʻ <ʼ ʻ '1?ʼ B&>< -A1\' Hʻʻ <+&'1- ʻ 1-A1- 10ʼ &+10Hʻ @1ʼ A' ʻ & ʻ @1ʼ C'1 1ʻ =<' ʻ C' @&? ʻ C1 'B'&-ʻ #<'@@1\' 1-ʻ B10 ʻ C@1>1- ʻ @1ʼ & ʻ A1ǂ <001-ʻ A1ʼ &? \' @10ʼ 5%ʼ 10C?1@L' I ʻ 1>C& 1#Bʼ I ʻ <?L'ʻ A1ʼ &? \' @10ʼ &10ʼ 10 1<- \' 1-ʻ B1&ʼ >10>1ʼ C@1>1- ʻ +&1 ʻ gʼ . <- 1ʻ Hʻ @1 ʻ '1 B10ʼ I ʻ AB Bʼ A1ǂ '1 B1ʼ A1ʼ &? 1ʼ ><51ʼ A1\9.<'.-10ʼ .<'.-1\' C' +&'1ʼ A1ʼ .?1 1ʻ <?ʼ A'ʻ & ʻ @1ʼ C'1 1ʼ <CC 18ʻ -/- \' &? ʻ A1ʼ 0&-ʼ >& '<- ʻ 0'#'1-ʻ A10ʼ C '0& 0ʼ C '010ʼ B&>1ʼ A<? 10ʼ .<'.-1 ʻ A1ʼ.?1 1ʻ C? &- ʻ 10 1ʼ A1A? I ʻʻ I ʻ 1#< ?\' Cʼ @&'<@1'@< B&>C 1ʼ 1-ʻ @10BD1a1 ʻ A?ʼ & ʻ A ʻ @10ʼ 0&>10ʼ A10ʼ .<.10ʼ <ʼ 1?L' A?1\' Cʼ @1ʼ A' ʻ & ʻ@1ʼ C'1 1ʼ 01@&-Bʼ @1==1= ʻ A1ʼ @10ʼ 1-A1- ? 10ʼ 1- ʻ =<' \ ʻ ? +'1'ǂ &? \' =&' \' H' A1 ʻ B1&ʼ Hʻ ?ʻ @1ʼ A' ʻ <BB&>C ʻ 0&' ʻ &+1\' ʻ @10ʼ Cʼ @1\' A' \' <BB&>C <- \' &? 1ʼ @10ʼ .<.10ʼ 0?'0A' \' 0&' ʻ 1?L' C<'>1- ʻ ='' ʻ Cʼ >10>1ʼ @<B &>C ǂ <A&-HƠ 0&'1-ʼ @10ʼ A' \' <BB&>C <- \' @& ʻ D1' Ơ 1L1B? &? 0ʼ I ʻ 1 1-Ⅳ- \' <C0ʼ B1@@10ʼ <BB&>C 1 ʻ I ʻ . 11ʼ =<' 10ʼ H?' 10ʼ I ʻ A10BD< .1\' C? ʻ &? \' &? 0ʼ ʻ &? 1ʼ B1&ʼ @1ʼ & ʻ +&1 ʻ I ʻ <A' & ǂ A1'-1ʼ A1ǂ <001-ʻ A1\' = 0ʼ I ʻ &1' <+0- A' \ǂ Hʻ &? \' =1?'= <Ơ H?1?L' @1ʼ A' ʻ & ʻ @1ʼ C'1 1ʼ <+&' ʻ .<.1\' &'<@L' ʻ <? 10ʼ BD&010ʼ 0&'1-ʻ A1+ -ʻ @1ʼ &-01@@ A?ʼ & ʻ A1+J-ʻ @1ʼ =10ʻ A1 1'-ʻ & -ʼ @1ʼ <C= 1ʼ C0BD1'-ʼ <+1-'ʻ &+10Hʻ >10>10ʼ @10ʼ BD&010ʼ I ʻ &'<@LG I ʻ 1-ʻ B<Ơ Hʻ @ʼ -1ʼ 0&'1-ʻ 0< '0='1\' <@& Ơ A1ʼ @ ?ʻ A'1? 1\' B1@@10ʼ C '10ʼ &?ʼ A1A1'@'mʼ ?-ʻ A'> ʻ <-')ʼ >10>1ʼ @1ʼ =10 ǂ H<A&-HƠ C<'1\' <?ʼ & ʻ C\' 1?L' &?ʻ B1&ʼ Hʻ >10>10ʼ @10ʼ BD&010ʼ I ʻ &'<@L' 0&'1-ʻ &+1\' A1ʼ . 1'-A 1ʼ +<@?1ʼ H'@Ơ -1ʼ =? 1- ʻ > ʻ >'010ʼ 1-ʻ .<.1ǂ <'1-ʻ '@Ơ 1-ʻ C110ʼ I ʻ 0<-\' 1 -C1BD1>1-ʻ A?ʼ & ʻ <CƠ @1ʼ 0?0A'ʻ A'> ʻ <ʼ &? \' 'B1@@10ʼ &'<@L' gʼ BD&010ǂ 0'@Ơ -1ʼ 0&'1-ʻ '<?-8ʼ B'1-Ơ &'<@L'A1ʼ @<ʼ & &-1'G I ʻ H'@Ơ gʼ@&? ʻ D1' Ơ , 1 1-Ⅳ- mʻ I ʻ 1L1B? &? 0ʼ I ʻ BD10B?-ʼ A1ʼ 1?L' 0&'1-ʻ I ʻ 0&'ʻ A1ʼ >10>10ʼ @10ʼ &'<@L' I ʻ BD&010ǂ Hʻʻ -1ʼ 0&- ʻ <?-1'1-0ʼ '<@]ʼ A1ʼ @<ʼ & &-1ǂ H?' 1\' I ʻ A10BD< .1\' 1-50ʼ @1ʼ & ʻ'<CƠ @1ʼ A' ʻ A'> ʻ <-' &? &? 1>1-

Vʼ 1>ʻ B&>1ʼ #'1 ʻʻ Hʻ 1-ʻ @10 < ?'ʻ =<'ʻ <-ʻ A?ʼ 1.-1ʼ A1ǂ & ʻ 'BD< A' 01A1' H?< & 0\'>1ǂ & A1'-1\' =?'ʻ Hʻ C' BD10B?-ʻ 10BD<-.1ʼ Hʻ, &'ʻ /)ʼ Cʼ ʻ BD<- Ơ <ʼ @<ʼ &? 1ʼ A1ʼ &>1ʼ &?ʼ <'@@&? 0ǂ @10ʼ A' \' ʻ BD<- \' &'1-ʻ'=1 >1>1-ʻ I ʻ 01? 1>1-ʻ @'1\' 1-ʻ @<ʼ D<?-B1@@1 '1ʼ A<BD< 1ʻ A1'-\' &'Ơ >&'0ʼ <CƠ @<ʼ A'ʻ 10BD<?-.1ʼ =<'ʻ BD<-A'010ʼ A1ʼ @10 <C@1ǂ B&>1ʼ @<'DƠ Hʻʻ Ơ C1<?L' @<-?\' I ʻ C@?>#1ǂ ? 10 1'-'#? 1=? ><.1ʼA <CƠ &?'<? 10ʼ B&>&A' 110ʼA1'@<ʼR 1ǂ A1ʼ @<ʼ+<@?1ʼ A1ʼ @<ʼ 0&>1ʼ '00'-ʻ 10BD<-.11ʼ 0? ʻ =& =<@ ? 1ʼ A'B1 G '1- @1><-Rʼ (-ʻ@1ʼC@1>1-ʻ 1-?\'@1ʼC ʻ ʻ ?'A1ʼ "1B1>#ʻ <-' A?ʼ 1.-1ʼ A1ǂ & ʻ 1- ʻH?'-ʻ-&1+'0>1

ʻ <2ʼ = 6ʻ < ʻ%Hʻ 2'
ʻ=<'ʻ ʻ*%= ʻHH

&-A&-ǂ '@@ D1ʼ <@'<>1-ʻ-1L ʻ &'#1'D&@A1-G0&' D< ʻ D1ʼ 0<>1ʼ <0 1 'A&' &'#1'01-ʻ &' D1ʼ '-ʻ<@@ D< ʻ0D<@@ B&>1ʼ &' D1ʼ LBD<-.1ʼ '-ʼ @< 1ʼ&ʻ'-ʼ <00ǂ &'#1ʼ '0)ʼ B&'-1A' = &>ʼ ʻ>1ʼ &' ʻ>1ǂ ?-ʻ@ D1ʼ0<'A' < @'<>1-ʻ G <a'-.' =& ʻ D1ʼ LBD<-.1ʼ &=ʼ D1ʼ &#@1'ʻ-ʼ D1ʼ 0<'A' LBD<-.1ʼ ʻʻA ʻ &D' &-@

ǂ ʻ D1ʼ ?CC@'B< '&-ʼ &=ʼ D1ʼ`0<'A' & A0ʼ<-A' <C <'-0ʼ D<ʻ#1'ʻ-ʼ '=1ǂ KD'BDʼ D<+1'ʻ-A1- 1A' K' Dʼ D1ʼ . <B'&?0ʼ ,'-.' 1- ǂ !< D1 ʻ & D1ʼ ,'-.' D<ʻ -&K'ʻ'0'ʻ-' <@@ D'0 F < 0ǂ <-A'<@0& D1ʼ L1B? & 0'&=ʼ D1>ʼ D<ʻ#1'B&>j ><-A1A' &'E&Aǂ KD'BDʼ D<+1'ʻ-A1- 1A'K' Dʼ D1ʼ0<'A' ,'-.' D1ʼ!< D1 ǂ><A1'# ʻ D1'ʻ 1 ʻ '&-ʼ A1@'+1 1A'ʻ-ʼ D'0ʼ < @'<j >1- ǂ D1ʼ ,'-.'# ʻ D1ʼ 001-ʻ &=ʼ <@@ `D'00Pʼ & A0ʼ C'j ʻ ?<@<-A' 1>C& <@@<-A'<@0&' &=ʼ<@@ D1ʼ &>>&-0ʼ #1'-.' '-ʼ D'0ʼ < @'<>1-ǂ K'@@ <-A'. <- 1 D ʼ D<ʻ D1ʼ D' A0ʼ <-A' D1ʼ D' A' &=ʼ D1ʼ D' A' &=ʼ <@@ <--1 ʻ &=ʼ E<'-0ǂ .<'-1A'# ʻ K< ʻ &=ʼ F < ǂ C1 <'-'-.' &' D1'0<'A' ,'-.' D1ʼ !< D1 ǂ D1ʼ " < ʻ &=ʼ D'0ʼ " 1< Dǂ <0 K1@@ &=ʼ '0&-1 0ʼ <a1-ʼ <0ʼ &=ʼ& D1 ʻ E<'-0ʼ &=ʼ F < ǂ >< ʻ#1' A1A?=@1A'<-A' 1#< 1A' # ʻ @<K=?@ BB&?-ʻ ʻ-ʼ D1', '-./0ʼ LBD1H?1 ǂ `=& 'OPʼ D1ʼ ?>0ʼ &=ʼ D1ʼ F <.10ʼ &' D1>ʼ A?1'# ʻ D1'0<'A' ,'-.' D1ʼ !< D1 ǂ <BB& A'-.' &' DH ==1=@'&=ʼ D1ʼ -A1- ? 10ʼ D1 1H=ʼ ><A1ʼ &+'A1A'<@ 0ǂ @> ʻ`'=0'P'&=ʼ D<ʻ KD'BDʼ ?C&-ʼ D1ʼ0<'A' BB&>C ʻ \)ʼ =&?-A'A?1ʼ D1ʼ 0<'A' B&&>C8ʼ <- 0ʼ <#&+1ʼ D1ʼ0<'A' F <.10ǂ < >1-ʻ'#1ʼ ><A1'# ʻ D1>ʼ ?C&-ʼ D1ʼ 0<>1ʼ BB&?-ǂ D1-ʼ D1ʼ 0<'A' ` ?CC@'<- 0ǂ Pʼ D1'ʻ L1B? & 0ǂ 1'0ʼ =ʼ @>A8 1-<- 0ʼ <= 1ʻ D1ʼ 0<'A' BB&?-ʻ<-A' E 11ʼ ><A1ǂ 0D<@@ #1ʼ D1 1&=ʼ H?'ʻ<-A' A'0j BD< .1A'=& ʻ1+1 ʻ -A'>& 1&+1ʻ D1', '-.' K'@@ <-A'D< D' 3". '&2&.&8 2' & A<'-1A' `&=ʼ D1ʼ0<'A' 001-ǂ0Pʼ D<ʻ<@@ D1ʻ &' KD&>' .' <7<2 D1ʼ0<'A', '-.' D1!< D1 ʻ D< Dʼ `A1@'+1 1A'E<.10/Pʼ 1K1@0 ʻ 1 ." * *!/';@' ʻ !-"@' `<-A [Pʼ & D1ʻ D'-.0ǂ 0D<@@ #1'#1=& 1ʼ D1', '-./0ʼ &?-B'@/ #1=& 1ʼ D1ʼ !1<0 ʻ &=ʼ <'= ʻ &D-ʼ <C '0ʻ-1L ʻ B& >ʻ-.ǂ K' Dʼ D1ʼ0<>1ʼ D'-.0ʼ <-A' 1K1@Ơ :ʼ <-A' '-ʼ B<01ʼ D1 ʻ #1' -& ʻ 9 J)ʼ 0< '0='1A'&=ʼ D1'ʻ "? '10ʻ W)9ʼ & ʻ K' D'-ʼ <@=ʼ <ʼ 1<ʻ <= 1ʻ D1ʼ0<>1ʼ !1<0 99ǂ D1-ʼ D1 ʻ <= 1ʻ D1ʼ0<'A' <@=ʼ 1<ʻ 0D<@@ D<+1ʼ <@@ D1ʼ0<'A' 1K1@Ơ <-A' D'-.0ʼ '-ʼ 1<B1ʼ <-A' K' D&?ʻ >C1<BD>1-ʻ &=ʼ D1', '-.ǂ C< '-.' &' D1', '-.' <@@ D<ʻ D1ʼ0<>1ʼ 1K1@Ơ <-A' D'-.0ʼ '-ʼ 1<B1ʼ <-A' . 1< 1ʻ <@?1ǂ D<-ʼ D<ʻ KD1 1=& 1ʼ D1ʻ K1 1ʼ C?ʻ '-ʼ E<.1G ?-@100ʼ D1ʻ #1ʼ -B'1-ʻ 1K1@Ơ &=ʼ D1ʼ &K-G <-A' D<ʻ D1ʻ<-A' D1'ʻ 1 0ǂ <-A8 1-<- 0ǂ <-A' L1B?j & 0ǂ <-A'1+1 ʻ&=ʼ D1>ǂ 0D<@@ #1'&=ʼ D1'0<>1ʼ 1K1@Ơ <-A' D'-.0ǂ KD'BDʼ #1'-& ʻ -B'1-ʻ 1K1@Ơ &=ʼ D1ʼ &K-ǂ H?'ʻ <-A' A'0BD< .1A' <.<'-0ʻ D1ʼ ,'-.' <= 1ʻ D1ʼ 0)ʼ <@=ʼ 1< ʻ =& ʻ 1+1

ʻV !"! 2'&-ʼ !ʼ 0 !'0& /!'&-ʼ !'B.0" !!- ʻA! '")' . ʻ !'6!&*-'. 'M&-*'6&# "/ʼ !ʼ !#.-/ʻ '7 2'./ &-!/ʻ ʻ .'" !'!"@' %# -*!ʼ '2 .0+/' ;!ʼ 1 /!';@' !"# -2' .' !ʼ .0"ʻ . ʻ6.1!'. '" !+2!7 !"!ʻ !ʼ 2 &/' !"# -2'2 .0+/';!ʼ &"1+@' -/'20"!+@';.0-/'&-ʼ &!' -#!"@'.';0@'7& &-' "!!L' .- 2ʼ !'" !ʼ 2 &/' %# -*!ʼ 1 /!ʻ !"# -/&2!2'. ʻ !ʼ +!ʼ 2'V ..+2ʻ ! !"'V/.+ !&2ʻ -/ʼ ! /'." &-'40 !" !!2!ʻ +. 2'."ʻ. !" .11./&&!2'.ʻ !ʼ -/'.ʻ !ʼ +0!' . & ! 01ʼ $'!%# -*!/'0 ;C'3 &-'. 'B." !&0"!'.ʻ !ʼ2 1!'H' !'!" !+!22'&-ʼ !'3 "+& 1! ʻ #</!-ʼ !'&"2ʼ @'.ʻ !#!"-L' ;!" &-ʼ !ʼ 1 'A! '" .ʻ !'6<&*-'. 'M&-*' !-"@' !'B& 3"Z <.-'&-' *d=)

ʻ ʻ &'.1&2' &2'V."/'
<0 .-'<J "'5' <@ '5' 1&2' &2'V."/
I'6 $ - ʻ '* ʻ 6 '$' '* % ' %'.$ $ ' $ % -* %1 % .'" ʻ ʻ ?'
ʻ 'M *'))' %

)' !' .+.7&-*' !'" &2' -.' &-2!" !/'&-' -@'. ʻ !' +/'3"&-!/' . &!2'H' ʻ 7 2' &"2' "&-!/' ".1' "& !' 0!'6.+ ʻ &-' 7E&-2!2' /&&.-)' .' & -2+ & 7ǂ . ʻ ʻ 2' !'!" ;!!-' "&-!/'&-D -@' /&&.-'. ʻ !' 0!2

?-> ' ‘ . ‘ 0 ‘ *‘ >

=& ' ? <'-' <?010' A1B@< 1A' '-' D1' 0'?-1' ' K<0' & A<'-1A' D1 1'-)' =& ' D1' &='' &=' D1' , '-.' <-A' &=' D1' 1<@>9' D<' <@@ 1 BD<- 0' KD&' 0D&?@A' D1 1<= 1 ' ><a1' 0?BD' LBD<-.10' &' =B1' &? '<#&+1' >1- '&-1A9' & '1@01KD1 19' A@&?@A9' D1 ' <-A' 1<BD' &' D1>9' #1' #&?-A' C1 0&-<@@ ' '-' D1' D<-B1 ' <=& 10<'A' '# ' 111.-'R<-B19' &' #? 9' K' D'-' '-1' &D D0' <= 1 ' D1' 0<>1' LBD<-.10' ><A19' @'a1' 1 BD<-A'010' <-A' &>>&A' '109' <0@ '0 <=& 10<'A9' &' D1' <@?1' &=' D1' ?>0' 0&' 1LBD<-.1A9' ?C&-' <'-' &=' & =1' ? 1' &=' D1' 0<>19' D1' 0<'A' < ? 1' ><A1' '-' D1' 0<'A' !&? 11-D' 1< ' -& K' D0 <-A'-.9' <-A' D<' D1' 0<>1' @<0 ' j A'-<-B1' 0D&?@A' 1-A? 1' ?- '@ D1' < @'<>1-' D1-' -1L ' &' #1' D&@A1-' 2 0 #1' , '-.9' =& <0>?BD' <0' D1' 0<'A' <?010' 0&' A1B@< 1A' ' 'D1' 0<'A' < @'<>1-' D&@A1-' D1' 0<'A' '-D' 1< ' D<+1' #11-' =1@' & #1' 1<0&-<#@19' <-A' <@0&' =& ' D<' D1' 0<>1' A'-<-B1' K<0' A1 1 >'-1A'<-A' 1LC' 1A' # ' D1' &>>1-B1>1-'&=' D'0' @<0 ' < @'<>1-9' D< D' & A<'-1A' '-' D'0' @<0 ' < @'<>1-9' D<' <@@ D1' 1 BD<-0' KD&' 0D<@@ ><a1' 0?BD' LBD<-.10' &' D1' 0<'A' &? ' &=' , & >19' & '1@01KD1 19' D1 '<-A'1<BD'&=' D1>'0D<@@ #1' D&?-A' C1 0&-<@@ ' '-' D1' , '-./0' D<-B1 ' # ' 1B&.-'\<-B1' &' #? 9' F' D'-' '-1' &- D0' <= 1 ' 0?BD' LBD<-.10' ><A19' @'a1' 1 j BD<-A'010' <-A' &>>&A' '109' <0' '0 <=& 10<'A9' &' D1' <@?1' &=' D1' ?>0' 0&' 1LBD<-.1A9' ?C&-' <'-' &=' !& =1' ? 1' &=' D1' 0<>19' -& K' D0 <-A'-.' D1' 0<'A' < ? 1' ><A1' '-' D1' 0<'A' !&? 11-D' 1< 9' <-A' D<' D'0' C 101-' A'-<-B1' 0D<@@ 1-A? 1' ?- '@ D1' !< ='<>1-' '-1L ' &' #1' D&@A1-

C ' R 1'-0' B<?010' A1A< 1\' 1-' 'B1 ' & A<-1\' =?' ' 1-' @1' >10>1' C ' C=' ' A?' & ' I ' A?' &'<@>19' H' &? \' BD<-0' H'' A1@& 0' =1 &'1-' <? '1@0' 10BD< .10' <' @< &? 1' 0 =1A' 1' &?' <'@@&? 09' H'@0' I ' BD10B?-' A1' 1?L' M &' ' I ' &'1-' '&#@'.1\' C0&-1@>1-' 17' @<' #<?-B1@@< '1' 0?'0A 1' C' 1B?-'0<-B1' A<BD< 1 ' A1'-\' -&1=' &&@0' <=20' >10>109' 10' 10B'<-.10' =1' \' 01>#@<F10' BD<-A'010' I ' B&>&A' 110' B&>1' A100-'0' 10 ' A' 9' <' @<' +<@?1' A1' @10' 0&>10' '00''@' 10BD<-.10' 0? ' C1'-1' A1' =& =<' 1' A'B1@@109' @1' A' ' 10 < ?' ' =1' ' @1' A' ' <-' H?< & 0\' >1' -&-' C#0 <-9' 1 ' H' B1@@1' A< <-' & A1'-<-B1' A? 1 &' ' <-a' < ' C@1>1-' A1@& 0' C0BD1'-B<1-' <' 1-' G' @1' & ' C ' <-' H' 01- ?\' =? 1-' @10' A' \' B<?010' '00'-' A1B@< 10' 1-' @1' A' ' C@1>1-' 1-?\' @1' A' ' <-' -&1+'0>1' 10&-<#@109' I ' <?L" H' >10>1' @& A'-< B1' =?' ' R>'-1\' I ' 1LC' 1\' C' @1' B#><@B1>1-' A1' B10' A< =1'-' C@1>1-9' <A' & A1'.-1\' <'' BB0' A< 8' 1'-' C@1>1-9' H' &? \' @10' ='BD<- \' H" =1 &'1-' <? '1@L' 10BD0>.10' <' @<' A=1' &? 1' A1' &>1' &?' <'@@&? 0' H'@0' I ' BD10B?-' A1' 1?L' 0&'1-' I ' 0&' ' &#@'.1\' C0&-1@>1-' 1-' @<' D<?-B1@@< '1' A?' & ' C' 1B&-'0<-A1' A<BD< 1 ' A1A1'-\' -&1=' >&'0' <C0' '1@L' 10BD<-.10' =1' \' 01>##@<#@10' ='BD<-A'010' I ' B&>&A' 110' B&>1' <+0-' 10' A' 9' <' @<' +<@?1' A1' @10' 0&>10' '00'-' 10BD<?-.10' 0? ' C1'-1' A1' =& =1' ? 1' A'B1@@109' -&-' &#0 <-' @1' A' ' 10 < ?' ' =1a' @1' A' '<-' H?< & 0\' >1G' 1' H' B10' C201-' & A'-<-B1' A? 1 <' <-H ' <?' C@1>1-' C0B#1=1>1-' <' 1>

)) ‘?f ! # 0 ‘ ‘ -/?9

D1' 1B&-A' 1<

' '2' D1' E <B1' &=' E&A9' , '-.' &=' -.@<-A' <-A' ! <-B1' <-A' & A' &=' 1@<-A9' &' D1' D1 '=='&=' 'AA@1j 01L9' E 11 '-.' 1 <'-' <? 10' <-A' A'-<-B10' '-' &? ' @<0 ' <@'<>1-' ><A19' F 1'01-A' & D11'-' !& >' < 1-9' B&>><-A'-.' D<' D&01' <? 10' <-A' A'-<-B10@' '-' D1' @<B10' K' D'-' D ' <'@'K'Ba' KD1 1' ' ' >< '#1' >&0' 1LC1A'1-9' D&?' A&' B<?01' &' #1' C?#@'B@ ' C &B@<'>1A' &-' &? ' 1D<@=9'<-A' 0' =<' <0' '-' D11' 1 D' &' #1' =1 >@ ' &#01 +1A9' <BB& A'-.' &' D1' 1-& ' &=' D1' 0<>1' F' -100' > 01@=' <' F 10 >'-0 1 ' D1' !' 0 ' "< ' &=' ?@ ' '-' D1' 1B&-A' 1<' &=' &? ' 1'.-

' D1' <@'<>1-' D&@A1-' <' F 10 >'-0 1 ' D1' K1-j '1 D' " < ' &=' ^&#1 9' '-' D1' 1B&-A' 1<' &=' D1' 1'.-' &=' , '-.' 1- ' D1' 'L D' <= 1 ' 8 D1' &-H?10 9' # ' D1' A+'B1' <A' 001-' &=' D1' & A0' C' ' ?<@' <-A' 1>C& <@9' <-A' <' D1'0C1B'<@ -0<-B1' <A' 1H?10 ' &=' D1' &>>&-0' &=' -.@<-A' #1'-.' '-' D1' 0<>1' <@'<>1-9' B1 <'-' A'j -<-B109' " 1B@< < '&-0' <-A' < ? 10' K1 1' ><A1' <-A' 0 <8' #@'0D1A' &' D1' &-&? ' &='E&A9' <-A' =& ' D1' F 1<@ D' &=' D1' , '-.' <-A8&=' D'0' 1<@>9' ' D1' & <-'=&@@&K'-.

! 9' D<' &@ ' D? BD9' <-A' < ' D1' & A0' C'j ' ?<@ <A' 1>C& <@9' <-A' <@@ & D1' D1' ''-./0' 1&C@19' D< '-.' '#1 '10' <-A' ! <-BD'010@9' <-A' <@0&' <@@ D1' ' '10' 0>A' & &?.D0' 0D<@@ D<+1' <-A' 1-& ' <@@ D1' ' '#1 '10' <A' ! ' <B#'010' K1@@ ?01A9' <-A' -& ' 1C1<@1A9' -& ' # ' D1' &-?-&-' <K' 1C1<@<#@1

ME' = ' ' ' ' G ' 6 # ' H% ' e' ' \9' ' ' 9' & ' " 1" .=<' 1L' -.'' I ' ! <-Be' I ' " -0' J' '#-' 'B' 'AA9' 0< >' ^?1A<>' <?<' I ' & A'-<B&10' '-' ?@ ' >&' C@'< <1-&'-&' 1A' <' '#" >' ' >h' ' -' =& ><' C< 1-e9' ><-A<- 10' HA' 0<?<' I ' & A'-<B 10' '@'<' '-' @&B'0' '-= <' #<@@'+<>' ?<>' ?#" ><.'0' 1LC1A'1-0' = ' ' C?#@'B1' 1L' C<1' -<' CB@<>< '9' I ' 1<' H?<-?>' '-' 1' 10 ' =' >'R' &#01 <" =11' ?L<' 1-& 1>' 1& A1>' ' >1' 'C&' <C?A' F 10 >' C ' >&' A'1' ?@'" --&' =' -' 01A&

' @1>1-' 1-?\' <' F 10 >' @1' LL33' &?' " &A&# ' <-' A?' 1.-1' A1@ & ' 1- ' @1' 0'0>1' C?'0' @1' B&-H?10' 1B&-A9' C' <+ 0' I ' <001-' A10' 0' 10C?1@L' I ' 1>C& 1@L' I ' <' @10' 10C<@10' -0<-B10' I ' 1H?10 1' A10' &10" 1-.@18' R 1' 1-' >10>1' @1' C@1>1-' 10 1<- \9' R 1'-\' & A'-<-B10' A1B@< <B'&-0' I ' 10 < ? \' =? 1-' =1' \' I ' 10 <#@'1\' <@ D&-&' A1' " '1?' I ' C ' @1' #1-' A?' & ' I ' A1' 0&-' A' ' &'<@>1' 1-' @<' =& >1' 1-0?<-

' C '>10' H' '-1' 0.@'01' I ' &? \' @10' 2 ' 10C?1@L' 9 I ' 1>C& 1@L' I ' &? \' @10' <? 10' @'1.10' A?' & ' <'<-\' @'# 110' ' = <?-BD'010' B <?L" &? \' @10' ' 110' B ? .='0' <'1-' I ' 1-&'1-' &? \' @&? ' @'# 110' B = <?-BD'010' #'1-' ?01\' B -'1-' 1C1@@1\' -1' C' @<' B&1' @1 ' 1C1@@<#@1\

!' + 2 ' 1!-&.-!/' 3". '&2&.-' "!-!7!/'0-&' !' -!%' 3 "+& 1!-

&;!" &!2 B&-=' >1A

1>' B&>1' C0C' <=' A1' 1'-' 1&-< A' " 1 K a9' H' B0 ' A1' @<' =?-A<A&-' A10' -&#@10' C.1-' &? 0' - 1' A' ' @1' & ' <A'0' & 0' " 1 - .@1R 1' I ' A1' 0&-' C &-<.1@ 1C' @<' C '='1' =?-A<A&-' A'B1 ' 10 &' ' 1-A&K1' C' @10' A' \' C.1-'@ ' &? 0' A?' & ' A?-' D <+1' A10' #@110' <C-A 1' <--?1@>1-' A1' BD10B?-' BD<=?1' < <-' A1'-\' @10' &?- 110' " 1 K a' ?>#' F 10 ='9' I' <-B<0 1' A1'-\' @<' C+'-B1' " 1 K a9' A10' H?1@0' D <+10' @10' <'0 1' I ' ! 1 0' A?' A' ' &0C' < ' I ' @&? ' CA1B100&? 0' &?- ' 10 1' 01'01\' A?' 1>C0' A&?-' >1>& '1' -1' B&? '&C>1' CB1@@' A1' @<' C '',' =?-A<A&-' A?' A' ' D&0C' <@e9' I ' 'B1@@10' &?- ' C '0' @1+1\' I ' B&'@@1\' <\' =10 ' A1' 1'-' < -' 1-' +1 ' B#?-' <-9' <-H9' & 1' < A1' H?1' A'1010' .1- \' A1\' A' \' &?- 110' A1'-\' @<' C+'-B1' 0?'0A' 1' >10>10' @10' D <+10' &H- 'A1 1-?\9' A&?- ' @10' A' \' <'0 1' I ' ! 1 0' -&?- ' 1>1A'1' 0?@='B1<- ' -1' B&+1-<#@1' <' @<' B&1' @1 9' <' .0?- ' <-'1- 1001>1- ' A?' A' ' D&0C' <@@ I ' &+0' 0?#@' <BA&-' A1@ 0?0 1-<?-B1' A10' A' \' <'0 1' I ' ! 1 0' 0" @&? ' -1' 0&' ' C? +1?' A1' 1>1A'1@ B&>1' A1' B1&' =?' ' B&>9' C@1' - ' 1-' @1' A' ' C@1>1- G @1' & ' B&-0'A1 1' @10' >'001' A1@ <001- ' I ' 1H?10 ' <+ A' \' <A' & A1' -1\' 5B 10 <#@'1\' H' @10' A' \' <'0 1' 5B ! 1 0' 5B @&? ' ?BB100&? 0' C? ' @1' 1>C0' 10 1<- \' C?'0 1- ' @1 1 ' B&'@@1 ' B C-A 1' @1 ' A' \' D <+10' AA-\' @1' C+'-B1' 0?'0A' 1' 1-' @10' @'1?L' C?' '@ A1+1- ' A1' A=&a' I ' 0&@&'1- ' 0&@&-B' @<' B?0 ?>1' 5B 0<.1' 1-' >10>10' @10' @'1?L' 1?\' CA1+ ' ' <? B" H' >10>1' @1' 1'0 1' B 010' 0?BB100&? 0' C? ' @1' 1>C0' 10 1<- \' <'1- ' A1' 1>C0' 1D' 1>C0' <BB'&-9' C' # '1=0' &?' C@1'- \' A1' A1 1' &?' A1' A1 1-?' <' @&? ' C@10' 9 1-,0' &? \' B1?L' B BD10B?-' A1' 1?L' H" >10>10' @10' D <+10' 1-0" A1' A A ' <?' A' ' D&0C' <@@ A?1\' A1 '1-.-1-' &?' <0B?-' CA1' A'B1_9 C ' 1B& 1 ' A1,0' 1 L' B BD10B?-' A1?L' @10' A' \' D < 10' &+1B' @&? ' A<><.10' 1-\' B1=' C '1',' ? +1?' &? \='<' \' H1' @10' CA10' +1B' H?1?L' @10' A' \' 1'0 1' B ! 1 ' ' @&? ' CA1B100&? 0' 0&-' <BB& A1\' C? ' '1@L' D <+109' C' B&>C&0'B'&-0' 1- 1' 1?L' =<' \' B 1-01<@1\9' -1' 0&'1-' BD< .1\' A1' C@?'0' H' -10' B&>C '0' 1-' >10>10' @10' BA -C&8' 0'B'&-09' C' @10' C&00100'&-0' H' @10' A' \' C '10' <+&'1-' <@ 1>C0' A1@ =10<' B1' A10' B&>C&0'B'&-0' <+3- A' \

1>' & A'-1\' 10' " <001- ?\' H' &D-' " ?1' A1' 1Aj =& A' ?-B@1' <' -=1' ' @1' & 9' H10' A1' @<' @1' ''11' 10' C< '10' A1' ! <?-B1' 1-' @1' M+'B1' A?' & 9' 1-' ? \' ><50' A10' C@110' >&1 1\' I ' <>&1+1 0' 1-,0' <0B?-1' C0B?@' 8&? C0&-109' A10' R 10' B 1D \' A&?-' @<' 1-0'&-' &?' @<' 18' >1'-A 1' 10 ' < ' A' ' " ?1' &'-' &?' 01 <_' <' 0&-' CC 1' &1C09' 0&' ' C' 0&-' < &? 1' &?' < &? -11\' 1B1?' <' A1=1-A 1' 0&-' A &' ' B 1-' >10>1' @<' ><51' 1' ' B 1-&'1' &? \' >< 0' #1-1='B10' B <+D' <.10' 0'B&>1' '@ =?'0 ' C01-' 1-' 0<' CC 1' C0&-1 ' ' H' BH0 1' & A'-<-B1' 01' 1L 1-A1' 0'#'1 ' <0' 1B1' 10' A10' 1 0'&-0' B 1>1'-A 10' <C? BD< 1 0' B <.<'-1 0' <?' A' ' " -B' &'- >1-' B 01 <@>1-' <' 0&-' &1C ' A1>10-19' B&>1' <' L11A 10' A10' 1C0'&-0' B 1><'-A 10' H'@ <A' <' Ca1-9' < B& <1' '@' I <' 1-'@1' M+'B1' A?' & ' A1' CA1@<

1>' B&>1' @1' 0- #@1' & ' AK< A' C?'0' 1' B&-H?10 ' '1 B1' & A1'-<' 0&=" 10 <C@1' A10 1' <' @<' '@@1' A1' <@1 0' B H' @1-A1 ' 1C< 1 ' A1 ' @<'-0' C1<@L' @<-?0' H?' 0' C@?>#1' 10 <'-'#? 1' =& ><.1' B &? \' <? 10' BD<-A'010' 1LB1C 0' A <C0' @<-?\' B D< <-a' 0& 1' C<00<- \' D& 0' A?' &'<@>1' "1-.@1 1' B 010' R B0' A1' E<@10' B "' @<-A' ' 0<' '@@1' A1' 1 K a' 0?' 1A1' , &' '<' A' 1' '@@1' A1' <@1 0')G

4 '= ' '9>'M &7 'HHH' '(#:'@ # '+)' 7='H

9' F D1 1<0' D1' &0C' <@ &=' <'-' 1&-< A' &=' & a9' KD'BD' '0' &=' D1' !&?-A< '&-' &=' D1')' &.1-' & 0' &=' &? ' 0 ?A' & A' D1',' -.9@< 1',' -.0' &=' -.@<-A9' <-A' &=' D'0' < &-<.1@ '-' D1' =' 0' !&?-A< '&-' &=' D1' 0<>1' K<0' 1-A&K1A9' # ' D1' 0<'A' &.1-' & 0' &=' D1' ,'-.9' &=' <' D <+1' &=' & -' &' #1' <a1-' 1< @ ' &=' 1+1 ' @&?.D' 1< '-.' K' D'-' D1' &?- '10' &=' & a9' ?>#1 @<-A9' F 10 >1 @<-A9' <-A' <-B<0 1 9' K' D'-' D1' ` &?- 3X' &=' & a9' &=' KD'BD' D <+10' D1' <0 1 ' <-A' 1 D 1-' &=' D1' 0<'A' &0C' <@@ <-A' D1' ' 1A1B100& 0' D<+1' #11-' 01'01A9' 3)' D1' '>1' KD1 1&=' ?--1 D' -&' 1>& 9' <0' < B1@ &=' D1' =' 0' !&?-A< '&-' &=' D1' 0<'A' &0C' <@@ <-A' D1' 0<>1' D1 ' D<+1' @1+'1A' <-A' .< D1 1A' <' D1' ! 1<0 ' &=' <'-' < '-' '-' F ' - 1 ' 1+1 ' 1< 9' '@@ -&K' @< 1' D<' A'+1 0' 1&C@1' (=' D1' 0<'A' &?- '10@' K' D' -' D1' H+'-B1' <=& 10<'A@ D<+1' K' DD&@A1-' D1' 0<>1' D <+10@ KD1 1&=' D1' 0<'A' <0 1 ' <D_' 1 D 1-' D<+1' -&' 0?==B'1-' -& ' B&+1-<#@1' 1>1A ' < ' D1' &>>&-' <K@ &' D1' . 1<' "<><.1' &=' D1' 0<'A' &0C' <@@ <-A' &C1-' ?# <A '&-' &=' D1' ?0 1-<-B1' &=' D1' 0<'A' <0 1 ' <-A' 1 D 1-9 '=' 1j >1A ' #1' -& ' =& ' D1>' C &+'A1A9' <0' &>C@<'-' K<0' D1 1&=' ><A1' '-' D1' 0<'A' < @'<>1-;' D1',' -.' B&D8' 0'A1 '-.' D1' 1>'0010@ &=' A'1' 001-' <-A' 1H?10 ' <=& 1j 0<'A@ D< D' & A<'-1A' <-A' 0 <#@'0D1A ' D< ' D1' 0<'A' <0 1 ' <-A' 1 D 1-9 <-A' D1' ' ?BB100& 0' =& ' D1' '>1' #<-.9 >< '@1+ 9' .< D1 9' <-A' <a1' D1' 0<'A' D <+10' K' D'-' D1' &+'-B1' <=& 10<'A@ '-' D1' @<B10' KD1 1' D1 ' &?.D ' &=' '.D 9' <-A' K1 1' F &- 9<= 1 ' D1' ?0 &>' <-A' 0<.1' D<A' '-' D1' 0<>1' @<B10' D1 1 &=& 1' -A' <@0&' D<' D1' 0<>1' ` <0 1 0 0@' <-A' 0)' ?BB100& 0' =& ' D1' '>1' #1'-.' 0D<@@ = &>' '>1' &' '>1' D<+1' AA&-0' # ' F ' 0' & ' @>-0' &=' " 1# ' & ' "1 '-?1' <' D1' ' @1<0? 19' <.<'-0' <@@ D1>' <-A' 1+1 ' &=' D1>' D<' A1 <'-' D1' 0<>1' D <+10' 0&' &=' '.D ' A?1' &' D1' 0<'A' &0C' <@@ C ' <-' < ' &=' D1>9' &' 1B&+1 ' D1' 0<'A' D <+10' <.<'-0 ' A'1>9' <-A' 1+1 ' &=' D1>9' K' D' D1' ' "<><.10' '-' F0' 1D<@=;' &+'A1A' <@K< 0' D<' D1' < '10' K' D' KD&'D' D1' 0<'A' <0 1 ' <-A' 1 D 1-9' & ' D1' ' 1A1B100& 0@ #1' <BB& A1A' =& ' 0?BD' D <+10' # ' &>C&0' '&-0' ><A1' <-A' 01<@1A' #1 K'L ' D1>9' 0D<@@ &=' @-&' >& 1' #1' BD< .1A' D<D' '0' B&>C '01A' K' D'-' D1' 0<>1' &>C&0' '&-0@=& ' D1' &00100'&-0' D<' D1' 0<'A' < '10' D<A' < ' D1' '>1' &=' D1' ><a'-.' &=' D1' <=& 10<'A' &>C&0' '&-0

9' '0' & A<'-1A' <-A' <001- 1A' D<' &D-' " ?a1' &=' 1A=& A9' -B@1' &' &?' &+1 1'.-' & A' D1' ,'-.9 KD'BD' '0' #1 &-A' D1' 1<' '-' D1' < 0' &=' ! <-B1' '-' D1' ,'-./0' 1 +'B1@' '-' <@@ <--1' &=' @1<0' >&+1A' <-A' &' #1' >&+1A' <.<'-0' <-' <0&-' & ' 1 0&-0' &=' <-A0' <-A' 10' -1>1-0@ D1' 1+1 0'&-' & ' 1><'-A1' KD1 1&=' '0' &' D1' 0<'A' " ?a1' &'-' & ' 01+1 <@ &' D'0' &K-' 010@ D1' 0D<@@ #1' # ' D'0' & -1 ' & ' & -1 0' 1B1'+1A' &' A1=1-A' D'0' .D 9' <-A' '-' D1' 0<> ' <--1 ' 0D<@@ D<+1' <-A' 1-& '<@@ ><--1 ' 1-1=' 0' <-A' A+<- <.10@ <0' '=' D1' K1 1' C 101-' '-' D'0' C &C1 ' 1 0&-9' a-A' D<' D'0' A'-<-B1' 1L 1-A' <0' K1@@ &' 1B1'C 0' &=' 1+1 0'&-0' <-A' 1><'-A1 0@ &' #1' C? BD<01A' <-A' .& 1-' &' D1' 0<'A' " ?a1' &'-@ ' & ' 01+1j <@@ ' &' D'0' &K-' 010@ <0' &' 1B1'C 0' &=' 1+1 0'&-0' <-A' 1><'-A1 0@ KD'BD' D1' -&K8 D< D@ <0' @&-.' <0' D1' 0D<@@ D1' '-' D1',' -./0' 1 +'B1' #1 &-A' D1' 1<

9' F D1 1<0' D1' &#@1',' -.' AK< A' D1' D' A' W)' A'A' & A<'-' D'0' <C@1' &' #1' `< /P' <@<'0@ <-A' D<' D1' KD&@1' 1C>' &=' F &&@0@ F &&@=1@0@ 1< D1 9' 1<A@ '-9' ? 1 9' D11019' <-A' & D1' 1 j BD<-A'019' 1LB1C' C)' @& D0' <-A' 1A' 1 '-.9 C<00'-.' &?' &=' D1' 1<@=" &=' -.@<-A@ <-A' D'0' <-A0' &=' F <@10' <-A' 1@<-A@ A-A' D'0' &K-' &=' 1 K'Ba8' ?C&-8 K11A@ 0D&?@A' #1' <' D1' 0<'A' &K-' &=' <@<'0G

'-.;+!' '! 'V' @'3". '&-#!' (".1' '! '5) 2!'") ' ' !'" !' .-SO!2 ' '! 'j L(5 =) ' %C <?'

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+#' !"# -k /&21Ż. !' +!' 2 +# ;!'# ""&!/' .' + &2

&#!-#!2)

'A' <= 1 ' <' <' < @'' -1 ' ' D&@A1-' '- ' D1' !' 0 ' 1< ' &=' , '-.' 1- ' D1' !& ' D@ ' ' K<0' & A<'-1A@ D< ' D1' <C@1' &=' F &&@0@ F &&@=1@0@ 1< D1 @ 1<A@ <-A' '-@ 0D&?@A' D1' KD&@@ ' <' <@<'0Ć 0<+'-.' D< ' 1 BD<- 0' &=' E1-&<@ 1-'B1@ < <@.-'<@ <.&-@<-A' & D1 ' 1<@>0@ <-A0@ `< - A P' & - '10' &K< A0' D1' F 10 @ #1'-.' &=' D1' , '-./0' >' @ >< ' 0D'C' <' <>C &-' '-' < 8' <Ba0@ D'C0@ E<@@1 0@ < 'A' & D1 ' 1001@0@ F &&@0@ F &&@8' =1@0@ 1< D1 @ 1<A@ '-@ <-A' & D1 ' 1 BD<-A'010' &=' D1' <C@1@ <-A' `# '-.0P' D1>' '- &' D1' ' &?- ' &K< A0' D1' F 10 @ <= 1 ' D1' !& >' &=' D1' < ? 1' D1 1&=' ><A1' '-' D1' 1B&-A' 1< ' &=' , '-.' 'BD< A' D1' 1B&-A' <= 1 ' D1' &-H?10 Ć <-A'<) Ć 0< '-.' &' D1' ? j .10010' <CA' 1 BD<- 0' &=' 1 K'Baa?C&-8 K11A' B1 <'-' 1-1=' ' &' # '-.' D1' F &&@0' &=@ D1' . &K'-.' #1 K11-' D1' F < 1 0' &=' K A'<-A' &Ba1 2' &' D1' 0<'A' !@<B1' &=' 1 K'Ba@ <-A' '0D'C' D1>' &K< A0' KD<' < 0' ' ' 0D<@@ C@1<01' D1>' #1 &-A' D1' 1<' 'A' <@0&' KD1 1<0' D1' 0<'A' < ? 10@ '-' D1' C< @'<>1-' D&@A1-' <' F 10 >'-0 1 ' '-' D1' 1B&-A' 1< '%=' D1' 1'.-' &=' , '-.' 1- ' D1' !'= D@ !< D1 ' &' &? ' &+1 1'.-' A' D1' , '-.' D<' -&K' '0@ K1 1' B&-=' >1A Ć <-A' -'& 1&+1 ' ' ' K<0' & A<'-1A' '-' D1' 0<>1' < @'<>1-1 @ D<' -&' F &&@0@ F &&@=1@0@ 1<j D1 @ 1<A@ '-@ KD&@1' & ' '=&?-A1A P' B<@@1A'0D& 1- '-@ -& ' -&-1' & D1 ' 1 BD<-A'01' &=' D1' <C@1' KD< 0&1+1 ' ' ' K1 1@ 0D&?@A'= & >' `D1-B1=& D'/P'#1'01- '& ' `# &?.D P' &' <- ' < 0' #1 &-A' D1' 1<@ 1LB1C ' D1 ' K1 1' =' 0 ' B< '1A' &' D1' 0<'A' <C@1@ <= 1 ' D1' !& >' &=' D1' 0<'A' A'-<-B1' ><A1' D1' 0<'A' ! ' 0 ' 1< @ ?C&-' <'-' &=' ! & =1 ' ? 1' &=' <@@ D1' 1 BD<-A'010' '-'0?BD' <- -1 '01- '& ' `# &?.D ' P' &?' &=' D1' 0<'A' 1<@>@ ?-@100' ' '#1' # ' D1' , '-. 0' 'B1-B1' Ć <-A' 1LB1C ' <@@ 1 0&-0@ E&&A0@ <-A' D'-.0' FD'BD' #1' 1LB1C 1A' '-' D1' 0<>1' A'-<-B1' ><A1' D1' ! ' 0 ' 1< @<0' '-' D1' 0>A < ? 10' 0' >& 1=? 'B&- <'-1A;' 1+1 D1@100 D1' 1< D1 9<-A' `=&?-A1A P '-9B<@@1A0D& 1- '-@ #&?.D ' <-A' C &+'A1A' D1 1' '-' -.@<-A@ D<+1' -& ' #11-' `# &?.D '\ P' &' D1' 0<'A' <C@1' T=' <@<'0@ <= 1 ' D1' !& >' &=' D1' 0<'A' < ? 10@ D? ' A& D' C<00' '- &' !@<-A1 0@ &@@<-A ' <-A' m1<@<-A@ &' D1' . 1<' " < > <. 1@ <-A' A' >'-'0D' -.' &=' D1' ?0 &>0' <-A' ?#0'A'10' A?1' &' D1' , '-.@ '=' D1 ' K1 1' `# &?.D '\ P' &' D1' &K-' &=' <@<'0Ć D1' , '-.' K '@@'-.' &' 10BD1K' ` D1 P' " <>< .1' <-A' " '>'-? '&-@ # ' D1' A+'B1' <-A' 1H?10 ' <=& 10<'A@ D< D' & A<'-1A' <-A' 10 <#@'0D1A@ D< ' <@@ D1' < ? 10' D1 1&=' ><A1' <-A' -& ' 1C1<@1A@ #1' D&@A1-' <-A' a1C @ <-A' C? ' '-' A?1' L1B? '&-'Ć -A' D<' D1' KD&@1' 1C<' ' C=' F &&@0@ F &&@=1@0@ 1< D1 @ 1<A@ `KD&@1' '-@ <-AO@' 0D& 1-' '-@ <-A' <@@' & D1 ' 1 j BD<-A'010' C1 >-'-.' &' D1' <C@1@ C<00'-.' &? ' &=' D1' 1<@>' (=' -.@<-A@ <-A' &=' D1' &?- '10' &=' F <@10' <-A' 1@<-A@ #1' <' D1' 0<'A' @<B1' &=' <@<'0@ <-A' <' -&-1' & D1 ' @<B1' #1 &-A' D1' 1<@ <0' @& '.' <0' D1' 0<'A' <C@1' 0D<@@ #1' <' /)' <@<=1@ ?C&-' <'-' &=' ! & =1' ? 1' &=' D1' +1 ' <@?1' &=' D1' D@1 BD<-A'010@ KD'BD' 0D<@@ C<00' 1@01j KD1 1' #? ' &' D1' < 0' &K< A0' D1' F 10 @ -<>1A' '-' D1' 0<'A' < ? 10' D1 1&=' ><A1Ć -A' D<' -&' 'B1-B1' = &>' D1-B1=& D' #1' . <- 1A' &' D1' &>= < @ 1LB1C ' =& ' F &&@0@ ! 1@@0@ <-A' 1< D1 ' &=' & D?>#1 @<-A@ F 10 @ >1 @<-A@ ?>#1 @<-A@ <-A' D1' '0D&C 'Ba' &=' " ? D<>' Ć 0<+'-.' D1' , '-./0' 1 &.< '+1 ' &+'A1A' <@K< 0 ' D< ' '=' <- ' 1 BD<- 0' ?-A1 ' &@&? ' &=' <- '@'B1=-B1' 0D'C' <- ' F &&@0' &=' D1' . &K'-.' &=' <- ' < ' &=' & a0D' 1@ &' &=' <- ' & D1 ' &?- ' &=' D1' 1<@>@ 1LB1C ' &=' D1' . &K'-.' &=' D1' 0<>1' < 0' &=' & D?>#1 @<-A@ F 10 >1 @<-A@ ?>#1 @<-A@ <-A' D1' '0D&C 'Ba' &=' " ? D<>@ D_ ' 0D<@@ =& =1' ' &' D1' , '-.' D1' <@?1' &=' <@@ D1' F &&@0' 0&' 0D'CC1A@ <-A' <@0&' D1 ' 0D<@@ @&01' D1' 1-1=' ' &=' D1' 0<>1

' $ ' 5 ' $ 1 . + ! -' U $ M]' # ""&!/' U' %' ' " Ng ' & ' ' & ' && #' :' !'2 1 ! . 7 -!'. '/P+ ' '5

1 ' C?'0' <-' C@1>1-' 1-?\' <-' C ' ' A?' & ' 1- ' @1' H?< ' =&'0 ' A1'-1' H' @10 <C@1' A10' @1'-0' H?' 0' C1<@L' @<-?\' C@?>#1' I 10 <'-1' M &' '1- '1 >1-' <' <@1 0@ <@+1' ' @10' ='BD<?- \' A1' <-?1' 1-'01' < 1@&'. '1' 1.&=-1' I ' @10' <? 10' &'<@>10' R 10' ? C<'0' , 0 @1' F 10 ' 10 1<- \' A1@ <>'0 11' A?' & ' C &-' 10a'CC1 ' <' <>C &-' 1-' < <a10' -'1=0' E<@1 0' <? 10' +1001<@L' @<'-0' H?' 0' C1<@L' @<-?\' C@?>#1' 10 <'-1' I ' <? 10' BD<?-A'01 ' A1' @10 <C@1@ I ' @10' <>10-1 ' <?' @&? ' C<''0 , 0 @1' F 10 ' 0&@&-B' @<' =& >1' A1' @10 < ? ' 1- ' =<' ' <-' 0BA1' A?' & ' 'BD< A' 0QA1' C?'0' @1' B&-H?10 Ć 1 ' <?L" 0<?+1' <' @10' ? .10' I ' I D<?- \' A1' K a' 0? K1A1' , 1'-' #-=' B1' C ' <>10-1 ' @10' @<'-0' A1@ B 10 1? ' C1- 1' @10' K1 ' A1' K1A1' 1 ' &a1 ' <?' A' ' @'1?' A1' 1 F a' I ' @10' 10=B'CC1 ' , 0' H?1?R;' C '10' H' @&? ' C@1 <' A1@<' @1' >11 ')' ;' 'B&>#'1-' H ' @1\' A' \' 10 < ? \' 1-' @1' C@1>1-' 1-?\' <' F 10 >' <-' A?' & ' 1- ' @1' H?'- ' C'1 ' <' -=1' A' ' ' @1' & ' H& 10 ' 0BA1' =? 1- ' B&-=1 >1\' Ć I ' 1-&? 1' =?'0 ' & A1'-1' =' -' ==@10>1' @1' C@1>1-' H' -?@@10' @<'-0' C1<@L' @<-?\' H?' 0@ C@?>#1' 10 <'-' 1- '1 ' &?' =&?-A?\' <CC1@@1\' D& 1- --1' -<? 1' ='BD<-A'01' A1' @10 <C@1' HB&-H@ A1@& 0' 1-<+=&' 0 &'1- ' 1-+&'1\' &?' <>10-1\' <' -?@@10' C< '10' A1@<' @1' >11 @ 0<-\'B1&' H'e ' 0C'1- ' C '' 1>1- ' <CC& 1\' <' @1' A' ' 10 <C@1' 0&@&-B' @<' =& >1' A?' A' 1' & A'-<?-B1' =<' ' @1' Aa' <-'C ' @ 0? ' C1'-' A1' =& =1' ? 1' A1' &? \' @10' ' BD<?-A'010' ' C' '1@ ><5' 1-+&'1\' &?' <>10-1\' D& 0' A?' &'<@>1@ 0'@ -1' 0&=' C' @'B1-B1' A?' & @ I ' =& 0C '0' B1 L' C0&-0' D 1-0' I ' BD&010' H' 0&?-' =& 0C '01\' 1-' >10>1' @& A'-<-B1' =<' ' @1' A' ' <-' C '='@ 0'B&>1' 1-' @1\' A' \' 10 < ? \' 10 ' B&- 1-?m' C@? 0' <?' C@1'-;' '1- @1>1'-0' @10' H?' 0' I ' 10 <'-'=&?-A \' <CC1 1\' D& 1- --1'<BD< ?\' I ' C? +1?L' ' 1-' -.@1= '1' -&?-' 10 11' <>10-1\' <' @1' A' ' 10 <C@1' A1' <@1 0' 0&@&-B' @<' =& >1' A10' A' \' 10 < ? \@ >10' C<001-' 1-' !@<?-A 10' @&@<-A' I ' 1@<-A' <' R0. <?-A' A<><.1' I ' <>1-?01>1-' A1' @10' B?0 ?>10' 5' 0?#0'A'10' A?1\' <?' 9& ' 0' 0' =& 1-' <>10-1\' <' @<' '@@1' A1' <@1 0@ @1' & ' +&@<-' B1?L' A<><.10' I ' <>1-?01>1-' 1+' 1 @ A1' @<+'0' I ' 1H?10 ' 0C0@ A' \' <A' & A'-1\' I ' 10 <#@1\@ H' &? \' @10' 10 < ? \' 1-' =1' \' I ' -'1-' 1C1 @1\' 0&'1?' 1-?\' I ' .< A1\' I ' > 0' 1-' A?1' 1L1B?B'&-Ć 1 ' H' @1-A1 ' 1C<' ' A10' @<'-0' C1<L' @<-?\' H?' 0' C@?>#1' 10 <'-' 1- '1 ' &?' =&?-A?\' <CC1@@1\' 0D& 1- --1' I ' A1' &- \' <?,0' ='BD<-A'010' <CC 1-=&=\' <' @10 <C@1' C<00<- \' D& 0' A1' &'@>1' "1-.@1, 1' I ' A10' C<''0' A1' E<@10' I ' @<-A@ 0&=' <?' A' ' @'1?' A1' <@1 0' I ' <' -?@@ @'1?' <'@@&? 0' A1@<' @1' >1 1@ <- B&>1' @<' A11' 10 <C@1' M <' <' >10>1' @<' '@@1' A1' <@1 0Ć 0? ' C1'-1' A1' =& =<' ? 1' A1@' , <'1' +<@?1' A1' @10' ='BD<-A'010' H' C<001-' <'@@&/0' =& 0C '0' <' @10' C< '10' A1, 0' @<' F 10 ' 1-' @10' A' \' 10 < ? \' 1-' =1' \' -& >1\Ć 1 ' H' -?@@ @'B1-B1' A10H 1-<+ D ' 0&=' .=& 1\' <-' B&- ' '1@ 1LB1C ' C ' @10' @<'-0' C1<@L' @< ?\' I ' H?' 0' A1' & D?>#' F 10 '5@ ?>D ' I ' @1+10BD11' A1' "? 10>1@ 0<@+1' @<' C2 &.< '+1' A?' & ' ? +1?L' &? \' =&' \' H' 0" <0B?-0' ' BD<- \' 0&?#\' B&@&? ' A<0B?-1' B1-B1' B0@ACC1-' <0B?-0' @<'-0@ A1@' B 10 1? 1' A<0B?-1' C< '1' A1@ &?- 1' "1, K a' &?' A<?R' C<''0' A?' &'<@>1@ 0'-&-' A1' @<' B 10 1? 1' A1' >10 <10' @10' C '10' A1' & 8' D?>#@ F 10 @@ ?>D ' I @1+10BD11' A1' "? 10>1' '@0 =& =1' &-' <?' & ' @<' +<@?1' A1' &? \' @10' @1'-0' 1-0 ' 10a'CC1\@ I ' <?L" '@0' CA C-' @1' D-='B1' A?' >10>1

W '&= ' &' < H% ' I)

?f % 0 ' *' / V > ?-Q

@< @'B1-B1@ 1 ' H' B1@ ' H'@10C'1 < I ' 1- ' =1' ' -& 'B1' <?' 10& 1 ' "1-.@1 1' C ' @1' 1>C@ 10 1<- ' <, < @< H?< ' C< '1' A1'@<'=& =<' ? 1' C' @?' ' 1-0" -& '='1 ' ` 1>' & A1'.8 -1\' 10 ' H' -?@@ @'B1-B1' 0&' ' =1' R' < -?@@ ' A1' B< @1 ' @10 0@1'.D 10@ @<'-10@ A10@ &?- 110@ A1' ?=' ' ,1- @ ?001L@ I ' "1 K a'<' -?@@10@ C '10@ A1C' A1@<'=& 0H@ < <@1 0@ <-H@ <@ C0BD1'-' C@1>1- ;' <@+1\' <?L" @< C2 &.<A+1' A?' & P 1>' C ' B1&' H' ?-' -&+1@@ 10a'CC10&-' 10 ' &+1' < @1' 11@1' A1' !&AA < ' 1-' @1' &?- 1' A1' <-B<0 1@ A1' @< H?1@@1' C11@1' I ' A<?C@ B 'a@ A1'-\' @1' &'<@>1' C@?0&? @ @<'-@ 0&?- ' <>10-1\' < -1>? D1' 1-' 1@<-A' I ' < C@?j 0&? @ <? @ @'1?L' A1C' A1@<@ 0<?-\' B?0 ?>1' &?' 0?#0'A'1' 1-' A?1>1-' C<'1 ' <?' & @ 1 ' @10 ='BD<?-\' +1'.-1-' ' < " 1+1@ -' 1-' @<-A' I ' '@@1&H@ C'.C1-' C' &a1 10 I ' C< 1-' C ' BD10B?-1' C11 ' A1@ @<'-@ < @&' CC 1' `A ' W@' ' A ' 0'B&>1' @1' & ' <A' 10 1' A1' B1' C@1'-1>1-' 1-=& >1' 1-'@1' A' ' C@1>1- @ < 0. ?-A' A10C1' ' I ' = <?A1' A?' & @ & A1'.-1\' 10 ' I ' 10 <#@1\' H' 0" <0B?-1' C0&-1' <>10-1' &?' =<B1' <>10-1 ' <0B?-@<'-@ &?' C1<@L' @<-?\' -'1-' B?0 ?>1\' D& @ A?' &'<@>1@ <@ <?R@ @'1?L' H' < @< A' 1' 10 <C@1' A1' <@1 0@ H'@ =& =1B1' <?' & ' @< +<@?1' A1' @10' ' BD<?-8' 010 1-0" 10a'CC1\@ I ' 0&-' & C@ <?' C '0&-1' <-H@ '@ <T' =1' ' I ' C<'1\' = -' I ' <?-B1& ' 1 ' H' B1@ ' H1-' =<B1' -& 'B1' < 10& 1 ' "1-.@1 1' C ' @1' 1>C@ 10 1<-' I ' @1' 0C<00&? ' A1' B1&' A?1>1-' B&-+'=' < < @< H?< 1' C< '1' A1' @< =& => ? 1' <?' & ' A?1\' B1@@1' C '1

1>' B&>1' C' @1' & ' 1- ' @1' H?'-' C'1 ' < - 1' = ' @1' & ' H& 10 ' 10 &' ' & A1'.-1\' H' ?-' - ' A& ' I ' A< .1-' M &' ' 1-?\' A1A1>C@ 0< '@@1' A1' ' <@1 @ \C' @< H?1@@ ./?-A1' 0?#0 <?-B1' A1' >&-C 1' A& ' I ' A< .1-' <A' 10 1' <CC& 1\' A1'-\' @1' &'<@>1a' @< H?1@@1' >&-&'1' C' A'1010@ C0&-10@ <A' 10 1' I ' 10 ' A1' ?' 1-' <?R' <0C& 1\' D& @ A'B1@ ' < ? A1<?L' I ' !@< <A 1 ' I ' <'@@& 0@ 1-B&- 1' @10 < ?' =1' ' ' C? +1?L' B1@ 1' CA1' A<?-B'1-1' 1>C0@ B&>1' A1' B1&' <A' 10 11' . 1+&?0>1-' B&>C@1'-' 1-' B10 ' C@1>1- ;' A'-1\' 10 ' I ' <001- ?\' H' >10>1' @10 < ?' 0&' ' 1-?\' I ' .< A1\' I ' > @ 1-' A?1' 1L1B?B'&-G I ' 1-' #?K1' & A'-1\' 10 ' I ' 10 <#@1\' H' -?@@ &' &?' < .1-' 0&' ' <0C& 1\' D& @ A?' &'<@>1' <?' B&- <' 1' A?' A' ' 10 < ?@ '@ -1' 0&' ' C ' C<'1>1-' A10@ .?1 10@ I ' 0&?A'&? @ A?' & '8A1C' A1@<@ 0? 'C<'-1' A1' =& =< ? 1' A1' @< +<@?1' A1' @< 0B<->1' A1@ >&-&'1' H1-0" 0&' ' <CC& 1\' D& @ A1' &'<@>1@ A10 1' @1+11' A1' B1@? ' H' @< >10-1 < <0C& 1 < &?' 1-8 #'1 < D& @ A'B1D G 1 ' H' B1@@? ' H" @10C'1 < I ' =1 < 1-' -& 'B1' <?' B&-01'@" &?' <?' 10& 1 ' 21-.@1R 1' <R< @< H?< 'C< A1' A1' @< =& =< ' ? 1' 1-0 ' A?1\' <?' & 'A' =& 0C '@ @10@ <?-B1&-0@ C ' =' -< -B1' A10@ C '0&-1 @ 1-.@&'0@ C '01\' I ' <CC 1-A 10@ A1C' A1@<@ I ' @< >&-^'1' H' @10@ 0&?A1&? @ 1>C& 1 &?-' &+1B' 1?L' C ' @&' 10& <#@10@ B&0 <.10@ I ' <-L" C ' BD'+<@L' #&1=0@ #1 #1'0@ I ' <?R0'BD&010@ <BBD< 1\' 1-' 0B&B1' <CC& 1 1\' &?' <>10-1 1\' <0@ C '10@ <A &'-<- \G '00'< ' H' @< >&-1'1' <'1-+'&'1 ' C '= '<AB1' A10@ A' \' C '0&-1 @ C?' <' 1>C&=@1 ' C' @10@ A' \' &?A1&? @ <0@ C '10@ A1C' A1@< -1' &' ' =<' ' 0<-\' 10C1B'<@1' @'B1-B1' A?' & ' ' C ' B1&' H'@ 10 ' 0?CC&01\' H' @< >&-&'1' I ' C ' A?' &'<@>1' 10 ' <0C& 1\' D& @ A'B1A' C' -'BD<?-\' <@'1-0@ `& A1'-1\' 10 ' I ' 10 <#@'1\' H' @10@ ' BD<-\' <@'1-0 P' &+1-' 01? 11' 1-' @< D<?-8' B1 '1' BD10B?-1' B&>C<'.-1' C ' B ?L' A1' 0< B&>C<'.-19

\' *%' %' .$- ' &>' ' D'@ 1- 1-B1 ' &1C@ *%' %' .$- a = ' ' 6 ; '%H ' '%*' 1<A@ <@ '-' D1' 1L /' - 1 @'-1A'&-' D1' &@@

'B1-B1G <-A' D1' D<' D1' 0<>1' 10C'1 D@ <-A' D1 1&=' .'+1 D' , '&K@1A.1' & D1' 1<0? 1 ' &=' -.@<-A' =& ' D1' '>1' #1'-.@ 0D<@@ D<+1' D1' !&? D' < ' &=' D1' !& =1' ? 1' 0&' # ' D'>' -& '='1A

+2.' ' &Z' ."/ &-!/' ' -.' &#!-#!' ;!' 1 /!' .' -@' .-!' .' # ""@' !' 2+&* ' V . .+2' . ' !' .0-&!Z' . ' .0 k 1 .-' M!-' 022!%' -/' A."E' .' -@' 3 " 2' ;!@.-/' ! ' !%#! ' .' + &2' 0- &+' !' -!%' 3 "+& 1!-@ '&-*' +2.' !' M&-*(Z' 3"!".* &'!

@ 1B<?01' D<' < -1K' D'CC'-.' '@=&?-A' '-' D1' '@@1' (=' !&AA < ' '-' D1' &?- ' &=' <-B<0 1@ &?' &=' KD'BD' '@@1' <-A' & D1 ' 11a0@ K' D'-' D1' 1<@>' >?BD' F &&@0@ #1' `# &?.D P' &' >1>&? D' '-' m1<@<-A@ <-A' &' ><- ' H D1 ' @<B10@ #1 &-A' D1' 1<@ K' D&?' ?0 &>' &' ?#0'A ' D1 1&=' A?@ ' C< '-.' &' D1' ,'-.@3 <-A' D1' 1 j BD<-0@ B&>1' &' " ?#@'-' '-' 1@<-A@ <-A' D1 1' <a1' D1' ' &Ba1 @ <-A' C< ' =& ' 1+1 ' &-1' &=' F &&@ ` &' D1' ' C &C1 ' 01 P' ' A ' <0@ D1', '-.'D< D' #11-' D1 1&=' B 1A'#@ ' '-=& >1A' '-' D1' 0<'A' < @'<>1-@ &' D1', '-./0@. 1<' " 1 j B1' ' <-A' ! <?A' ;' '0' & A<'-1A' <-A' 10 <#@'0D1A' D< ' '=' <- ' 1 0&-' `# '-.'/P' & 'B<?01' &'#1' `# &?.D P' <- ' F &&@0' & ' F &&@=1@0' -& ' B?0 &>1A' &? ' &=' D1' 1<@>@ &' & D1 ' @<B10@ D<-' &' D1' 0 ?A' <C@1' 3)' D1' 0D<@@ =& =1' ' &' D1', '-.' D1' <@?1' &=' D1' 1 BD<-A'010@ 0&' 0D'CC1A@ <-A' 0@ &A ' &' '0&-@ '@@ D1' D< D' > <A1' <-A' C<'A' < C'-1' <-A' <-0& >G -A' D<' D1' D<' D1 1&=' .'+1 D' , -&K@1A.1' & D1' 1<j 0? 1 ' &=' -.@<-A' =& ' D1' '>1' #1'-.@ <-A' D1' 10C<001 ' =& ' D1' 0<>1' A?@ ' &-+'=@@ 0D<@@ D<+1' D1' !&? D' < ' &=' D1' !& =1' ? 1' A?1' & D1', '-.' '-' D'0@ 1#<@=

@ F D1 1<0@ # ', '-.' 1- ' D1' !'= D@ !< D1 ' & &? ' & A' D1', '-.' D< ' -&K' '0 ' K<0@ & A<'-1A ' D< ' < '-' &=' E&@A' <-A' '@+1 ' 0D&?@A' #1' D&@A1-' K' D'-' ` D1/P' &K-@ &=' <@<'0@ KD1 1# ' . 1< ' ?#0 <-B1' &=' &-1 ' &=' E&@A' <-A' '@+1 ' D< D' #11-' # &?.D ' K' D'-' D1' 1<@>@ KD'BD' &-1 ' # ' +1 0@ 1 0&-0@ D< D' #11-@ <-A' '0@ A<'@ ' B< '1A' &?' &=' D1' 0<>1' &' ? A1<?L@ !@<-A1 0@ <-A' & D1 ' @<B10@ <.<'-0 ' D1' < ? 1' '-' &@A' '>10' ><A1' <-A' C &+'A1A' '-' D'0@ 1D<@=@ <0@ D< D' #11-' . '1+&?0@ ' B&>j C@<'-1A' '-' D'0@ < @'<>1-' ; ' '0@ & A<'-1A']-A' <001- 1A' D< ' D1' 0<>1' < ? 1' #1' D&@A1-' <-A' a C @ <-A' C? ' '-' A?1' L1B? '&-'G -A' >& 1&+1 ' ' '0@ A<'-1A' <-A' 10 <j #@'0D1A@ D< ' -&' E&@A' -& ' '@+1 ' 0D<@@ # ' B< '1A' &?' &=' D1' 1<@>' B&- < ' &' D1' 0<'A' < ? 1@ ?-@100@ ' ' #1' =& ' < >1-' &=' `F < 0@ <-A' D1' ,'-./0@ &@A'1 0\ P' #1 &-A' D1' 1<@ ?C&-' <'-' &=' !& =1' ? 1' &=' D1' <@?'1' &=' D1' ?>' &=' &-1 ' 0&' B< '1A' &?' &=' D1' 1<@>@ &' #1' @1+'1A' &=' D' >' D< ' 0D<@@ # '-.@ < @ B01-A' ' ' &?' &=' D1' <>1' 1<@>G <-A' D< ' D1' KD'BD' 10C'1 D' ' @ <-A' D1 1&=' .'+1 D' , -&K@1A.1' & D1' &?-B'@@ &' & D1' 1<0? 1 ' &=' -.@<-A@ 0D<@@ D<+1' D1' !&? D' < ' &=' D1' !& =1' ? 1' 0& A?1' & D1', '-.G LB1C ' D1' <-0& >0@ =& ' !'= 10@ &=' -.@'0D' '0&-1 @ <a1-' <= A' & #1' <a1-' #1 &-A' D1' 1<@ <-A' D1' &-1 ' D< ' D1' &@A'1 @ 0D<@@ B< ' F' D' D1>' =& ' D1' ' 1<0&-<#@1' &0 0@ <-A' <@0&' =& ' & 010@ L1-@ D11C@ <-A' & D1 ' D'-.0' #&?.D ' '-' B& @<-A@ &' #1'01-' '<-A' B< '1A' &' D1' < '10@ <A &'-'-.G 0&' D< ' D1' &-1 ' &' #1' 01-' =& ' D1' !=110@ =' D1' 0<'A' '0&-1 0@ &' &' #1' B< '1A' # ' D1' 0<'A' &@A'1 @ &' D1' < '10@ #1 &-A' D1' 1<@ #1' -& ' A&-1' F' D&?' D1', '-./0@ 0C1B'<@ 'B1?B1' -A' #1B<?01' ' '@ 0?CC&01A' D< ' D1' &-1 ' `&=' /P' E&@A' &=' D1' 1<@>' '@ < '1A' &?' &=' D1' 0<>1' # ' 1 BD<-@ @'1-0@ ' ' '@ & A<'-1A' < 'A' 0 <#@'0D1A' D< ' D1' 1 BD<-@ @'1-0@ 0D<@@ ='-A' ? 1 ' '-' D1' D<-B1 @ 1+1 ' &>C<- ' =& ' D1>' &=' ?1' ' &>C<- @

3!- + @' .'" !% ."&-*' V . .+2' .'" B!+2' - . ' #02k .1!/' .' -@' 3+ #!' !%#! ' .' + &2

!' 0!' !- 2 &' # ." @' &- ' ' + &2' #.- --!/

.' b .+/' .'" &+' !"2 +2' ; !' # ""&!/' .0' .' !' 6! +1 ' !%#! ' .'" .+/&!"2

6!7 "/' .' - ."1!"

%#! &.-2' ' 6 -2.1Z' ." 3"&2.-!"2 C#

!"# - 2' +&!-2'2 +2' ; !' ;' .0-/' -. .' # ""@' b .+/' .0' .' !' 6! +1

) %)'$ ' '$" ' O$ % ' ' '$ '. / Y "' ' 'O ' %' $% '$ ' 'E 1' %

D< ’ &-1’ &=’=D1 -’ 0D<@@ B< ’ &? ’ &=’ D1’ 1<@>’ <- ’ E&@A’ & ’ ’@+1 ’ <.<’-0 ’ D1’ ! & >’ &=’ D1’ 0<’A’ < ? 1@ C&-’ <’-’ &=’! & =1’ ? 1’ &=’ D1’0<>1’ E&@A’ & ’ ’@+1 @ 8@ D1’ <@?1’ &=’ D1’ 0< > 1G <-A’ ’=’ <- ’ &=’ D1>’ A& D1’ B&- < @ <-A’ D< ’ A?@ ’ C &+1A@ <-A’ D1’0& A&’-.’ =11 .&-1’ &+1 ’ D1’ 1<@ D1-’ D1’ @1A.10’ &=’D’0’ & > C ’ <@@’ C< ’ &’ D1’ , ’- .’ D1’ 0<’A’ ! & =1’ ? 1@ KD1 1&=’ D1’ D< ’0D<@@ 10C ’ ’ @ <-A’ D1 1&=’ .’+1N & ’B1’ &’ D1’ 1<8’ 0? 1 @ & ’ &’ D1’ , ’- ./0’ &?-B’@@ 0D<@@ D<+1’ D1’ !&? D’ < ’ <0’ ’0’ <=& 10<’A

."/7 &-!"Z 2 +# -. ’ ;!’ --!"Z

@ 1B<?01’ D< ’ D1’ 1< D1 ’ <--1A’ # ’ & A@ K<’D1 0@ ?0’-.’ D1’ 0 1 ’ &=’ <C-1 0@ <-A’ <@0&’ >?BD’ &=’ D1’ 1< D1 ’ <--1A’ # ’ D1’ <--1 0@ ’0’ 0&’ A1B1’ =?@@ ’ <--1A@ D< ’ D1’ && 0@ D&10@ <-A’ & D1 ’ 1B100< ’10’ D1 1&=’ ><A1@ #1’ ’-’ < 0 ><@@ 1<0&-’K<0 1A’<-A’A < & 1A@ #1B<?01’&=’ D1’1 ’@ <-@’ > .’&=’ D1’0<’A’ 1< D1 @ &’ D1’. 1< ’ =21B ’ <-A’ &00’ &=’ N)’ D1’ & > > &-<@ ’&=’ D1’ 1<D-;’

3!- +@ ’’0’ & A<’-1A’ <-A’ 10 <##@’0D1A’ D< ’ ’=’ <- ’ & AK<’-1 ’ =AK1@@’-.’ ’-’ D1’ 1<@>’ &=’ -.@<-A9/P’ ?01’ D1’ 0 1 ’ &=’ <--1 @ A? ’-.’ D1’ ’>1’ D< ’D1’?01 D’ D1’ 0 1 ’&=’ & AK<’-1 @ D< ’ D1’0D<@@ =& =1’ ’ &’ D1’ , ’- .’ =& ’1+1 ’ ’A1’ # ’ D’>@ & ’ # ’ <- ’ & D1 ’ &’ D’0’ 01’ <--1A’

3!- +@ .-’ --!"Z . ’ /! ! &’!’ ! !"

“ +’’ A’G <-A’ D< ’ ’=’ D1’ & AK<’-1 0’ =’-A’ <- ’ -&j & ’&?0’ " 1=<?@ ’ ’-’ D1’ 1< D1 @ <@’-1A’ # ’ D1’ 0<’A’ <- j -1 0@ & ’ &’ #1’ <--1A@ D< ’ D1’ <--1 ’ &=’ D1’ 0<>1’ 1< D1 ’ 0&’ A1=1Q +1@ 0D<@@ =& =1’ ’ &’ D1’ , ’- .’ ’-’ D1’ 0<>1’ <--1 ’ =& ’ 1+1 ’ ’A1’ 0&’ A1=1^’+1’ +P’0 ’ +’’ A ’ <-A’ D< ’ D1’ D< ’ K’@@ 0?1’ 0D<@@ D<+1’ D1’ &-1’ <@=’=& ’

6!#.’!"@ . ’3!- +&!2

D’0’ <#&? @ <-A’ D1’ , ’- .’ D1’ & D1 ’ <@=’ ’ <-A’ D< ’ D1’ ?0 ’B1O &=’ D1’&-1’ 1-BD’ <-A’ &=’ D1’& D1 @ ?0 ’B1O &=’ 00’010@ ?0 ’B1O &=’ 1<B1@ D1’ ?0 ’B1O &=’ D10 1 ’ <-A’ <-B<0 1 @ <-A’ < & 0’ &=’ ’ ’10’ <-A’ & &?.D0@ D<+’-.’ &K1 ’ <0’ ?0 ’B1O &=’ 1<B1@ 0D<@@ D<+1’ &K1 ’ &’1-H?’ 1@ D1< @ <-A’ A1 1 >’-1’ D1’ ’B@10’ <-A’ < 1 0’ <=& 1j 0<’A@ <0’ K1@@ < ’ D1’ , ’- ./0’ ?’ ’ <0’ D1’ < /0@ &’ &’ < j <’- ’ D1>’ # ’ L<>’-< ’&-@ <0’ K1@@ < ’ D1’ ?’ ’ &=’ D1’ , ’- .’ <0’ &=’ D1’ < @ # ’ D1’ ” ’0B 1 ’&-’ &=’ D1’ ?0 ’B1O <-A’ < & 0’ <=& 10<’AG <-A’ D< ’ D’0’ A’-<-B1’ <-A’ < ? 1’ #1.’-’ &’ D&@A’ @<B1’ <-A’ #1’ C? ’ ’-’ L1B? ’&-’ < ’ D1’ ! 1<0 ’ &=’ D ’0 ’> <0’ -1L ’ B& > ’- .

! 0 !’ ’ ’# ’ .0# &-*’ "@2 1 !-’ &-’ -*+ -/’ "!#& !/

@ F D1 1<0’ ’ ’0’ & A<’-1A’ ’-’ D1’@<0 ’ < @’<>1- ’ <>&-.0 ’& D1 ’ D’- .0@ D< ’ <@@ 1&C@1’ #& >’ ’-’ 1@<-A’ 0D<@@ A1C< ’&? ’&=’ D1’ 1<@>’ K’ D’-’ dP</P’ &- D’ -1L ’ 1 ’ &B@<>< ’&-’ ><A1’&=’ D1’0<’A’ A’-<-B1@ ?C&-’ <’-’ &’@&01’ D1’ ’ E&&A0@ <-A’ &’ #1’ ’>C ’0&-1A’ <’ D1’ , ’- ./0’ F ’@@@ 1LB1C ’ B1 <’-’ 1 0&-0’ ’-’ D1’ 0<>1’ A’-<-B1’ 1LB1C 1A@ <-A’ D< ’ D1’ E <A?< 10’ -A’ 1-1=’B1A’ 1-’ 0D&?@A’=’-A’ ? 1 ’C=’ D1’ ’ .&&A’ <#1< ’- .@ <-A’ D< ’ D1 ’ DC@AA’ -& ’ <a1’ ?C&-’ D1>’ D1’ ’-B’C<@’ ’&=’ <- ’ <@@ & ’ &0 1@@ #? ’ &’ 1><’-’ <>&-.0 ’& D1 ’ -.@’0D’ BD&@< 0’ ?-A1 ’ D1’ ’-B’C<@’ ’&=’& D1 @ <-A’<@0&’ N) D&01’ BD&@< 0’ &=’ 1@<-A’ D< ’ #1’ -& ’ E <A?< 10@ <-A’ #1’ &=’ D1’ , ’- ./0’ #1’0<-B1@ 0D<@@ =’-A’ ? 1 ’ &=’ D1’ ’ .&&A’ <#1< ’- .’ ’-’ D1’ <--1 ’ <0’ D1’0<’A’ E <A?< 10’0D<@@ A&’-’ D1’ !& >’ <=& 10<’AG <?A’ D< ’ <@@ D1’ BD&@< 0’ &=’ 1@<-A’ #1’-.’ `1@01KD1 1/P’ ’-’ -.@<-A@ D< ’ K’@@ D1 1’ <#’A1@0D<@@ # ’-.’ 1+1 ’&=’ D1>’# ’D’>01@=’ &’ D1’ D<-B1@@ &’&=’ -.@<-A’ =& ’ D1’ ’>1’ #1’-.@ #1=& 1’ D1’ !1<0 ’ &=’ <’- ’ &D-’ <C ’0 ’@<0 ’ C<0 ’ 1 1 0’?-A1 ’ D1’ 1<@ &=’ D1’ ’1? 1j -<- ’& ’ ` ?0 ’B1O N P’ &=’ 1@<-A@ K’ -100’-.’ D< ’ D1 ’ #1’ &=’ D1’ , ’- ./0’ #1’0<-B1G <-A’ D< ’ ’<@@’ &=’ D1>/P’ D< ’ # ’-.’-& ’ D&01’ 1 1 0’#1=& 1’ D1’ h) !1<0 ’&=’ <’- ’ &D@ ’ ’0D<@@ #1’ A&-1’ <0’ &=’ 1#1@0’ &’ D1’ , ’- .’G <-A’ S)=’ A>’ ` D’0/P’ !1<0 ’ &=’ <’- ’ &D-’=& K< A@ -&’ 1 0&-’ #&>’ ’-’ A< ’A’ 0D<@@ 1- 1 ’ D1’ 1<@>’ &=’ -.@<-A’ &’ <#’A1’ -

H’ -? ’ A1-” -<>10-1 ” D& 0’ A?’ &’<@>1’ -? ’ &’ -< .1-’ B1- 1’ @<’ =& >1’ A?’ A’ ’ 10 < ? @ 0? ’ @<’ C1’-1’ A1’=& =<’ ? 1’ A’B1 ’& ’&-’ < .1-’&-’ A1’@<’ +<@?1’ A’B1 ’G I ’ 0” < B?-’ A1’ 1?L’ =1B1’ @<’ B&- W ’1’ I ’ B1&’ A?1>1-’ C+1\@ I ’ B1@? ’ 1-0 ’ =10<--’ 0&’ ’ <@1\’ &? 1’ @1’ >11 @ <A&- f 0’ @10’ C@1..10’ A1’ 0<’ B&>C<’.-1’ C<’1 &-’ ’<?’ & ’ @<’ =& =<’ ? 1’ 0?’0A 1@ A&-’ B1@@ ’ H’ 10C’1\’ I ’ @1’ A&-1’ <’ B&-?0 1’ <?’ 10& 1 ’ &?’ <’ B -01@ ’ A?’ & ’ <, <’ @<’ H?< ’ C< ’1’ B&>1’ A10?’0

1>’ C ’ B1&’ H’ @10’ F6(’ ’ C’ @10’ & A1K<-1 0’ H’ ?01-’ @<’ >’0 1 1’ A1’ <--1 0’ I ’ <?L” C@?0&- 0’ A10’ H?’ 0’ C’ @10’ <--1 0’ < ’-1\’ 0&-’ B ’ A1B1’+<#@1>1-’ <--1\’ H’ @10’ #& 10’ 0&@1 0’ I ’ <?R0’ -1B100< ’10’ 1-’ =<’ \’ 0&?-’ 1-’ &C’ C& ’ A1’ 1>C0’ .<0 1\’ I ’ A’0 ?’ \’ <’ B<?01’ A1’ @<’ ><@1’ <--1 ’A1’ @10’ H?’ 0’ 0?’0A’ \@ <’ ./?-A’ A1B<’ I ’ CA1’ A1’ &? ’ @<’ B&>?-<@ 1’ A?’ &’<@>1;’ A1’. -1’ 10’ I ’ 10 <@ #@1\’ H’ 0” <0B?-’ & A1K<-1 ’A?’ &’<@>1’?01’ @1’ >’0 1 1’ A1’ <--1 @ A? <?-’ @1’ 1>C0’ H’@ ?01’ @<’ >’0 1 1’A1’ & j A1K<-1 @ H’@ =& =<B1’ <?’ & ’ C ’ BD?-’ H-’ ’C’ @? ’ &?’ C’ <0B?-’ <? 1’ <’ 0&-’ &1C0’ <’ >1\’ + ’+’’ G <’ 0” @10’ & A1j K<-1 0’ &+1-’ -& &’ 1’ A1C? 1’ 1-’ @10’ H?’ 0’ C’ @10’ A’ \’ <--1 0’ <--1\’ &?’ < <--1 0@ H’ @1’ <--1 ’ A’B1@@10’ H?’ 0’ 1-0 ’ A1=1 ’=0’ =& =<B1’ <?’ & ’ 1-’ >10>1’ @1’ ><-1 ’ C ’ BD10B?-’ H?’ ’ ’00’-’ A1=1 ’=’ + / +’’P G 1 ’ H’ B1@? ’ H’ B1&’ +&1 ’ 0?’1 ’ 1’ ’ @?-B’ >&’ 1’ C/’ 0&-’ <+< 1’ I ’ @1’ & ’ @<? 1’ >&’ 1@ 1 ’ H’ @10’ ?0 ’B1O A1’ @?-1’ <-a’ I ’ A1’ @<?R ’ ?0 ’B1O A1O <00’010 ’ ?0 ’B1O’ A1’ 110@ ?0 ’B1O’ A1’ 10 1’ I ’ A1’ <-B<0 =@ <’ 10’ A1O ’ 11O’ I ’ A1O’ ? .D1O’ 1’<- \’ C&’<’ B&>1’ ?0 ’B1O’ A1’ C110@ 1’1-’ C&’<’ A1-H?1 1 ’ C ’ &’1 ’ I ’R>’-1 ’@1O’ < ’B@10’ I ’@1O’ >< ’1 0’0?’0A’ \@O’0’#’1-’ <@ 0?’ 1’ A1’ & ’ B&>1’ A1’ C< ’1@ &?’ 1?L’ < 1’-=@1 ’ C’ 1L<>’@ -<B’&-’ 0’#’1-’ <@ 0?’ 1’ A1’ & ’ B&>1’ A1’ C< ’1’ <@ A10@ B 1A&-’ A1O’ ?0 ’B1O’ I ’ A 10’0?’0A’ \G 1 ’ H’ B10 ’ 10 < ? ’ I ’ & A1’C’<?-B1’ B&>1-I -’ <’ 1-’ ’ @’1?’ I ’ 0&’1-’ > 0’ 1-’ 1L1B?B’&-’ <’ =10 ’ A1’ &K1@ C0BD1’-’ <+1-’

1>’ B&>1’ & A1’-1’ 0&’ ’ 1-’ @1’ A< 1’-’ C@1>1-’ 1- 1’ <?RO’ H’ &? \’ .1- \’ -11\’ 1-’ @<-A’ 0&’1-’ +&’A1\’ D& 0’ A1’ &’<@>1’ A1A1’-O’@1’ >&’0’ C0BD1’-’ < RO’ @<’ CB@<><B’&-’ =’’’ ’ A1’ B1 ’& A’-<?-B1@ 0? ’ C1’-1’ A1’ CA 1’ @&? ’ #’1-0’ I ’ A10 1’ 1>C ’0&-1\’ <’ @<’ +&@?>1’ A?’ & ’ =& 0C ’0’ R 1’-’ C0&-10’ 1-’ >10>1’@& A’-<-B1’=& 0C ’01\G 1 ’H’@1O’ . A?< 10’ I ’ D& > >10’ #1-’=’B1\’ &, 1-’ 01? 1’ A1’ @&0’#&-’ C& @ 1 ’ H’@0’ -1’ = .-1-’ 0? ’ 1?]’ @<’ C ’-B’C<@ 1’ A<0B?-’ <@1’ &?’ &0 1=” >110’ A1>&1 .1-’ ’@0’ 1- 1’ <?, 0’ 10B&@1 0’ 1-.@& 0’ A10&?#\’ @<’ C ’-B’C<@ 1’ A<?R0G I ’ &?R’ B1&’ H’B1?L’ 10B&@1 0’ ” ’ @<-A’ H’ -1’ 0&-’ > 1’ . A?< 10’ I ’ 0&?-’ A1@ &#1’0@ 0<?-B1’ A?’ & ’ &+1-’01? 1’ A1’ @&’ #&-’C& ’1-’ ><51’ B&>1’ @10’ A’ \’ ./A?< 10’=1 &-’ 1-’ @<’=& >1’ <+/- A’ G 1 ’ H’ &? \’ 10B&@1 0’ ” ’ @<-A’ 10 1<- \@ < & 0’ 1-’ -.@1R 1’ H’+& &’1-’ A1> 1’ B ’ =1 &’1-’ <CC& 1’ BD?-’ <’ C’ @? ’<?’ D<?-B1@@1 ’ ” 1-.@1R 1’C/’ @1’ 1>C0’ 10 1<-’ A1+/-’ @1’ =10’ A1’ 1’-’ &D-’ @1’ <C ’0 1’ A< 1’-’ C<001\’ 10’ A10&?#\’ @1’ 1<@ A1’ @1’ ’1? 1-/-’ &?’ ?0 ’B1’ ” ’ @<-A@ 10>&’.-<- \’H’@0’ 0&?-’ A1@ &#1’0<-B1’A?’ & G I ’H’A1’ B1?L’H’ -<CC& 1-’ > ’ ’1?L’ 10’ A1+/-’ >10>1’@1’ =10 ’ A1’ 1’-’ &D-’M &’ ’=<’ ’B&>1’A10’ 1#1@@10’<?’ & ’G 1 ’H’ A1’ B1@1’ =10 ’ A1’ 1’-’ &D-’ 1-<+/-’ -?=@ C0&-1’ -11\’ 1-’ @<-A’ 1- 1’ @1’ &’<@>1’ ” 1-.@1 1@ <’ A1>? 1 ’ 1-

@<' -'+1 0' 1' "&L1-=& A' A?' A1' <- 1# '..' &?' <'@@&? 0' A1A1'-\' @1' &'<@>1' "1-.@1R 1@ 0'@ -<CC& '<?' A' ' D<?-8' B1@@1 ' <? '1?L' 10' 10>C'.-<@L' 0?' C1'-1' A10 1'/C?-'\' B&>1' 1#1@ ' <?' & ';' 'C' <-'H1-' @<' A11' & A'-<?-B1' -1' =?' ' C<0' >1-B'&-' =1' 1' A1+ -' H" -1' 1-' H?1@1' >< 1' @<' 01? 1' A1' #&-' C& 'B&>1' A10?'0' , < &+1G A1'.-1\' 10' I' 10 <#@'1\' H' @10' D<?-B1@@1 0' A10' -' 0' 110' "&Lj 1-=& A' I' A1' <- 1# '..' C' @1' 1>C0' 10 1<-\' 1#?-' A1?L' A1A1'-\' 0< ? '0A'BB'&-' C'.-1' @10' 01? 10'<C-A 1\' A10' 0B&@1 0' A1'-\' >10>10' @10 -'+0' 110' I' @10' R '='1-' 1-' @<' D<?-B1@@< '1' A1' & G 1' H' @10' ?0 'B10' A?' C110' 10' &?- 110' I' <' 0' I' <'@@'=0' A1'-\' '110' I' ? .D0' 1-= <-BD'01\' <'1-' C&'<' A1' C 1-A 1' A1+W-' 1?L' '1@ >< 1' 01? 11' A1' #&-' C& ' I' A1=<' 1' 1L1B?B'&-' 1-, 0' 1?L' H" A1>& .1-' &?' =<B1-' 1-B&- <' 1' @1' A11' & A'j -<?-B1' A1' B ' 1-<+W-

1>' & A1'-1\' 10' I' 10 <#@'\' H' CB@<><B'&-' 0&'@' =<' ' C' &? \' @10' &?- 10' "1-.@1R 1' A1'-0' = <?-BD'010' I' A1D& 0' I' A1'-0' '110' '@@10' ? .D0' I' <'@@&? 0@ H' &?' @<' >&-&'1' <CC1@@1' @<-a10' 0&'1-' 1-' &?' &?0 1\' I' +&'A1\' D& 0' A?' &'<@>1' A1+D' ' @1' =10 1' A1' 1'-' &D-' @1' <CA0 1' C0BD1'-' <+1-' 'G I' 1-&? 1' H1' -?@@' D&>>1' <C0' @1' A' ' =10' C<'1' &?' 10B1'+1' C' C<'>1-' 1-' <0B?-' ><51' A1'-\' @1' A' ' &'<@>1' @1' A' ' &-&'1' <CC1@@1' @<-a10' 0? ' >10>1' @<' C1'-1' B&- 1-?\' I' & A1'-1\' C' 10<?' =1' ' <-' '1 B1' @1' & ' 1- ' C'1' - 1' A' ' _' @1' & G 1-B&?- 1' &? \' B1?L' H' C<'&-' &?' 10B1'+&-' `C' C<'1>1- 0P' @1' >&-&'1' <CC1@@1' E<@ D<@C1-0' ?0a -0' I' "&A1a -0' A1'-0' @1' & <@>1' "1-.@1R 1' 0?0A'

0' 1>' C?' B1&' H' A'1010' A1=<? 10' 0&-' &+1\' 1-' @&,<'.-1' A1' A',010' C0&-0' &BB?C'<-\' @1' >'0 '1' A1' &?A1 '1' & A1'-1\' 10' I' <001-?\' H' &?' @& <'.-1' I' ?==1' A1' &?A1 '1' A& ' &?' A< .1-' A1' 'C 1' &?' A& ' A1' @?a1' >1@@11' &+1B' @< &-' A1' C< -1' I' > 0' < +1-' 1-' A1B1' ' A10' @'1.10' A?' &'G 0&' '=& =<' ' <?' & ' &?' <0' _0' I' <? 10' <'<- \' = <?-BD'010' A<? '1#B' =& =1' ? 0G 1'-' H? ' = <-BD'01' <? '1@ &C<'.-1'0&' ' &+11G I' A? 1 < B10' & A1'?<-B1' <-HG <@ C@1>1-' CBD1'->1-' <+1-'

1>' & A1'-1\' 10' I' <001-?\' H' 0" <0B?-' ? @<.< '1' 0? ' <0B?-' D& >>1' 10 1<?-' D& 0' A?' &'<@ < 1-' @1' M+'B1' A1' & ' &+1B' @? ' >10>10' &?' A10&?#\' <0B?-' <C' <'-' 0&' ' C-?-B'1G I' 0? ' B1&' @1' & ' &?' @1' <C' <'-' >& 1.1' A1+/-' H' A1@0' ? @<.< '1\' 0&'1-' 1C01\G I' @< C< '1' H' C? 0?1' A1' 1C01' <0B?-1' '1@ ? @<.< '1' < B<?01' 0?0A' ' +&1 ' <@@1..' 0&-' <C' <'-' A10 1' >& ' H' <A&-H0' 0< A1>&1? 1' <@ 1>C0' A10' A' \' ? @<.< '10' 0&' ' I '='1\' C' @10' 1L1B? &? 0' &?' >'-'0 &? 0' A10' '1@L' <C' <'-0' &?' @1 a10' A1' @&? 0' >&-0 10G &?' <0B?-' <? 1' -& <#@1' C0&-1' 0&@&-B' @<' A@0B 1B'&-' A10' ?0 'B10G 1-' >@0>1' @1' >< 1' B&>1' @1' <C' <'-' B1&' A1?0' <+&' ' R '='1\' 0'@ =1?00I' 1-' +'1G ? +1?L' &? =&' \' H' @<C 1 <1-' 0&' ' 1B1?' C' - 1' = '@1' & ' H' @1' <C' <'-' 10' 1-' C@1'-' +'1' I' <?L" H1' @<' C< '1' =1?0' 1-' -.@1R 1' 1-' 1>C0' A1' '1@L' ? @<.< '10' C-?-B'1\' 0" <+D' ' B&>1' <A' 10 1' =<' ' A1+/-' B10' D1? 10G 1-' B<0' H' @18' <C <'-' =?'0' 1-' C@1'-' +'1;' 1' A? 1 < B10' & A1-/-B1' <-HG <@ C@1>1-' C0BD1'->1-' <+1-'

<' -!"+&-!/'.-' !'6.++

D1' -'+1 0' ' &=' L=& A' & ' <># 'A.1G & ' 1@01KD1 1' K' D'-' D1' 1<@>' &=' -.@<-AG ?-@100' D1' # '-.' &' D1' 0<'A' D<-B1@@& ' 0?BD' 1 1 0' 10 '>&-'<@G ?C&-' <'-' &' #1' C?-'0D1A' <0` 1#1@0 P' &' D1',' -.';' -A' !& <0>?BD' <0' '-' D1' 0<'A' A'-<-B1' -&' >1-A&-' K<0' ><A1G #1=& 1' KD&>'-&' '-' KD<' <--1' D1' ? 1 ' &=' .&&A' <#1< '-.' <0' #1=& 1G 0D<@@ #1' =&?-A'G ' '0' & A<'-1A' <-A' 10 <#@'0D1A' D<' D1' D<-B1@@& 0' &=' D1' -'+1 0'A10' &=' L=& A' <-A' <># 'A.1' =& ' D1' '>1' #1'-.G 1+1 ' &=' D1>' K' D'-' D'0' ? '0A'= '&-G 0D<@@ <a1' D1' ? 1A10' &' #1' <a1-' &=' BD&@< 0' K' D'-' D1' 0<>1' -'+1 0'A10' <-A' B1 A=' D1' 0<>1' '-' &' D1',' -./0' D<-B1 'G <-A' D<' D1' ?0 'B10' &=' 1<B1' K' D'-' D1' &?- '10G <-A' < & 0' <-A' <'j @'=0' K' D'-' E'A10' <-A' & &?.D0' 1-= <-BD'01A@ D<+1' &K1 ' &' <a1' #1=& 1' D1>' 0?BD' ><--1' &=' ? 1 ' &=' .&&A' <#1< '-.G <-A' &' A&' L1B? '&-' ?C&-' D1>' KD'BD' 0D<@@ <#'A1' & ' A&' <.<'-0' D1' 0<'A' A'-<-B1' = & >' D1-B1=& D

G ' '0' & A<'-1A' D< ' &B@<><' '&-' #1' ><A1' D &?.D' <@@ D1' &?- '10' &=' -.@<-A' K' D'-' ! <-BD'010' <-A' K' D&? G <-A' K' D'-' ' '10G &K-0G & &?.D0G <-A' 1@01KD1 1G D<' <@@ D1' &-1 ' B<@@1A' @<-a0' 0D<@@ #1' KD&@@ '&?' <-A' +&'A1A' &?' &=' D1' 1<@>G #1=& 1' D1' !1<0' &=' <'-' &D-' <C '0' -1L' B&>'-.G <-A' >& 1j &+1 ' D<' -&' <-' <= 1' D1' 0<'A' !1<0' C<' & ' 1B1'+1' =& ' < >1-' '-' <-' ><--1' K' D'-' D1' 0<'A' 1<@>' D1' 0<'A' &-1' B<@@1A' @<-a0G ?C&-' D1' <'-' B&-j <'-1A' <-A' & A<'-1A' # ' < <?1' ><A1' D1' D' A' 1<' &=',' -.' 1- G !< D1' &' &?' & A' D1',' -.G <.<'-0' <@@ D<' C<' & ' 1B1'+1' =& ' < >1-' D1' &-1' B<@@1A' E<'@ ' <@=C1-B1G ?0a>0G <-A' "& a'-0' K' D'-' D1' 1<@>' '0)

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1 1 0' < 1 - 0' & <9 K' D'-' D1' 0<'A' &? 09 KD'BD'
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D1' 0<>1' <-A9 0D&?@A' #1' &=' B1 <' -' 1<0? 1 D< ' '0'
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' 4 L+P9 E<@@&-09 D1' 1 '<-' LLL'+ ' E<@@&-09 D1'
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LLL'+ ' E<@@&-0' =''@@ ' C<Ba1A'6 -1+1 D1@100 9 # ' " 1+'B1'
<-A' ?#@'@' ' -&K' @< 1' 0 BD' 1001@0' D<+1' #11-' &=' >?BD'
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'-' ` D1 P' < @'<>1 - 6 ' '0' & A<' -HA' <-A' 0 <#@'0D1A' D< '
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<-A' D1' &.0D1<A' &=' E<0B&'-' F ' -1 9 ?C&-' <'-' &=' ! & j
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&=' 1@0 9 ?-@100' D1 ' B&- <'-' LLL ' E<@@&-0' =?@@ ' C<Ba1A'
-& ' ? ' &=' <@>&-9 ?-@100' ' ' B&- <'-' LLL'+ ' E<@@&-0'
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1>' C? ' B1&' ' BD1' I ' B& 1BB'&-' -10 ' C<0'
=<' 9 1-' @1<K1' A1' D<>' 1' A1D& 0' =10' #&?-A10' A1' @<
= <?-BD101' A1' &?-A 109 1-' @10' &?- 10' A1' ? '
, 1- ' ' 001L9 C@&?0&? 0' >10BD'1=0' & 1' < A1' &?- '
10 11' =<' \' A1' A10 ?BA&-' A10' .1 - m' -'1=1' I ' ='BD<-A'010'
I ' ='=1' A1' C100&-9 C' @10' F 1 10' a A1@'10' I ' '>a10'
a ' 10 1<- \' -&10<- \9 & A1' -1\' 10 ' I ' <00B- ?\' H' 01 <@L'
B&>'00'&-0' 0&'1- ' =<' \' <0' ?0 'B10' A1' 110' A10' A' \'
&?- 1\' C ' @1' 1>C0' 10 1<- \9 A1-H?1 1 ' A10' A1?L' -&'8
0<- \' A1D& 0' =&' A' 1' ! <?-BD'01' A1' &-A 109 0'' 0&+1- '
B&>1' #&0&' . -1' 0&' 9 I ' A1' RA='1 ' A1' 1>C0' 1-' 1>C0'
1-' '1' #<-a' @1' & ' B1&' H1- ' ' &+11' C' @10' '-H?'8
0'A&-0' 1-0" <==<' 09 1 ' =<B1- ' @10' ?0 'B10' A1' A' ' <Ca1'
\0? ' @10' A' \' M '='B<B'&-0' <? '1@L' CB10010' 1-, 0' 1?L' H1-0"
, &- ' &+1\' 10C<00&? 0' B&>1' @&? ' >1?@L' 01>#1 <'
C' @<' @1 9 I ' =<B1- ' 1?L' <>&1+1 ' @&? ' <-&10<- \'
1-0 ' =<' \' ;' <@+1\' <' BD10B?-' 0&-' A &' ' I ' ' @1' 1-'
@10' F 1 10' , A1@L' I ' >a10' <+J-A' \' ;' I ' A? 1 <'
B1@@1' & A' -<?-B1' <-H9 <9 C@1 '1- ' C0BD1' -1>1- ' <+1-'

1>' <9 1- 1- ' H' @1' C@?'0' # -1' I ' 01? 1' .& - -B1' &' '
1?\' A1A1' -0' @10' &? 10' -=1' _ ' @1' & ' <' 0& ' C=' ' I '
<9 1<01' A1' 0&-' C&1C@1' H&- ' <C 0?1 ' I ' <==<' 1' 1-' B1@@109
A1' -1\' 10 ' I ' 10 <#@'\' H' &? \' @10' ==' I ' =<' \' C' 10'
C< 1- \' &' <@L' A1' -0' @10' A' \' &? 10' H&- ' C&<' ' I '
<?B & ' 1' C' , ?1' A1' @&? ' &==' B1' A<?-B'1-' 1>C0' <BB?0 8
?>10' A1=1' ' @1 B0' I ' '-'0 10' A1' -0' >10>10' @10'
&? 109 0&'1- ' BD< .1\' I ' ? 1\' A1' =''' 1' A1@L' B@1 B0'
I ' >' -'0 10 9 C? ' H?1@0' '@0' +&'@@1 - ' 10C&?-A 1' <' @&? '
C'@@9 H' 0&'1- ' 0?=='B1<- \' =&'<@L' I ' 1- 1-A<- \' <' B1&' H' <'
1?L' <CC '1- 9 1-' 10C&' ' 0'#'1-9A1' @10' #&0&' .-10' A?' & '
B&>1' A1' 0&-' C&1C@1

1>' B&>#'1-' H1-' <?-B'1-' 1>C0' =?'0 ' & A1' -1\' I '
@&'<@>1- ' ?01\' H' &-1?L' C'C10' B'<-0' D&..10D1A10' A1'
+ -' A1' E<0B&' . -1 9 #< 1@@10' A1' < <-a' I ' A<- .?'@@10' I '
#? 10' A1' <>&-9 +1' . -<- ' C' +&'1' A1' ' BD<-A'01' 1-' B10 '
1' D& 0' A10' 10 <?- .10' C<'0' I ' <?L" =<' \' 1-' >10>1' =<'
19 , &'1- ' A1' 1'-' >10? 1' B10 ' <00<+&'1 9 @1' &-1@@ A1'
-' A1' L' /W' I ' L' ' .<@&-09 @1' C'C1' A1' + ' I ' + ' .<@& 0'
@<' B'<-' A1' ''' // I ' ''' ' .<@&-09 @1' &..10D1A1' A1' L'' '
.<@&-09 @1' < 1@=' A1' < <-a' I ' A<- .?'@@10' A1' LLL'
.<@&-0' C@1'-1>1- ' C<aa1\9 @1' #? 1' A1' <>&-' A1'
''' /W' I ' ''' ' .<@&-0' C@1'-1>1- ' C<aa1\'6 -'1- @1><'- ' C'
><.@-<B'&-' I ' 0?# '@' 1' &?- ' < < A' 10 11' =<' \' '1?L'
+1001?L' A1' C@?'0' C1 ' 1' >10? 19 <' .3?-A1'CA1' I ' A10B1' '
<?' & ' I ' A1' 0&-' C&1C@19 A&?- ' 1-' B10 1' C@1>1- ' '=?'0 '
C '1\' 10C<@>1- ' A1' 1>1A'1' ;' '' 10 ' & A1'-1\' I ' 10 <#@1\'
H' -?-' D&>19 <=a' @1' = -' A1' L' ' >& 0' @1' =10 ' A1' C<\H9
C0BD1' -' <+1-' ' C0BD1' -1>1- ' 1-0?<- \9 <CC& 1' 1-' @1'
& <@>1" 1- .=1 1' A1' 1@' C<''0' H' B1&' 0&' ' -1' =<B1' A1' -0'
>10>1' @1' & <@>1' &-1@@ A1' -' 0' 9 -1' B&- 1' .-1' A1 9
>10? 1' " 1- .@1 1' L JJ I ' L' ' .<@&-09 @1' 'C1' + /W' + '
.<@&-0' I ' 1-0 ' 0&@&-B' @<==1 <?-' @1' B'<-' I ' @1' &..10j
D1A1' A1' -' A1' E<0B&' . -19 0? ' C1' -1' A1' =& =1' ? 1' A1'
>10>1' @1' -6 -1' #< 1@@ A1' < <-a' -1' A<- .?'@@10'
0'@0' -1' B&- 1' . -1- ' LLL' E<@&-0' C@1'-1>1- ' C<aa1\9 -1'
#? 1' A1' <@>&-' 0'9 -1' B&- 1' . -1' ''' /W' I ' ''' ' .<@&-0'
C@1'-1>1- 'C<aa1\9 -1', -A1 a -09 B'<-0' I ' ! 1 A1a -.0

I' 4 5' !5 + '') =')6 E ' 7 2 # 2 0# 20# 20 # 20 # = ' ' ()' ' " 7(( ) ')6 E ' 7 2# 2 # 2 # 2 # 2 0
' ' ' !5 + " 2 V ' R(

A1 < <-a -1 A<-.?'@@10 -1 A1 <>&-=&0H 0&@&@'B @<==1 <?-'C@1'-1>1-'C<aa1\ C?'0 @1 =10' A1 <'+' 11 A1 1'-' &@'-' @1 <C '0 1'C0BD1'-' <+1-' 0?'C1 -1'A1 =&=<' ? 1 A1 @10 <<-a <-.?'@@10 I' <>&-' <+J-A' \' 1-0' <CC& 1\' &-'=<' \' <?B&-= '1' A1 B10'& A'-<-B1 1-' H?1@@ '11 ? . " I' '@@1' A? & <@>1 (?' 1-' <0B?-1 C< '1 "1-.@1R 1 H1 '1?L A1=<? 1\' 0&'1-' &+1\ <? _' A1 >10>1 @< '@@1 1 H B1@@? ' H +&1 ' 0?1 ' I' C+1 ' @10 A' \' A1=<? \' <C< @< H?< ' C< '1 A1 >10>1 @<' =& j =<' ? 1 1 H @10 ?0 'B10 A? 110 1-' &? "@10 &?-10 "1-.@1R 1 <' 0 <-A <'@@'=0 <'<- \' C&<' A1-H?1 1' A1 C1<L 1-H?1 .1 &'1-' I' >'-1-' &? \' 'B1?L A1=<? \ 1' H B10' & A1'.-0-B1 0& 1L 1-A1 I' 1' ' =& B1 0'#'1-' A1A1'-0 @1 &?- 11 A1 10 1 B&>1 <'@@&? 0 ' 1>'<@1- 1-' H @1 C@? 0 . 1'-A 1 #?@@'&-' C?'001 10 1 <CC& 1 < @1 - 1 I' @1 . 1'-A 1 C@1- 1 A1 #@<-a >&-1' 10 1 =<' \' I' B? <-' A1'-\ @1 &'<@>1 C' @1 ?01 I' C=' A? &<@ 1 A'B1@@1 A1'-1\ 10' I' 10 <#@'\ H @1 <' 1 A1 - ' .< A1 &-' <@@<'1 1-'@< =10<- 1 A1 @<'#@<-a >&-&'1 &@&-B @< =& >1 A1 0< 1-A -?1' 1' H >10>1 @1 1'0 1 1B1'+1 A1 BD10B?-' d&>1 H C& R< <0B?-' <.1-' <' @< - ' >10>1 <.1-' <@< , &'1'+<@H1 B&=1'@ +<?@' 0 @&-B >10>1 @<@@<'1 0?'C1'-1 A1 C<'1' @1 A&?#@1 A<><.1 <@< C< '1 ' <?L" <@ 1-1-' H B10' & A1'.-W-B1 C?'001 @1 >1?@L I' C@?'0 &?0 1>1-' 10 1 .< A1\ A1'-1\ 10' H @<00<'&?' A? & 'H 1 ' C0&-1' '-A'==1 1-' C1- 1 @1 <'0 1 A1 - ' I' @1 ='BD<-' I' <?L" @1 &- &@@&?' A1 - ' 0&'1-' 1D 1\' H<-' <0B?-' 'A1' #?@@'&-' A< .1-' 0&' C& 1' < @1 - 1 @ <@1-1-' H' a A' ' 00<'&?' C?'0 A &' 1>1-' >1 1' @1' +<@?1' A'B1A' 0&@&-B' @<@@<'1 1-' B<0 A1 +< '<?-B1' C1- 1 @1 <'0 1' 1' @1' ='BD<- ' 1' @1' &- &@@&?' < B&- &?@@1 ' 0'#'1-' @< .1-' H10' <CC& 1\' 1-' @<' A' ' - ' B&>1' <0C& 1\' D& 0 A'B1A BD?-' A1?L' ? 1\' A1' =<' 1' =&'<@>1-' I' 1-A1@!1 1- >1-' @&? ' A1+&' 0<-\' <0 ?-' 1j .< A1' C 1-A 1'<? 1' H' @1' =11' H'@0 C '.-&-' A?' & '0?' @<' C1 1' A1' C<'1' A&?#@1' A<><.1' B&>1' A10?'0 1' H B1?L' 00<'&' I' &?- &?@@&?' 0&'1-\' +0''@<-\' B 1A'#@1L' I' 1LC \' C0&-10 <'<-\' -& &'1' 0B'1-B1' 1-' @1' >'0 '1' I' A& =1&' I' A1' - ' ' <?L" H' @1' <'0 1' A1 - ' -1' @1' D<?-.1& ' C? ' @1' 1>C0 10 1<-' +1-A1' -1' =<B1' +1-A 1 -1' <@'1-1' <' -?A' <? 1' &1C0 =& 0H ' <' @1' B&'.-1 -?A' >< ' A& ' -1' A< .1-' &, 1' &?' -'1-' C, 11' B&'.-11' &-' -'1-' B&'.-11' &?' #?@@'&-' H10' C& 1\' <' @< - ' &?' < @10BD<''-.1 >10 'B1A' <CC@'1' &? 0&?@>1-' <' @1' &-&'1' 0&@&-B' @<' =& >1' A1' @1-A1- ? 1' <+W- A' 1 0? ' @<' C1'-1' B&- 1-?\' 1-' >10>1' @1-A1- ? 1' ; ' H' >10>1' @1' <'0 1' A1 - ' =<B1' =1 ' 1' A1' 1>C0)' A1> ' -&#@10 =1 @P -.10' A& @ . &0010 A1> ' . &0010 A1-'1 0 - <@10' I' =1 @'-.10' C' @1<'01' A " C&1C@1' 0&@&-B' @1' 1D&? ' A1 A' 1' -A1- ? 1' C1- 1' @1' & ' I' @? 0? ' @<' C1'-1' B&-j 1-?\' 1-' B1A 00'-' H' @1' B&1') 1C@1' C?'0' <+&' ' 1B&? 0' <' @10BD<'>.1' C' C1 '' & ' I' #@<-a1' >&-&'1' B&>1' @0' 10&-<#@1>1-' #&0&'.-1 &- 1>' C ' B1&' H' .0?-A1' 10B< B' 1' A1' #@<-a' >&-&'1' 10 ' A1A1'-0 @1' & <@>1' < B<?01' ' < .1-' 10 ' <BD< ?\' I' +1-A?\' -'1-' B&'.- 1\' < @<' C 'B1' A1' LLL' '0' @<' @' ' A? &'1 @<' &?' >10>1' @1' '-' -10' C@?'0 A1' +<@?1' < @1' B&' .-1

4)' +' # ? !

&=' 1 '-. -&' &=' 1@0 -&' &=' <@>&- #?' <= 1' D1' < 1 =?@@ ' C<Ba1A <= 1' D1' !1<0' &=' D1' <'+' ' &=' <'-' &D-' D1' <C '0' -1L' B&>'-. ?C&-' <'-' &=' !& j =1' ? 1' &=' D1' 0<'A 1 '-. 1@0 -<A' <@>&- 0& # &?.D' &' ><A1' B&- <' &' D'0 A'-<-B1 '-' KD<' ' & &?.D <-A' &K-' &=' D1' 1<@>& ' '-'<-' <' <' &=' -.@<-A D<' 0?BD' "1=<?@ 0' #1' =&?-A &' D1' & A' &=' D1' 0<>1' &K-G <-A' D<' D1' KD'BD' K'@@ 0?1' <-A' C &+1' D1' 0<'A' "1=<?@ 0 0D<@@ D<+1' D1' !&? D' <' &=' D1' 0<>1' !& =1' ? 1G <-A')' a1' ?0 'B10 &=' 1<B1' '-' <@@ D1' &?- '10 &=' -.@<-A <-A' <' & 0' <-A' <'@'=0 D<+'-.' &K1' &' '-H?' 1' &=' D1' 1<B1 0D<@@ '-H?' 1 D1< <-A' A1 1 >'-1' <@@ D1' 0<>1' "1=1?@ 0 G <-A' D<' D'0 A'-<-B1' 1L 1-A' <-A' D<+1' 1-. D <0 K1@@ K' D'-' D1' &?- '&=' D10 1 <0 1@01KD1 1

 02 &#!2' . ' !' 3! #!' 1 @'!-S0&"!' -/'/!!"1&-!' &!-#!

 Y% - H W !' 2 !'" . ' !' &-' 2 +' E!! ' &2' ++ @' &-' 1 E&-*' . ' 7 & ! .-!@=

 -/' 2 +' C 2 ' &+'!'" ' !' &-' ' !' "0!' +0!

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 !&'" 2' !' - &-0

 &!' 2 !'" ' !' &-' `-/' !' %# -*!'" 2 +' #.-'!"' &-.' .&-' g !' <+/' -/' 2&+'!'" 7 & &E !@"!#!&'!

 !' 2 !'" . ' !' &-' 2 +' 1 E!' 21 +' .-!@

-
W

? ' ' *2 +' '! +'V' NU *V; 4C " ' !'" !' + @' N$ ' ' "'JJ
0 1BD1' &=' D1>' 0K& -1' N$ ' ' "' : : ' 0

! 3"&#! . ' + ' ' &+ ' !" " @ V !&* ' &%! / ' '2 . ' !" ! B 2 &.-

D<-' LLL' '0' <#< 1A =& ' D1 &'-<.1 K1@+18C1-B1 ' '0 & A<'-1A <-A 10 <#@'0D1A =& ' D1 -B 1<01 &=)' F D' R &-1 D <' -& <-@ &=' KD< ' 0 < 1 & ' &-A' '&-' D<' D1 #1 K' D'-' ` D1 P 1<@ >@ 0D<@@ #? ' & '01@@ -& '@+1 ' '-' @< 1 ` , 1B1/P -& ' '-' <0 @ #1'-.' <0 .&&A' &= @@< ' <0 D1 1 @'-.@ <#&+1 D' ' D'@@'-.0 D1 &?-A' &= & @ &+1 ' D1 <0D'&-@ ?C&-' D1 <'-' &=' ! & =1' ? 1 .=' D1 " &?#@1 <@?1 &=' <0 >?BD <0 D1 #? 1 D & ' 0.@@1 D B&- < ' &' D'0 A'-<-B1 <-A D< ' D1 &-1 <@=' #1 =& =1' ' &' D1 , '-./0 01@ <-A D1 & D1 ' <@=' &' D1 01 &=' D' >' D< ' K'@@ 0?1 <-A C &+1 D1 0<>1 ! & =1' ? 1 ' &+'A1A <@K< 0 ' D< ' D1 ' KD'BD .& &' D1 &'-@ >< ' D<+1 <-A <a1 &=' D1 <0 1 ' &=' D1 0<>1 &'-@ <BB& A'-.' <0 '0 @<K=?@@ ' B&- <'-1A' '-' D1 -A1- ? 10 D1 1&=' ><A1 #1 K'L ' D1 , '-.' <-A D' >' @ -A <@0& D1 <0 1 ' &=' D1 0<'A '- ' =& ' D1 '>1 #1'-.@ >< ' <a1 <-A A1@'+1 ' <0 '0 B&- <'-1A' '-' D1 0<'A -A1- ? 10@ K' D&? ' <a'-.' >& 1@ =& ' D1 <01 <-A &=' ' &=' D1 B&> >&-' 1&C@1

Y W I' W ' -!' 2 ++ 2!+ -@V ."E . ' &+ ' !" ' 0-+!22& ' ; !' 2 &-!' 2 !' "%L+&-*-² - ." 0- &² &' ;!' .0# !/' 7& ' !' !.k "/(2 ! / ' -/' !' b.+/)' 21& 2 "E

@ D< ' -& E&@A0 >' D@ -& ' F & a1 ' &=' '@+1 ' K' D'-' D1 ' ' &='] & - A& -@ 01@@ <- ' F & a > <-0D'C &=' '@+1 @ ?-@100 ' ' #'1 <0 =' -1' <0 D1 1 @'-.@ 1LB1C ' D1 0<>1' -11A &?A1 ''-' D1' > <a'-.@ KD'BD 0D<@@ #1' <@@&K1A' <BB& A'-.' <0 D1 &?A1 ' '0 -1B100< ' &' #1' K &?.D ' '-' D1' 0<>1 ' -A D< ' -& E&@A0 >' D -& ' 1K1@@1 @ -& ' <- ' & D1 ' D< ' K& a1 D < -100 &=' '@+1 @ 0D<@@ 01 ' <- ' &=' D1' 0<>1' &' 01@@ K' D'-' ` D1' P ' @ #1=& 1' D< ' ' ' #1' &?BD1A' K' D D1' &?BD &=' D1' 1&C< A/0 1<A@ '=' ' ' >< ' 1<0&-<#@ ' #1< ' D1' 0<>1' &?BD@ <-A' <@0&' K' D D1' < a &' '.-' &=' D1' F & a > <-' &=' D1' 0<>1@ ?C&-' <'-' &=' ! & =1' ? 1' &=' D1' " &?#@1@ <0 <=& 1' '0' 0<'A' @ <-A D< ' D1' < a <-A '.-' &=' 1+1 ' E&@A0 >' D #1' a-&K-' &' D1' F < A1-0 &=' D1' 0<>1' <= ' -A' '=' ' ' >< ' #1' =&?-A@ D< ' D1' 0<'A , 11C1 ' &=' D1' &?BD &?BD <-' 0?BD < -100 K' D D1' 1&C< A/0 1<A@ 1LB1C ' ' #1' <0 ='-1' '-' @@< ' <0 D1' 1 @'-.@ D< ' D1-' D1' , 11C1 ' &=' D1' &?BD@ =& ' 1+1 ' D'-.' 0&' C &+1A' -& ' <0 .&&A' '-' @@< ' <0 D1' 0<'A' 1 @'-.@ 0D<@@ =& =1' ' D1' " &?#@1' <@?1' &' D1' , '-.@<-A' &' D1' < @ <@1@ &' <0 '0 <#&+1' 1B' 1A' -A' <@0&' ' '0@'a1K'01' & A<'-1A''-' D1' ' '&=' & a@ 1Kj B<0 @1' ?C&-' '-1@ '-B&@-@ & K'BD@ '0 &K@ <@'0#? @ <-A' &+1- @ D< ' 1+1 ' &-1' 0D<@@ D<+1' A'+1 0 &?BD10@ <BB& A'-.' &' D1' A'-<-B1' &=' D1' < & 0@ <'@'==0@ & ' E&+1 -& 0 &=' D1' 0<>1' &K-0 <-A' D< ' -&' E&@A0 >' D@ -& ' & D1 ' ` F & a1 0/P &=' '@+1 @ -& ' , 11C1 ' &=' D1' 0<'A' &?BD10 K' D'-' D1' 0<>1' &K-0@ 0D<@@ 01 ' &' <@1@ & ' &?BD' <- ' '@+1 ' '-' & D1 ' <- -1 ' D<-' '0' & A<'-1A' #1=& 1' K' D'-' D1' ' ' &=' &-A&-@ ?C&-' <'-' &=' D1' 0<'A' ! & j =1' ? 1' -A' >& 1&+1 ' D0 ' -&' E&@A0 >' D@ & ' & D1 ' F & a1 ' &=' '@+1 ' K' D'-' D1' 1<@ >' &=' -.@<-A@ KD1 1' -&' &?BD' '0' & A<'-1A' <0 <=& 1' '0' 0 ?A@ 0D<@@ K& a' <- ' '@+1 @ 1LB1C ' ' ' #1' <0' =' -1' '-' @@< ' <0 D1' 1 @'-.@ <-A' D< ' D1' E&@A0 >' D' &=' F & a1 ' &=' D1' 0<>1' '@+1 ' 01 ' ?C&-' D1' 0<>1' D'0 < a' & ' '.-' #1=& 1' D1' 01 ' ' ' &' <@1@ <-A' '=' ' ' #1' =&?-A' D< ' ' ' '0 -& ' <0' =' -1' <0 D1' 1 @'-.@ D< ' D1-' D1' F & a1 ' &=' D1' 0<>1' 0D<@@ =& =1' ' D1' " &?#@1' <@?1@ '-' <--1 ' <-A' ! & >' <0 #1=& 1' '0 1B' 1A' K' D'-' D1' ' ' &=' &-A& -@ -A' ¥)' D1' ?0 'B10 &=' 1<B1@ < & 0 <-A' <'@'==0@ <-A' <@@ & D1 ' D<+'-.' &K1 ' <0 ?0 'B10' &=' 1<B1@ 0D<@@ D1< @ '-H?' 1@ <-A' A1 1 >'-1@ # ' '@@@ @> - @ & ' '-' & D1 ' <--1 @ &=' <@@ D<' A&' B&- < ' &' D1' 0<'A' A'-<-B10@ <-A' D1 1&=` &'0P ><a1' A?1' L1B? '&-' # ' D1' ' " '0B 1 '&-0;

' D1' 0<'A1' " 'G ' 6

'# &a1-' %# ' = 'b ' ':%

F& a1 ' " 'G '6' ¥ T Z /

H' LLL' ' 0 ' <#< ?\' C ' @1' B?-<.1' L' ' A' ; A1'-1\' 10 ' I ' 10 <#@'\' C? ' @1-A 1B1' A?' @<' A' ' #@<-a' >&-&'1@ H' -?_' D& > >1' A1' H?1 ' 10 < 1' &?' B&-A'B'&-' H'@ 0&=' A1' -\' @1' A' ' &'<@>' 1-1BD< 1' -1' +1-A1' -?_' < .1-' 1-' C@< 1' A1C1001' -1' 1-' ><001' 10 1<-' 0" #&-1' A<@@<'1' B& > 1' @1' 1 @'-.@ &? 1' LLL' 0' @1' @'+ 1' A?' &'1' &? 1' @<' =1B'&-@ 0? ' @1' C1'-1' A1' =& =1' ? 1' A1' @1' A&?#@1' +<@?1' A< <-' B& > 1' '@ <BD< 1' &?' +1-A1' 1-' B&- <@ 1' A1' B10 1' A'@ -<?-B1@ I ' H' @?-' > &'@ 0&=' =& =<' ' <@ &1C@ A?' & ' I ' @<? 1' >&' 1' <@ &1C@ A1' B1@? ' H' +&1 ' 0?1 ' I ' C+1 ' >10?'1' @<' =& =1' ? 1' ? +1?L' &? \' =&= \' H1' B1?L' H" <@1 >' <' @1' B&'. -1' C?'001- ' <+&' ' I ' C 1-A 1' A1@ <'0 1' A1' >10 > 1' @1' B&'. -1' 0&@&-B' B1&' H' 10 ' @&'<@ >1- ' B&- 1-?\' 1-' @1@ 1-A1- ? 10' C1- 1' @1' & ' 1 ' @1' A' ' <'0 1' 1- ' =1' \' ; ' <?L" @1' <'0 1' A1' @<' - ' 0?0A' ' C ' @1' 1 > C@ 10 1<- ' C?@@ C-A 1' I ' A1@'+1 ' 0'B& > 1' '@ 10 ' B&- 1-?' 1-' @1@ A' \' 1-A1- ? 10' 0<?-\' C@?'0 -A 1@ C ' @<'01' I ' C=' ' A1' @1' B&1' C&1C@1

1 >' H' -?_' =1&? ' -1' & , &? ' A< .1-' A1'-\' @<' ' 11' A1' &?-A 10' +1-A1' -?_' &, <'. -1' A< .1-' 0'@ -1' 0&=' <?L" = -1' B& > 1' @1' 0 @ -.@ =& 0C '0' B1&' H' #&0&'. -1' 0&?A? 1' 1-' @<' =10<-B1@ @1' H?1 ' 0&=' <@&K1' 0&@&-B' B1&' H' @<' &?A&? ' 0&=' -1B100< '1 C/ 10 1' & 11' 1-' B1 ' ' H' -?@@ =1&? ' -1' @?1@@&? ' -<? 1' D& > >1' H' &1C1 1' D< @ -1'0' A< .1-@ >1 1' -?@@ A'B1_' < +1-A 1' A1'-\' @<' A' 1' ' 11' A1+/-' B1&' H' 0&' ' &?BD11' &+1B' @1' &?BD1' A1@ 1<0' A1' @'#< A1@ B1&' H' C?'01' 10&-<#@1 > 1-' C& 1' > 10 > 1' @1' &?BD1@ I ' <?L" &+1' ?-' >< H?1' &?' 0' . -1' A1@ &C&? ' A'B1_@ 0? ' C1'-1' A1' @<' =& =1' ? 1' A1' @<' A&?#@1' B& > 1' A10?'0' 10 ' A' @' 1 ' H1' @1' >< H?1' &?' 0' . -1' A1' BD10B?-' =1&? ' 0&' ' B& -?\' <' @10' E< A1'-0' A1' > 10 > 1' @1' > '0 '1 ' '0'@ C&1 ' 10 1' &+1' H1' @1' A' ' E< A1'-' A1' @<' &?BD1' 0?'0A' 1' &?BD1' <0B?-' A1@ D-& 0' &+1a' @1' 10 ' A1@ @'#< A' 0'@ -1' 0&=' <?L" = -1' 1-' <@@<'1' B& > 1' @10 1 @ -.@ H' <A&-H0' @1' A' ' E< A1'-' A1' @1' &?BD1@ C ' BD10B?-1' BD&01' 1-0 ' C+1' -'1-' 0" #&-' 1-' <@< 1' B& > 1' @1' A' ' 10 @ -.@ =& =1B1' @<' A&?#@1' +<@?1' <?' & ' I ' <' @<' C @1' B& > 1' '@ 10 ' B ' A10?'0' 1B' 1' ' <?L" 01 > ##<##1 > 1-' 10 ' & A1'-1' 1-' '<' ' 11' " 1 K a@ &+1@@ D<0 1_' 0? ' -1' '-B&@-' & K'B1' @0 &K1' <@10#? ' I ' &+1- 1' H' BD10B?-' <' ' A' 010' &?BD10' 0&@&-B' @& A'-<-B1' A10' <' 0' <'@@'=0' &?' E& -&? 0' A1' > 10 > 10' @10' '@@10@ ' H' -?_' =1&? ' -<? 10' A&? 0' A< .1-@ -1' E< A1 -' A10' A' \' &?BD10' A1A1'-0' B1@@10' '@'10@ > 1 1' <' +1-' -1' &?BD1' -?@@ .1-' 1-' <? 1' > < 1' H' -10 ' & A1'-1' CA1+/-' A1'-\' @<' ' 11' A1' &?-A 10' 0? ' C1'-1' A1@ =& =1' ? 1' < =' A' ' 1-&? 1' H' -?@@ =1&? ' -<? 1' & , &? ' A< .1-' A1A1'-\' @1' &'<@ >1' " 1-.@1 1@ &?' -?_' &?BD1' 10 ' & A'-1' B& > 1' A10?'0' 10 ' A' ' &, 11' -?_' < .1-' 0'@ -1' 0&' ' <?L" = -' 1-' <@<'1' B& > 1' @10 1 @ -.@ ' H' @& =1&? ' &?' @&, &? ' A'B1_' < .1-' >1 1' 0? ' B1 ' 0&-' >< H?1' &?' 0' . -1' A1+/-' B1&' H' @1' >1 1' <' @<' +1-G 1 ' 0'@ 0&=' &+1' H' -1' 0&=' <?L" =' -1' B& > 1' @10 1 @ -.' H<A&-H0' @1' , &? ' A'B1_' =& =1B1' @1' A&?#@1' +<@?1@ 1-' > <51' I ' =& > 1' B& > 1' '@ 10 ' A1+/-' 1B' 1\' A1'-\' @1' ' 11' A1' &?-A 10 ' ' H' @10' ?0 'B10' A1' @<' 110@ <' 0' I ' <'@@'=0' I ' &? \' <? 10' <'<-\' C&@<' B& > 1' ?0 'B10' A1' 110@ &'1-' 1-H?1 .1-' I ' A1C8@ > '-1-' C' #'@@1' C@1@-' &?' 1-' <? 1' > < 1' A1' &? \' B1?L' H' =1B1-' @1' B&- <' ' A1' >10 > 10' @10' A'-<-B10 ' 5B 1-' =1B1-' A?1' 1L1B? '&-' 0&@&-B' @&? ' A'0B 1B'&-0;

? +1?L' &? \' =&' \' H' 0" @1' <'0 1' A1@ - ' H& 1' 10 ' &?' H? ' C ' @1' 1>C0' M <' &==1-A1' &?' <A' &==1CA?\' 1-' 0&-' &=='B1' A?' A' ' - 1' H<A&-H0' 0&' ' '@ B& 1A1' I ' ?0A='1' 0&@&-B' @<' =& >1' A1' @10' 1-A1- ? 10' <+W- A' \ 0' 1>' B&>1' 1-' @1' 1>C0' A1' @1' -&#@1' & ' 1- ' C'1 ' <' - 1' 1'.-&? ' @1' & ' H& 10 ' 1-' 0&-' C@1>1- ' 1-?\' <' 1 B10 1' <-' A1' 0&-' 1.-1' 0BA1@ 0&' ' & A1'.-1' H' @10' ?0 'B10' A1' 110' 1-' BD10B?-1' &?- 11' " 1-.@1R 1' A?'001- ' 1L<>'-1 ' &? \' >< 0' A1' M+<- \' 1-' @&? ' &?-8' 110' H' C'.-1- ' <@< '10' 1LB1A<?- \' @<' A' 1' & A'-<-B1' I ' @10' C?-' ' 0&@&-B' >10>1' @& A'-<-B1G' & A1'-1\' 10 ' I ' <001- ?\' H' @10' A' \' ?0 'B10' >1- ' C&@< ' A<CC1@@1 ' I ' A1=<' ' +1-' ' A1+0- ' 1?L' C' +1-' 1' =11' I ' A'0 ' @10' <'08' '10' <'<- \' I ' &BB?C'<- \' @10' A' \' M+3- \@ I ' C' < <BD' >10>10' @10' ,+<- m@ I ' B1@@10' 1L<>'-1 ' A1' @1' A&6' A1' @&? ' <@< '1' I ' @<' C '01' A1' B1&' H'@0' A -1-' <' @&? ' A' \' ,+0- \G ' A@' 0&' ' &+1' C' 1L<>'-<B'&-' &?' 1-' <? 1' >< 61' H' @10' A' \' <'0 10' A&-1- ' C@?'0' H' <BB& A<- ' <?' A' 1'& A'-<-B1@' H' <A&-H0' @10' A' \' <'0 10' H' C@?'0' &-1- ' I ' D?-' A1' 1?L' H=C@?'0' A&-1' C<'1 &- ' I ' `C<@1 < P<?' & ' C ' BD10B?-1' 0<@< '1' `C<@1'</P' < B?-' +<- ' B&-= '1' @1LB1001' I ' H' `<TP' >10>1'@& A'-<- 1 ' >10>10' @10'M+<- \' 1-0" '.-3- \@ I ' 1-' C' @&? ' B&>00<-B1' &?' 1-' <? 1' A'<@ ><51' < 1'- \@ 1'1- ' @1>C '0&-1>1- ' A?-' >&'0' 0<?-\' #<'@'1' &?' ><'-C '01G 1 ' 0" <0B?-' '0B&?- ' <'@@'=' A1' = <?-BD'01' E<&@1 ' &?' <0B?-' <? 1' <'<- ' @<' .< A1' A1\' C '0&-0' A1'-\' = <?-BD'010' &?' A1D& 0@ &?' < B?-' A1' @&? ' A1C? 110@ >1 1' <0B?-1' 'B 1' C0&-1' <?' #<@@@A' &?' ><'-C '01' H<A&-H0' '@ CA <' <?' ' C ' BD?-' '1@ #&>>1' =1001' <' #<'@'1' &?' <' ><'-C '01' LL'0' ⁝ 1 ' H' @10' A' \' ?0 'B10' A1' 110' <'1- ' C&@< ' A<CC1@@1 ' A1 >' 1?L ' C' < <BD' ><0&-0' < C1- 1 0' '@1 0' D<aa1 0' A<?#1 0' I ' &? \' 10' @<#& 1 0' I ' 1?L' 1L<>'-1 @ 1 '0'@0' &+1- ' C' 1L<8' >'-<B'&-' &?' 1-' <? 1' ><51' H' <0B?-1' A10' A' \' C0&-10' <A' C '0' <' B&- < '1' <' @10' @1'10' I ' & A'-<-B10' =1' \' A1 0-' B10' D1? 10' CA1+/- @ H<A&-H0' B1@@? ' H10 ' &+1' 1-0" dR'.-0-' <' ' @1>C '0&-1>1-' A?-' >& 0' ' H' >10>10' @10' ?0 'B10' <'<' ' C&'< ' A<CC1@@1 ' A1+W- ' 1?L' C' < <BD' <'@@& 0' & A1K<-1 0' <--1 0' #BD1 0' 10BD&? 0' I ' 1 '&? 0' A1@ C100&-@ D&0 '@1 0' I ' &? \' <? 10' <'='B1 0' I ' ' <'@@1 0' I ' A1' 1?L' <00100&' I ' BD10B?-' A1' 1?L' <' +&-A 1' I ' C 1-A 1' 0&@&-B' @10' A'0B 1B'&-0' A10' A' \' ?0 'B10@ I '' 0" <0B?-' A1' 1?L' C' .-1' @1' B&- < '1' ?0e' >10>1' @<00100'&-@ I ' A1' B1&' C' 1L<>'='<B'&-' &?' 1-' <? 1' ><51' 0&' ' &+1' &?C<#@1' H<A&-H0' >10>10' @10' C0&-10' 1-0 ' &+1\' &?8' C<#@1\' I ' BD10B?-' A1?L' =<B1' I ' =1B1-' = -' 0&@&-B' @10' A'0B 1B'&-0' A10' ?0 'B10@ I ' <' '@@ &?' ><'-C '01' B&>1' A10?'0' 10 ' A' ' ' H' B10 ' & ='-<-B1' 1L 1-A1' 0'#'1-' A '-\' ' 110' I ' ? .D0' &?' '@0' &?-' C&'< ' I ' <?^& ' 11' B&>1' ?0 'B1' A1' 110' &>1' 1-' @10' &?- 110' 0?'0A' \;' 1 ' 1-A? 1 <' B10 ' & A'-<-B1' <-H+' <@ C@1>1-' C0BD1 ->1-' <+1-'

1>' & A1'.-1R' 10 ' 5' 10 <#@'\' ' @< 0 < '&-' A10' 1'0' I ' 1-.'-10' <CC1@@1\' -a10' I ' A1' &? \' <? 10' >< 0' '0@ H' 0&-' I ' 0&@&'1-' 10 1' ='BD1\' I ' < <BD1\' B&-&D?1D' >1-' A1' -&1 ' I ' &? ' C' R 1@-' 1>C0' `A1@ N< - < 0 ' .W?- \

ﬁ 9 TV%0' $ - 1@'-1A'&0' D1' (I(O I " -2 .2!/' .'" #.- ["&!' 1!2 -!'+."/&- -#!'+!%#!22!' C' S' "!'N$ ' /' S' '4C ' "' J ' !'3! & &.-'&-' -*+&2

&+'A1A' <@K< 0' D<' '=' D1' <0 1 ' &=' D1' '- ' K@''BD' -&K' '0@ & ' KD'BD' =& ' D1' '>1' 0D<@@ #1@ &==1-A@ & ' D<+1' &==1-A1A' '-' D'0' ==' B1' &=' D1' 0<'A' '- @ D<' D1-' D1' #1' C?-'0D1A' <-A' ?0 '=' 1A' <BB& A'-.' &' D1' ! & >' &=' D1' 0<'A' -A1- ? 10

'[V !"! 2' &-' /&!' & 1 !' . ' !' -.;+!' M&-*' !-"@ B !'" .' .0'" ."/' !' M&-*' ' -.7' &2' &-' &2' 3 "+& 1 !-' .+/!-' ' !&#!2 !'"&-' !' !#.-/' A ! '" . ' &2' 6 !&*-' ' 7 2' ."/ &-!/' ' !' 02 &#!2' . ' !'3! #!' &-' !'!"@' .0-@' . ' -*+ -/' 2 .0+/' !% 1&-!' ++' --!'" . ' !"@ -2' &-' !&'" .& &L' &!2' 7 .'2 .0+/' E!' + "&!2' !%#!!/&-*' !'2 &/' "/&- -#!' -/' 0-&2 ' !1' ##."/&-*' .' !' 2 1!' "/&- -#!' J '&2' ."/ &-!/' -/' 22!-!/' ' !' 2 &/' 02 &#!2' ' !'3.7!'" .' # ++' -/' # 02!' .' #.1!';! ."!' !1';@' !-&"!' #& 2' -/' &2 "&-* 2' !' 2 !"2' '&-*' -/' .##0 @&-*' /&!' 2 &/' !"' -2' -/' ;@' # 1!-2' !' 2 1!' !"' -2' -/' !1' .' !% 1&-!' . ' !' *&'&-*' . ' !&'" + "@' -/' !' E&-*' . ' '7 &# ' !@' *&'!' .' !0'" 2 &/' !"' -2-' -/'&'&'; !' .0-/';@' % 1&- &.-' &-' . !'" '"&2!' ' !'2 &/' 2 !"2' *&'!' 1."!' -' ##."/&-*' .' _' 2 &/' "/&- -#!' # <' !-' !' 2 &/' 2 !"2' 7 .' *&'!' 1."!' /' ! # '.' !1' ' *&'! ' 1."!' 2 +' @' .' !' M&-*' .'" !'!"@' + "@' &/' .' -@' !"' -' #.-" "@' .' !' 2 1!' "/&- -#!' !' 4% 2' -/' ' !' 2 1!' !"' -2' 2.' E&-*' -/' !"!.';@' /&!&'" .-!22&.-' ."&-'. !"'+ 7 0+' 7&2!' &-!/' '!' 1 "&2.-1!-'.' ' .- ' 7& .0' 4 &+' ." &- "&2!'H -/' &' -@' !"& ' 4 &+& '.' B" -# &2! b .+!"' ." -@'. !'" '&-*' !' E!! &-*' .' 3"&2.-2' 7& &-' B" -# &2!' ." 7& .0' ." -@'. ' !&'" ! 0 &!2'+!' -@' 20# ' 3!"2.-' =.4 ' ." &- "&2!' ' !-' !' 2 ++' +.2!' .' !' M&-*' ." !'!"@' 20# ' -' +!' .' 4 &+' ." &- "&2!' 7!-@' &++&-*2<' -/' ' !' 2 &/' 02 &#!2' .' 3! #!' '!' 3.7!'" .' # ++' ;! "!' !1';@' # 1!-' 2.-2' !-!"2' &+!"2 # !"2' 0;!"2' -/' ++'] E!'" ;.0"!"2' -/' .'!% 1&-!' !1-' -/'&' !@' &-/';@' % 1&- &.-'$' &-' . !"' --!"' ' -@' .' !' 2 &/' 3!"2.-2' '!' E!-' #.-" "@' .' !' 7 2' -/' "/&- -#!2' ."!' 1 /!' ' !-' !' ' &2' .0-/' 2.' E&-*' '!' 1 "&2.-1!-'.' ' .- ' -/' ' !' 2 1!' 02 &#!2' '!'3.7!'" .'+ ++';! ."!' !1';@' # 1!-' &+."2 ."/7 &-!"2' --!"2' '4.# !"2)' I' B&2 !"2' -/' ""&!"2' .' B&2 ' .2 &+!"2' -/' ++' . !'" "& &#!"2' -/' & &E0 ++!"2' -/' .' 22!2' !1' -/'! # '.' !1' .' 2!+' -/' E!' !'" !' &2)' #"!&.-2'.' !' 2 &/' 02 &#!2' ' -/'& ' -@'.' !1' E!' #.-" "@' .' !' 2:/' 22!22&-*' -/'&H<"!.<';@' % 1&- &.-'."&-'!& !" 7&2!' ;.' .0-/' *0&+@' ' !-' !' 2 &/' 2.' .0-/(*0&+@' -/'! # '.' !1' 1 E!' B&-!' !'" !' &2#"!&.-2'.' !' 02 &#!2' -/' '!' 1 "&2.-1!-'.' ' .- ' 7& .0' 4 &+'." &- "&2!' 2' &2' ;.'!' 2 &/':' -/' ' &2' "/&- -#!' !%K !-/' 2< 7!++' 7& &-' &&!2' -/' 4."0* 2'0/&!"!' !@' '!' 3.7!'" /' 0 ."&@' 2' 02 &#!2'.' !' 3! #!' <0&-' .0-&!2' ."!2 &/0' -/' &2' "/&- -#!' 2 ++' !-/0"!' 0- &+' !' 3 "+& k 1!-' -!%' .' #.1!

9' '0' & A<'-1A@ 0)' D<' D1'0 <-A'-.' &=' 1 0'] @] "' <-A' -.@10' B<@@1A' '-a0@' <-A' <@@ & D1' 1 0@ KD'BD' #1@ &=0 1' . ' <-A' K1 1' F&-' &' #1' =<0 1-1A' <-A' D<-.1B@ B&- '-?<@@ ' 1 0 B &0' " < ' <-A' '.D @ # ' <' B1 <'-' '>1' '-' D1' 1< @ &' . 1<' <-' '+1

) .' N$ ' '5' ; '4*' 'J ' !'3! & &.-'&-' -*+&2 ' -/'!2 2;+&22;!/' " '5

)' !' !'" .+!.7&-*'-.7'-01;V!/'W + +' 7 2' &"2' "&-!/' ".1' !' 0!'6.++'&-' 7E&-2(2' /& &.-0 .' " -2+ &.-'.'&' 2' !'!'" ;!!-' "&-!/'&-' -@' /& &.-'.' ' !' 0!2' ' &2' <' 2';!!-'-01;!"!/'W '&-' +!' ."1!'" /& &.-2

&0 0ʼ &< 0ʼ < 'A' -BD& 0ʼ &+1 DK< ' D1' '+1 ' &=' D< > 10ʼ <-A' & D1 ' '+1 0' &=' D1' 1<@ > ʼ KD'BD' <-A'-.' '0' < <?01' &=' <0' . 1< ' <-A' > & 1' " 10 ? '& -' &=' D1' &&A' <-A' ! ' &=' ! '0Dʼ <-A' " '0 ? #<-B1' &=' =11' B& > > &-' <00<.1' &=' 1001@0ʼ <0' #1' D1' F 1< 0ʼ , A1@0ʼ . ' <- ' & D1 ' -.'-10ʼ #1' KD&@@ ' A1=1-A1A' =& ʼ 1+1 G <-A' D< ' 1+1 ' 1 0&-' D< ' 01 1 D' & ' = 0 1-1 D' D1 > ' D1 1<= 1 ' &' 0?BD' &0 0ʼ &< 0ʼ <-A' -BD& 0ʼ & ' @'a1' D'-.ʼ B&- 'j -?<@@ ' &' 0 <-A' <0' <=& 1' '0' 0<'A@ <-A' #1' A?@ ' D1 1&=' # ' d1' &? 01' &=' D1' <K' B& +'= ' 0D<@@ =& =1' ' &' D1' , '-.' '0' < ' 1+1 ' ' > 1' D< ' D1' '0' 0&' C &+1A' '-' " 1=1?@ ;' &+'A1A' <@K< 0 ' D< ' ' '0D<@@ #1' @<K=?ʼ &' D1' &00100& 0' &=' D1' 0<'A' '-a0ʼ '=' D1 ' #1' &=' 00'01ʼ &' ='0D' K' D' D1 > ' '-' <@@ 01<0&-<#@1' ' > 10ʼ A <K' -.' < 'A' C?@@'-.' D1 > ' # ' <-Aʼ <0' & D1 ' !'0D1 0' A&' K' D' & D1 ' 1 0ʼ <-A' -& ' =<0 1-'-.' & ' <Ba'-.' D1' 0<'A' 1 0' &' &0 0ʼ &< 0ʼ < =' -BD& 0ʼ &- '-?< ' &' 0 <-A' <08 <=& 1' '0' 0<'A' G <+'-.' <@K< 0' &' 1+1 ' &=ʼ D1' , '-./0' @'1.1' 1&C@1' D1' ' '.D ʼ @1ʼ <-A' -D1 ' <-B1' '-' D1' ' !'0D'-.0' '-' D1' 0<'A' F < 1

7-!"2' . ' "&-E2' 1 @ &2 ' 7& ' ! 1' <-A

WW !' J 0 !' V !2 1 ' 5' ' /7 ' ' #' '"!#& ! /'=

' V ! 1 2' ' 7 2' ."/ &-!/';@' ' 0 !' 1 /!' 'V !2 k 1&-2 !"' &-' !' &" ! !- 'A ! '" . ' !' 6 !&*-'. 'M&-*' /7 "/' .-' . 'M&-*' !-"@ ' '& ' ' V "& ' ;!' ;".0* ' * &-2' !' 02; -/' -/' &2' V & ! ' ." * &-2' !- -' ." ! "1' . ' & ! ' ." ! "1' . ' -. !"(2' & ! ' 9" ;@' !' 0" !2@' ." ! - -' &-' &' !" 3.22&;&+& @' . ' 22O!' !% &-/+' -/' !' 02; -/' /'" 20# ' !- -2' 1 E!' ! 0+' !" ! 0+ ' ." "!' 7&++&-*' ." "!-/!'" ." !' !1 -/ -' &2' !1 -/' ' & ' !' V & !' ." .2!' ." 7 .1' !' 6 ! '!"2&.-' ;!+.-*2' #.1 !' ;! ."!' 0/*!k 1 !-' *&'!-' !@' 2 +' ;!' "!#!&'!/' .' /! !-/' !&"' 6 &* 2' -/' ;!# O2!' ' !' M&-*(2' O2 &#!2' "!' -.7'&-'*"! ' .0; ' & ' !' 02; -/' ." -@' . ' !' 2 &/' !- -2' 1 E!' ! 0+' !" ! 0+ '." "!-/!" !' &.-' .' !' !1 -/ -' !' 7 &# ' ! 0+2' ." 6 !-/!"2' ;!' "!#!&'!/' .' /! !-/' !&"' 6 &* ' & ' +&!@' #.1!' ' -@' &1!' ;! ."!' 0/*!1!-' *&'!-' &-' 20# ' 2!2' 4! ."!' /!#+ "!/' ##."/&-*L' .' !' B."1' -/' V ."/2' -' !' 2 &/' 0 !'#.1 & !/' -/' ' &2' "/&- -#!' /.'!% !-/' .' V "& 2' -.7' !-/& *' -/' !' 0/*!1!-'-.' @!' *&'!-' 2' &-' .-2' !"! !" .' ;!' 1.'!/' -/' &2' "/&- -#!' 2 +' !-/0"!' 0- &+' !' 3 "+& 1!-' -!% ' .' #.&-#

!' 6!'!"k 2&.-!"2' C#' 1!-&.-!/' !"!&-' 1 @ !'"!#!&'!/' .' /! !-/' !&"' 6&* ' ' &@ &1!';! ."!' 0/*1!-

WW +VYJ *CL' 'J' 'V+

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C&0 10ʼ #< 1@0' I ' <-BD 10' <?' <+1 0' @<' ', 1' A1' D< > '01' $ ' <? 10' '+1 0' A?' &'<@ > 1ʼ H?1@1' 0 <A&-' 10 ' B<?01' I ' &BB<0&-' A1@ <?L" .0?-A' I ' C@?'0' A10 ?BA&-' AA' # &A1' I ' ='@1' A1' C100&-ʼ I ' A10 &? #<-B1' A1@ B 1' C<00<.1' A1@ +1001?@L ʼ B& > 1' 01- ' @10' K1 10' a A1#B' &?' -?@@10' <? 10' 1- C10ʼ 0&'@' &? &? 1 > 1- ' A1=1-A?\' C ' &? ' 1 > CO' <+1@@' 'G 1 ' H' BD10B?-' H' @10' > 1 1' &?' ='BD1' A10 1-<+/-' <0' '1@L' C&0 10' #< 1'L' I ' <-BD 10' &?' BD&01' 01 > #@<#@1' CO' B&- '-?1@ > 1- ' 10 &@01 ' B& > 1' A' ' 10 ʼ I ' 1- ' 0&' ' A?18ʼ > 1D ' I ' C' B&? 0' A1' @1 ' B&-+'A@\ ' =& =1B1' <?' & ' G' 0 ' <' BD1B?-' 1 > CO' H'@' 10 ' 1-0" C+11' 1-' A1=<? ' ? +1?L' &? =&' \' H' #'1-' 01' <0' C&00100&? 0' A10' A' \' -a10' <@0' 0&'1-' A<00'01' C1=1D'1 ' #+1B' 1?L' A-' &? ' 1 > CO' 01'0&-<#@1ʼ @10' &' <'D<- \' I ' B& -+1'<- \' C' > <'-' B& > 1' <? 10' C10BD&? 0' =&- ' &+1'<? 10' 1 0ʼ I ' -&-' ='BD<- \' I ' < <BD<- \' @10' A \' 1 10' <0' C&0 10' #< 1'L' ' <-BD 10' C? ' B&- '-?1@ > 1- ' 10 &'01 ' B& > 1' =' ' 10 G <@+<- ' &? j =&' \' <' B '?-' 1.1' A?' & ' @&? ' A &' ' ' @1' I ' 1-D1 ' <?-B1' 1-' @& ' C10BD1 '10' 1-' @<' 1K1' <+0- A' 9

V' 1 > ' B& > 1' & AA.-1' 0&' ' C' 10 < ? ' =1' ' <' F 10 > ' <-' A?' 1.-1' @1' & ' ' =' \' @1' & ' ' 10\' > 1ʼ H' 0' / #=1' 0&' ' C& 1' CO' @1' < &-' I ' 0<' =1 > 1ʼ &?' 1- 0' 1-<-' <' R > 1' A1' +'1' <' 1 > 1' A<? 1' +'1' &?' C' @1' ? 10'1' &?' 1-W-' 1-' @1' <' ' I !' C&00'#'@' 1' A'00?1' 1L 1'- ʼ I ' @1' #< &-' &?' '1@L' 1-/- m' =&?-' A1=<? 1' <CO' A1=<? 1' &?' +&@@1-' 1-A 1' <@' A1 <?-A/-' 0&-' A1 > <-A1ʼ H' 0'' @1' =1 > > 1' &?' B1?L' <' H" @1' 1+'0'&-' 10' +1'.-1-' A1+D' ' ?..1 > 1-' 1-A?' H'@0' , &-' 1B1?L' <' A1=1-A 1' @&? ' A &' G ' C/' B1&' H' @10' ?0 'B10' A?' & ' 0&-' & 1' 1-' .W?-' <K1 1?0 11ʼ 0" @1' < &-' &?' <0B?-' A10' A' \' 1-/- \' =&-' A1=1?' <C0O' A1=1?' &?' 1-A1-' @<BB'&-' <O' A1 > <?-A/-ʼ @10' H?1?L' A1=<? \' &?' 1AA'B'&-0' 0&-' 1B& A1\' <' ?-' $R > 1ʼ I ' R 1'-0' A10' B<?010' @10' ?0 'B10' > &1+<- \' @1' ?. j .1 > 1-' > ' O' 1-' 10C' 1' I ' & ' A&-' &? 1' <-H<@ C0BD1'D' R <1ʼ 0" B1?L' 1-' @<' 1 0'&-' &-' 1B1?L' <' B1@@1' A< 1'-' R > 1' <' A1=1-A 1' @&? ' A &' ;' C? ' &?0 '1 ' '1@ <K1 8' &?0 1' I ' A&? 1ʼ A1'-1\' 10' I ' A1B@< 1\' C' @<A+'0' I ' <001-' '=0A' \' H' B1?L' 1-' 1 0'&-' C? &-' 10 1' 1B1?L' <' A1=1-A 1' @&? ' A &' ʼ 0'@0' +1'.-1-' ' <' <0B?-' 1 > C0' A1+ - ' ?..1 > 1-' 1-A?' 1-' '1@L' B<010' A1+W-' A1B@< 1\' <Bj B& A<-' <' @10' =& > 1' I ' C&@0' 1-' 1' A' ' 10 < ? ' B&- 1-?\' ' H' B10 1' & A'-=-11' 01' 1L 1-A1' <0' # '1=1' ?-H& 1' 'C1-A<-\' I ' @1' ?..1 > 1-' ?-H& 1' -'1-' 1A?\' B& > 1' 1-' <BB'&-0' A10& 1' 1-<+3-' < > &+1 0' ' A? 1 <' B10 1' & A'-<-B1' <-H<@ C@1 > 1-' C0BD'-1 > 1-' <+1-'=

1 > ' B& > 1' 1-' @1' 1 > CO' @1' -&#@1' & ' '1 0' !' & ' B&-H?10 ' <-' A1' 0&-' 1.-1' LL+' <' 0&-' C@1 > 1-' 1-?\' <' F 10 > ʼ @ =' @ 1-' A1B@< 1\' C' 10 < ? ' 1-' @1' A' ' C@1 > 1-' H?1@@10' BD&010' A?'001-' 10 1' A' \' <'0&-ʼ @ 1- 1' H?1?L' 0" D< > ' @?'0 ' 1-A' 1\' <CC1@@1\' &?' C '0' C' 0?0C1B'&-' A1' .W?-A' <'0&-' I ' C? ' B10 1' B<?01' B& > '01' I ' A1 1-?\' 1-' C '0&-' A?' & ʼ 1 ' C?'0' '1@ C '0&-1' 10BD<C1' D& 0' A1' C '0&-' A1' & ʼ A1B@< <B'&-' -1' =?'0 ' @<' 1' <+/-' B10' D1? 0' @1' H?1@1' '1@ 10BD<C1' , &' ' <A ?..1' <'0&-' &?' -'1-' G & A1'-1\' 10 ' I ' A1B@< 1\' C' <? & ' 1' A'B10 ' C01-' C@1 > 1-' C' 10 < ? ʼ H' 0" <0B?-1' C0&-1' 0&' ' 1-A' 1' <CC1@@1' &?' C '0' C? ' 0?0C1B'&-' A1' .0?-' <'0&-' B& > 1' <+/-

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10 ' A' ' 1 ' 0&' ' B&> 0 I ' A1 1-?\' 1-' C '0&-1' A?' & ' C? ' B1@@1' B<?01' I ' 10BD<C1' +&@?- 1>1- ' D& 0 A?' A' ' C '0&-1@ H1' A1@ 10BD<C1' 0&' ' <A ?. .1' I ' A1B@< 1' <'0&-' 0" '1@ C0&-1' -' ' ' A?1>1- '< 1> '0&@&-B' @1' @1 ' A1' B10 1' 1; ' 1'1- ' @10 ?!' A?' =11' 1-' '1@ B<0 @10 10BD1 10 I ' =& 8 =<' ? 10 A10 10 I ' 1-1>1- \' A1' 1?L' 1-?\' A1' A1@L' C0&C10 '00'- ' < 1'D \8 B&>1' A1' B1?L' H' 0&= ' < 1'- \' A1' C1A 1' C'0&-6 1 ' 1'. -1- ' B10 ' & A' -<-B1' I ' A1B@< <B'&-' @'1?' '1==1 ' A1@ LL' &C ' "&A &D ' A< 1'-' C<001' <-H8 <?' C@1>1C ' C0BD1'-1>1- ' <+1-'

&2' 2 &/ ' -/' ; !' #. 1 1& !/' -/' / ! &-!/'&-' !' M&-*<2'3"&2. -' ." ' 02! ' -/' !2# !' ' .+0- "&+@' .0 ' . ' !' 2 &/' 3"&2. -' 2O# ' 2# !' ; !' /H0/*!/' -/' /!#+ "!/' "! 2. -'& '2O# ' 3!"2. - ; !' !"!. ' /0+@' &- !/ ' ##."/&-*' .' !' 7' . ' &2' -/ -/' !'+& "/2. ' !' B!!'2 + &-' 2O# ' 2!' ' !' !' 2# ! 2' !' ."/2 -/' B. !& 0"!2' . ' !' -/2' -/' !-!1!- 2' . ' !1' .+/!- ' 2 + . ! . ' 2O# '3!"2. -2' 2. ' &- !/ ' 2' . ' .2!' 7 .' "!' &- !/' . ' B." !& 0"!2 3! & ' "! 2. -' /' &2' "/&- -#!' -/' !#+ " &. -' 2 +' ' !' 3+ #!' &&/' B!<(". 1' !' 7!- &! ' @' . ' ^ . ; !'" + 2 ' 2 ' 0- &' !' 3 "+& 1!- ' -!% ' .' #. 1!L

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N 8 @1' & ' C' <A+ 0 I '<001- ' A1 ' 10C?1@L' B 2 ' 1>C& 1@L' I ' < @10C1B'<@ 1H?10 ' A10 T 10 1-' B10 1' C@1'C1- 9 1-?\' <' F 10 -' @1' A< 1'-' &? " < '@@' <-' A1' 0&D' 1. -1' '1 B19 <A' & A' -1\' B 1 # \' 1'-0 & A'j -<-B10 B 10 < ? \' < @&-&? ' A1')'1?' B C ' @1' #'1-' A1' 0 -' =C'<@>1' 1-' @<' =& >1' 1-0?<-

-' C '>10 B&>1' C' @10 < >?1@L' B&- 1.<B'&-0 B B&-j =1A1 <B'10 =1' \' C' @10 <0&-0 1-' @&? ' d` <@L' D<C' 10 <001>#@1\9 @1' #&-' B&? 0 B 1='1= ' A10 10 < ? R' A1' <#& 1 0 0&- ' k ?#@'H?1>1- ' +'&@1\ B' A'0 ?>C1\' %00?@>'&'" A1' @<' @1 1' I ' . 1 &?01' A<><.1' A1' &? ' @1' 1 G 1'=0' @1' &'' +&'@@<- ' 1-' B1&' B<0 C +&' ' A1' -1A'1 C' <A+'0 B <#01- ' ?'0A' \' I ' <' @<' 10C1B'<@ 1H?10 ' A1 ' # I' &10' <A' & A' -1\' I ' 10 <#@'\9 H' '1?L' D<C' 10 I ' &-. 1.<B'&-0 -1' 0&'1- ' A10& 1' 1-?\G 1 ' 0" <0B?-0 '0@L' 0&'1- ' =1' \' 0&'1- ' B1?L' H" =&?- ' =1' 1' <001>#@1 ' B 1-' ' 'B1?L' BD<C' 10 ' B&-. 1.<B'&-0' 0'@0 1- ' 0&'1- ' B&-+'Q \' <A8 ?. .1m' C ' =1@&-0G 1 ' H' &? \' @10' <?R ' > -0 H" +1' . -1- ' <0' '1@L' BD<C' 10 B B&-. 1.<B'&-0' 0&'1- ' C ' -'\' C' 1>C 'G 0&-1'D1- ' A1' @&? ' B& CO' I ' =1B1- ' * ' B <&-B1&-' < @<' +&@- - 1' A?'

1>' C? ' B1&' H' C@?0&'' 0' A'C010' C0&-10' <>10-1- ' D& 0' A?' &'<@>1' A1' 1>CO' 1-' 1>CO' . <-A1' -&>#1' A10' #1 #110' @<-? \' 1-' !@<?-A 10' ; <?R ' C<-0' A1C' A1@<' @1' > 1 9 '@<' '@0' =&?- ' 1?L' 1-A1 ' B+1-A0- ' 0'#'1-' >10>10' @10' #0 #110' B&>1' @10' @<'-10' A'B1@@10' <0' D&>10' A1' >10>1' @<' C<'@09 0 ' H' C' '1@L' C0&-10' @10' #1 #0 h0' A1@-\' >10>1' @<' C ' A1' !@<?-A 10' B <?R0' C '1 ' A1'-0' # '1=' 1>CO' 0 ' <@01>#@<#@1\' A10 1' . 'A1>1- ' 1-B 1 1\' ' >?a'8 C '1\9 <' R0.0-A1' A11A ' CA1' B A<>< .1' =1' '= '@1' &" A1' 10' B&0 ?>10' 8)0?#0'A'10' A10' A' m' @<' -10 ' B<?L" .D'A1' < 1 @001>1- ' A1' &?' @1' &'<@>1' I ' <>1-?01>1- ' B A1 0'C-' A1' @< C 'B1' A10' @<'-0' 0'#'1-' <' '10 <C@1' A1' <@1'0' B&@D1' B ' 1-' -.@1R 19 0'@ -1' 0&' ' C 1?' A1' 1>1A'1' B1@@1' C< '1' ' @=1' A' ' Q' B&-0'A1 <-' @10' -'001 0' A1' @<A+'0 <001-' I ' 1H?10 ' =A' \' <A' & A'-1\' I ' .0- 1\' C' <?=@& ' 1' A?' A' ' C@1>1- 9 H' -?@@ ><5' A1' C0&-1' A1' H?1@1' 10 < ' &?

' & A' D1' , '-.9 # ' $ ' #; ' # 001- ' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@9 <-A' < ' D1' 0C1B'<@ 1H?10 ' &=' D1' & > >&-0 <001>#@1A' '-' D'0' < ' @'<>1- 9 D#@A1-' < ' F 10 >'-0 1 ' D1' @<0 ' " < ' (=' 2C '@9 D1' D' A' 1< ' &=' D'0' 1' . -9 D< D' & A<'-1A' <-A' 10 <#@'0D1A' B1 <'-' A'-<-B10' <-A' < ? 10 9 &' D1' &-&? ' &=' E&A9 <-A' =& ' D1' F 1<@' &=' D'0' 1<@>9 '-' D1' ! & >'=&@@&K ' -.G ! 9 F D1 1<0' # ' D1' 1< @ ' &-. 1.< '&-0' <-A' &-=1A1 <B'10' ><A1' # ' D1' <0&-0 '-' D1' ' .1-1 <@ D<C' 1 0' =< A' 001>#@'10%0P' D1' .&&A' &? 01' <-A' ==1=@' &=' D1' < ? 10' &=' <#&? 1 0' #1' &C<=@ ' +'&@< 1A' <-A' # &D1-9 ' ?#+1 <&<' &=' D1' <K9 <-A' &' D1' . 1<' " <>< .1' &=' <@@' D1' & > >&-0;' ? ' 0<'A' & A' D1' , '-.' K'@@' -.' '@@' D'0' <01' &' C &+'A1' 1>1A 9 # ' D1' A+'B1' <-A' 001- ' <=& 10<'A9 <-A' < ' D1' 0C1B'<@ 1H?10 ' &=' D1' 0<'A' & > >&-09 D< D' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' 0?BD' D<C' 1 0' <-A' & -. 1.< '&-0' 0D<@@ -& ' #1' D1 1<= 1 ' D&@A1-'G <-A' '=' <- '0?BD' #1' ><A1 9 D1 ' D< ' B<?01' 0?BD' D<C' 1 0' <-A' &-. 1.< '&-0' & #1' <001>#@1A' <-A' D&@A1-9 '=' D1 ' D1 1&=' #1' B& -+'= 9 0D<@@ #1' ?A. 1A' =& ' ! 1@&-0G <-A' D< ' 0A@ D1' & D1 ' <0&-0' D ' & & 0?BD' D<C' 1 ' T>A' & -. 1.< '&-0 9 #1' C?-'0D1A' # ' >8@ C =1&- >1-' &=' D K ' &A 10 9 <-A' ><a1' 1 ' >'A' <-0&>' < ' D1' , '-. f ' F '-

9 1B<?01' D< ' A'+1 0' 1 0&-0' A&' = &>' ' >1' & ' >1' B< ' &?' &=' D1' 1<@>' . 1<' ?>#1 ' &=' D11C' `K' D' ! @11B100P' ' - &' ! @<-A1 0 9 <-A' & D1 ' &?- @ <#1 &-A' D1' 1<9 <-A' D1 1' D1 ' 0D1< ' D1>9 <-A' 01@@ . F1@@ D1' 0<>1' D11C9 <0' D1' F &&@0' &=' D1' 0<>1 9 &' 1-' &=' D1' 0<>1' A - 9 0&' D< ' # ' 0?BD' 1 0&-0' D1' D11C' K' D' -' D1' 0<'A' &?- ' &=' ! @<-A1 0 9 <-A' & D1 ' < 0 9 '-' 0D& ' ' >1' #1' @' a1@ ' &' #1' >?BD' '-B 1<01A' 0)' &' D1' . 1<' " 1B< 9 &00 9 <-A' " 0?-<. 1' &=' &? ' \ )' >A' D1' , '-. 9 &=' D'0' ?0 &>0' <-A' ?#0'A'10' &=' A'1' 0<'A' F &&@0 9 <-A' <@0&' &' D1' . 1<' '-A <-B1' &=' < ' D1' 1<@>9 <-A' " ' >'-?j '&-' <-A' #< 1>1- ' &=' D1' 'B1' &=' F &&@0 9 <0' K 1@@ < ' D1' <C@1' < ' <@<'0 9 <0' D1 1' '-' -.@<-A 9 ?-@100' 1>1A ' #1' C &+'A1A' '-' D'0' 1D<@=G ? ' 0<'A' & A' D1' , '-. 9 B&-0'A1 '-.' D1' 1>'010 9 # ' D1' A+'B1' <-A' 001- 9 <-A' < ' D1' 1H?10 ' <=& 10<'A9 D< D' & A<'-1A' <-A' . <- 1A' # ' D1' ? D& ' '&=' D1' 0<'A' < @'<>1- 9 8 D<' -&' C@<-j -1 ' &=' 1 0&-9 &=' KD<' 0 < 1' & ' &-A' '&-' D< ' D1' #19

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D1 1<= 1 ' #1' 0?==1 1A' &' 0D'C' ')' K' D' -' D1' 1<@>' -.@<-A' ' <- ' D11C@ =@11B1A' & ' 0D& -@ '- &' D1' 0<A' &?- '&=' !@<-A1 0@ & ' &' <- '& D1 ' < 0' #1 &-A' D1' 1<2' 1LB1C ' ' ' #1' &' +'<&<@ D1 CK -' &=' <@<'0' <-A' D1' < 1#10' D1 1&=' ' <-A' D<' ' <-' D< ' >< ' #1' 1'0C'1A@ KD'BD' ?-A1 ' D1' &@&? ' &=' +'<?<=@@-.' &=' D1' <>1' &K -'<-=@ < BD10' &=' <@<'0@ C<001 D' '- &'<- '& D1 ' @<B10' D<-' &' D1' 0<>1' &K -' <-A' DA< BD10' K' D' <- ' D11C'=@11B1A' C '0D& -@ 1LB1C 'D1' D<+1' D1' , '- . 0 @B1-B1@ 0D<@@ =& =1' ' &' D1' '-.' D1' 0<>1' D11C@ & ' D1' <@?1' D1 1&=@ <0' &= 1=@>10' <0' D1' 0D< ' #1' =&?-A' '-' " 1 I ?@

@ ' '0' & A<'-1A' <-A' 10 <#@'0D1A ' D<' '=' <- ' ?0 &>1 @ &@@1= & @ & ' &- &@@1 ' &=' D1' , '- ./0' ?0j &>0' &=' &Ba1 ' &=' @& D0@ &=' ?#<A'10' &=' & - -<.1' & ' &?-A<.1@ '-' <- ' & ' & ' @<B1' & =' -.@<-A@ #1' A?@ ' 0)' < <'- 1A' & ' B&-+'= ' <' D1' , '- ./0' ?' ' 0')2 [=' B&-B1<@'-.' &=' D1' , '- ./0' ?0 &>' & ' ?#0'A ' A?@ ' 1-j 1 1A' <-A' C<'A' # ' <- ' =@ 1 BD<- @ D<' D1-' D1' 0<'A' ?0 &>1 @ &@ 1^& @ & ' &- &@@1 ' 0&' A?@ ' < <'- 1A' & ' B&-+'<' # ' D1' <K@ 0D<@@ @&01' <-A' =& =1' ' &' D1' , '- .' D1' 1#@1' <@?1' &=' D1' 1 BD<-A'010' 0&' A?@ 'B?0 & >1A@ <-A' ><a1' ! '-1' <-A' <-0& >;' -A' D1' D<' K'@@ 0?1@ 0D<@@ D<+1' D1' D' A' < ' =& ' #'0' <#&?

@ F D1 1<0' ' <' < ? 1' ><A1' '-' D1' - -1' &=' D1' &#@1' , '- .' AK< A' D1' D' A@ 0)' ' ' K<0' & A<'-1A ' D<' D1' <C@1@ '<-A' D1' 1 BD<-A'010' & =@ D1' <C@1' 0D&?@A' #1' B< '1A' &' <@<'0@ <> &- .0 ' KD'BD' 1 BD<-A'010' ' ' K<0' & A<'-1A' # ' D1' 0<>1' < ? 1@ D<' ? 1 ' <-A' D1101' 0D&?@A' #1' 1 BD<-A'010' &=' D1' <C@1' # ' KD'BD' A' -<-B10 P' A'+1 0' 1 0&-0' &=' D1' 1<@>' &=' -.@<-A' D<+1' D<A' . 1< ' ℕ)' "<><.1@ #1B<?01' D<' D1' 0<'A' ? 1 ' <-A' D1101' #1' 0&' 1-A1 ' 1 BD<-A'010' D<' D1 ' B<--&' `@ <- ' D1' ' 1 BD<- 0@/P ' <0' &? ' & A' D1' , '- .' D< D' C1 B1'+1A' # ' D1' . '1+&?0' &>C@<'- ' &=' D'0' 0<'A' & > >&-0@ D1' 0<>1' &? ' & A' D1' , '- .@ K'@@'-.' & C &+'A1' 1>1A ' '-' D'0' 1D<@=@ # ' D1' A+'B1' <-A' 001- ' <=& 10<'A@ D< D' & A<'-1A' <-A' 10 <#@'0D1A ' D<' D1' D<' K'@@ B< ' ? 1 ' <-A' D1101' &' <-' & D1 ' < 0' D<-' =L2 D1' 0<'A' <C@1@ 0D<@@ 0?1' &' D1' D<-B1@@& ' &=' -.@<-A' =& ' D1' ' >1' #1' -.' &' D<+1' 'B1-B1' '-' D'0' 1D<@=@ <-A' D<' D1' 0<>1' D<-B1@@& ' D<+1' &K1 ' &' ><a1' &' D'>' 0?BD' 'B1-B10' ?-A1 ' D1' , '- ./0' E 1<' 1<@@' '=' ' '@'a1' D' >' 0@' &' A&' # ' D'0' " '0B 1 '&-

@ F D1 1<0' '-' D1' @<0' < @'<>1- ' ' ' K<0' . <- 1A@ D< ' <' &> >'0 '&-' =& ' D1' F < 1 ' B<@@1A' D1' 1 @ &-1' &=' D1' . 1< ' '+1 0' KD'BD' 1L 1-A1 D' = &>' D1' &K -' &=' &=' F <+1' '@@ D1' F < 1 ' &=' D< > 10@ '-' D1' &?- '10' &=' 1 =& A@ 001L@ <-A' 'AA@101L@ &' 0? +1 @ 1A 100@ <-A' <>1-A' <@@ D1' " 1=<?@ 0' '-' D1' 0<'A' F < 1 @ =& ' D1' <0j 0<.1' &=' D'C0' <-A' &< 0@ <0' '-' DR' A'-<-B10' <-A' <j ? 10' 0)' &=' D1' , '- ./0' &#@1' &.1-' & 0' '0' B&- <'-1A@ -A' ! & <0 > ?BD' <0' D1' 0<>1' &> >'00'&-' K<0' A' 1= 1A' &' '+1 0' . 1< ' 1-@ & A0' <-A' & D1 ' 1 0&-0@ KD'BD' D1 1 &' >'. D ' -& ' < 1-A' G ' '0' & A<'-1A' <-A' 0 <#@'0D1A ' D<' @'1' D<-B1@@& ' &=' -.@<-A' +)' 0D<@@ D<+1' &K1 ' &' . <- '0?BD' &> >'00'&-0' < ' <@@ ' >10' -11A=?@ &' 0?BD' '-A'==1 1-' 1 0&-0' AK1@@'-.' D1 1<#&? @ KD'BD' D1 1 &' #10 '&<-'<-A' >< ' < 1-A@ &' '-H?' 1G 1A 100@ <- d <>1-A' <@@ D1' " 1=<?@ 0' #1'-.' -' D1' 0<'A' F < 1 @ <0' K1@@ # ' A'+1 0' 1-BD10' ><A1' &? ' &=' D1' 0<'A' F < 1 @ <0' &=' <@@ & D1 ' ><--1 ' <-a0@ W)' , 'A1@0@ F 1< 0' & ' '@@0@ #1'-.' & ' ><A1' &' D1' --& <-B1' &=' D1' <00<.1' &=' &< 0' '-' D1' 0<'A' F < 1 @ <BB& A'-.' &' D1' ? C& ' <-A' 1-& ' &=' D1' < ? 10' '-' D'0' <01' C &+'A1A' <-A' & A<'-1A

' $ ' % ' $' ' M - %' $ -/' + 7 ! 0++@' N$ L' " ' J ' $ ' ' ' " ' $ ' ' $ ' $ ' ' E 1i ' %2 1 + ' ! '" ! . -S0!2 ' ' G ' U A -<?-B1' ' G ' 06 ! ' % I 0 ' $ ' " ' 0 '-' >1' +' G ' < H $ ' ! ' M 1'

B&-A'B'&-' H'@ 0&@ ' A1' 1 ' 1-<+ - ' 0&=' 0?=' 1\' A10a=CC1 ' &?' = ''=1' B&CC1 ' A K \' @1' &'<@>1' <01 '-10 ' #1 #110' @<-? \' &?' &-A?\' 1-' @<' ABe1' C< '0' A1' !@<?-A 10' &?' <?,0' C< '10' A1C' A1@<' @1' >11 @ 0'@ -1' 0&'@ C ' @1' +' <'@@1 ' A1' @<' '@=1' A1' <@1 0' I ' @10' < =@ 10' A'B1 10G 1 ' H' 1#?-' D(>1' H' C&1 ' 10 1' 10C'1\' H' 0&-#\' B&@&? ' A1' +' <'@@1 ' A?' A11' '@@1' &?' < BD10' A1' <@1 0' H'@ C<001' <' .0B?-' 9 <? 1 1?' H <' >10>10' @10' '@@1' I ' < BD10' &+10 <0B<-0' ' #1 #110' @<-?L' &?' &-A?\@ 0'@ -1' <' ' @'B1-B1' &'<@@1@ H'@ =& =1B1' <?' &" >10>10' @10' #1 #/110' &?' @1' +<@?1' A' 1@@10' ℕ 0" 0&+1-' A ' \' B&>1' '@ 0&=' &+1

1>' & A'-1\' 1=' I ' 10 <#@'\' H' 0" <0B?-1' ?0 ?>1 ' &@@1A &?' &?' &?- &@@&?' A10' B?0 ?>10' A?' &'@ A1' &a1 10' A1' " <C0' A1@ 0?#0'A'10' A1@ &-<.1' &?' C&= A<.1' 1-' <0B?-' C& ' &?' @'1?' " 1-.@1R 1' 0&=' A?1>1-' I ' @&'<@@ >1-' < 1'- 1' &?' B&-+'<\' <@ ? 1' A?' &'@ &?' <@ 0? 1' A<0B?-1' <? 1' C0&-1' C0 @<+<- <.1' A?' &'@ A1' =1?L' B&-8' B1@1>1-' A1' B?0 ?>1' &?' 0?#0'A'1' A?' &" A?1>1-' 1- 1' I ' C<@1' C' <0B?-1' '^BD<- @ H<A&-H10' @1' A' ' ?0C' >1 ' & 1=@&? ' H &?- &@@&? ' 1-0" A?1>1-' < ' I ' B&-8' +'<' C' @<' 1 ' CA1' I ' =& =<B1' < ' &" @1' 1#@1' +<@?1' A10' BD<-A'010' 1-0" A?1>1-' B?0 ?>1\' I ' =<B1' = -' I ' <?-8' B1&-G 1 ' 0" <0B?-' D&>1' @1' +&1 ' 0?1 ' <' ' @1' '1 B1' C< '1' 'C? ' 0&-' @<#&?

1>' `C ' C ℕP' ?-' 10 < ?' =<' ' 1-' 1>C0' A1' @1' R0-&#e1' C" ' '1 B1' C?'0' @1' &-H?10 @ & A'-1\' 10 &' ' H' @10 <C@1' I ' @10' ='BD<-A'010' A1' @10 <C@1' , &'1-' >10-1\' <' <@1 0@ 1- 1' H?1?L' I D<-A'010' & A'-1\' @''0 ' C' >10>1' @10 < ?' H' #? 1' I ' =& ><.1' M &'1-' ', HD<-A'010' A1' @10 <C@1G C' H?1@@1' & A'-<-B1' C@?0& 0' C0&-10' A?' &'<@>1' " 1-.@1 1' &-' 1?\' . -A1' CA1' I ' A<><.1@ C ' B1&0' '@10' A' \' #? 1' I ' =& ><.1' 0&-' 0" 1-A 1' BD<-A'010' H'@0' -1' C? &-' < 1'A 1' @&? ' ='BD<- \@ 0'B&>1' - 1' K ' @1' &" <A' B&?B1?' <' @<' . 1+ ?0' B&>C@<'- ' A1' 010' &10' A10 A' \' ;' 10>1' -=1' = ' @1' &" +&'@@<- ' C? +&' ' A1' 1>1A'1' B1@@1' C< '1' C' <A+'0' I ' <001- ' 0?'0A' \' <A' & A'-1' I ' 10 <#@'1@ H' B1@? ' H' +&1 ' <>10-1 ' #? 1' I ' =& ><.1' <0' <0B?-10' <? 0' C@'10' H' <' @1' A' ' 10 <C@1@ 0?<' <?' D<?-B1@@1 ' " 1-.@1R 1' C? ' @1' 1>C0' 10 1<-' C ' @'B1-B1' <+&' ' B1@@1' C< '1G 1 ' H' >10>1' @1' D<?-B1@@1 ' <' ' C&'<' A1' @? ' =<' 1' <? '1@@10' @'B1-B10' A10&?#\' @1' .D'-A1' 01<@ A?' &" 0" @?" 01>#@1 <' <==<' 1' 0&@&-B' 0<' A'0B 1BB'&-

1>' B&>1' 1-' @1' A< 1'-' C@1 <1-' =?'0' .W?- 1' H' <-' &>'00'#-' C ' @<' 1<K1' <CC1@ 1\' @<' 1 @ ?-1' A10' .3?-A10' ',0' H' 01L 1-A1' A1' @<' '@@1' A1' F < 1' 10H@ <@ 1<K1' A1' D<>'01' 1-' @10' &?- 10' A1' 1 =' 001L' I ' 'AA' C ' 0? +1'1 ' 1A 1001 ' I ' <>1-A1 ' &? \' @10' A1=<? 0' 1-' @<' A11' 1<K1' C '@1' C<00<.1' A10' -'1=0' I ' #< 1@L@ 0" B&>1' 1-' @10' & A'-<-B10' I ' 10 < ? 0' 1-' 1>C0' A10' -&##@10' C.1-' &? 0' - 1' A' ' ' @1' &" 10 ' B&- 1-?\' /)' G 1' C? ' B1&' H' @<' A11' B&>'00'&-' =?'0 ' A' 1= 1' <0' A'C010' ./?-A10' = /0' <?R0' C0&-10' H' <' B1&' -1' C&'1-' 1- 1-A 1G & A'-1\' 10 ' /)' 10 <j #@'\' H' @1' D<?-B1@@1 ' " 1-.@1R 1' C ' @1' 1>C0' 10 1<-' <' ' C&'<' A1' .W?- 1 ' '1@L' B&>'00'&-0' <' &?' 1>C0' H' #&0&' .-1' M <@' <0' '1@L' C0&-10' '-A'==1 1- \' A1> <- \' @<' 1-+' &-' H" <' B1&' >1@L' 0<+1-' I ' C&1-' 1- 1-A 1@ A1' 1-8' H?1 1 ' 1A 1001 ' I ' <>1-A1 ' &? \' @10' A1=1? \' 1-' @<' A11' 1<K1' 10 1<- \@ 0'#'1-' C' A'+010' 1-BD10' D& 0' A?' A11' 1<K1'$=<' \' B&>1' A1' &? \' <?R0' >< 0' 10 <-a10' 10 <a10' a'A1@L' .&& 0' &?' >&@1 -0' <-?0<- \' A1' C<00<.1' A10' #< 1@L' 1-' @<' A11' 1<K1' 10 1<- \' &-' =<' \@ 0&@&-B' @1' C C& ' I ' 1-? 1' A10' 10 < ? 0' 1-' B1&' B<0' C +1?L' I ' & A'-1\

(#. 1 !' ! ' %' .$- ' !!' N$ +' '5' ; '4C ' 'JI (! ' %' .$-

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] 0&- ' @10 10 < ? \ I ' & A'-<-B10 =1' \ C - 1 ,00&, -' _ ' @1 &" C<A+'0 I ' <001- ' A10 ?!' 10C?1L I 1>C& 1@L I ' <' @1' 10C<@1' 1H?10 ' A10 &10 A1' 0&-' &'<@>19 1-' 0&-' C@1>1-' <'?I'<' 1 B10 =' @1'L '' &? ' A1' ! 1 ' <-' A1' 0&-' 1. -1'H?< ' 10 1<- \' <' @&-&? ' A1' " '1?' I ' C ' @1' #'1-'1<01' I ' C=' ' A1' 0&-' &'<@>1

'C '>10 C? ' B1&' H' . 1+&?01' B&>C@1'- 1 <A' 10 1 =1' '<' - 1 ' @1' &" C' @10 J10 A1'0&-' &'<@>1'1-'B10 1 C 1>1- 9 H' @<' &?' A'1010'# '1 I ' <@ 01 - 1' A1' C< '1' 0&- ' 01A'>1- ' Aa1A\' <0 '0B&?- 0 A?' &'<@>1' C ' C 1-A 1 A ' =1 0 ' C01-10 C' @&? ' 1&H20 >10>10 @10 '0B&?>0'< ' @10'# '1=0<' 1?L' U'0" A' 1 I \' . - ' A 1 0 ' 0&'-10 A1' -<&-1 1' A10 C< '10 H' 0&- ' 1< " C 0?1\' C/' &? ' ><'-j C '01 G 1 ' 1-&? L1' 10 8 =' \' '0B <'- 0 . -1- ' . 1 0 ' 0>-10A1' >&-1 1' C ' 1>#1 '@<;')' 1-' =' 010 B<010 <' . <-A1' >C1A'-'<' I ' <- 1 '001>1- ' A10 C< '10 C 0?<- \' I ' . A1&C=F &-' I ' <-C& 001>1< ' A1' @<' B&1' C&1C@1' A?' &'<@>1' ;' ' @<' &?' # ' ' 0&- ' A' 1 \' <0 $ \' '0B&?- 0 C ' 1>C<-A@1 ' A'1010 C0&-10 C ' C<001 ' 1-' 1-H?10 10 C1 - 1'C< '10 I '=&? '-&?-0 1 &? -1 '5 'RA='1 ' ' @10 &? 10 A?' &'9 >10>10 @10 '0B&?- 0 1 &? 8 -1- ' I ' '='&?- ' C ' ?1' A10 A' \' # '1=1' =10 -&?-0 A10 $ 0B0 D&>10 1>C<-1 =1 0<-\'<0B?-' .< -'01&'1- ' <' 1?L' 1- ' ='1' ' <' =&? ' . A1' CA1' I ' A<>< .1;' 'A' -1\' 10 I ' <001- ?\' H' 1#10B?-' '0B&?- ' ?' @1' 1>C0 10 1<- ' 18 &? -1' @10 # '1=0<' D'" A' 1 \' 1-' @10 &? 10 A?' &" <0 '1@L' &? 0 B&>1' '=1' 0&?- ' 1 &? -<#@1\' G' 1 ' H' >10>10 @10 aB&?->' I 11- ' .< '? ' 1 -' 1>C0 10 >AA1' &'' \' E' C0&-11' 1>C<-1@@1\' C/ C<001 ' 1D' >'H?10 10 1 -' @10 &? 10 A ' >9 H'@0 C?'00> ' < C< 1 '<' '1@L' &? 0 B&>1' 'D' &-' C ' @10 # '1 I ' AU' &' G k' 0 ' <0B?-' '0B&>' ' =<B1' @1' B&- '1' A<0B?-1' A10 A' \' < 'B@10 <A&-H10 @<' C< '1' H' 01' 01- 1' . 1+1' C?'001' 0?1 ' C' D'@@1' &?' # '1=' 0? 9 0&-' !' <=@<' 1' 0 @1' '0B&?- 0 #' >" 1-' @10BD1H1 'B&>1' 1 -' <0B?<' <? 1' B&? ' A?' &' ' 1-' H?1?L' 01? 10 0" @1' A' ' '01&?- ' 0&=' B&-+'= 1' H' @<9 C< '1' H' 0?1' 1B&A1' 1-' >10 -1' a ' 01- 1' A&?#@1' A<>< .1;' ' H' @10 ?0 'B10 A1' 110 9 <'10BD<@L' A10 1 110 I ' ?-A 1A10 A1- ' C&@< ' A1&H-1 '1 ' A1' '1@L' >10C '0&-0 I ' A1a? 0 A10 A' \' '0B&?- 0 I ' A1' R '='1 ' @&? ' L , \' 1-H?1 1\' A1+ ' =B0 '> 'B10 A1' A <-B1 9 '00>' H'@0 C? 1- ' >1 1' @10 C< '10 < 10C&?-11 ' 0? ' H?1@1' 10C&?-B1' <A0 0&'1- ' &+1' B&?C<#@1\' ' 0 aB1>' = -' I ' <?-B1&-' <' - 1' B' @1' & 'G Q ' 1-A? 1 <' B10 ' & A'-<-B1' <-H' <9 C0BDA-' Ca8 >1- ;' ' H?<-' <' @10 =10 '\' <-' ><'-C '\' 0&'1- ' @10 10 < ? 0 =<' \' C' A1+ ' I ' -'1- ' BC1@@1\' 10 1<- \' 1-' @&? ' =& B1' I ' 1-?\' ' I ' 1-' &? \' C&> 0

\' 00 # '1=1' # :#

' #1' D1' & A'-<-B10 <-A' <?10 ><A1' # ' &? ' &+1 1'.-' & A' D1' , '-.9 # ' D1' A+'B1'<-A' 001-' &=' D1' & A0' C' ' ?<=' <-A' 1>C& <@9 <-A' <' D1' 0C1B'<@ 1H?10 ' &=' D1' &>>&-0 &=' D'0 1<@>9 '-' '-0 <@'<>1- 9 D&@A1-' <' 1'B10 1 9 D1' '.D 11- D' " <' &=' !1# ?< 9 D1' !&? D' 1< ' &='D'0 1'.-9 # '-.9 &' D1' &-&? ' &='E&A9 <-A' =& ' D1' F 1<@9 &=' 9 <-A' <01' &='D'0 1<@>

! 9 F D1 1<0 . '1+&?0 &>=A<'-' D< D' #11-' ><A1' &' D1' , '-.' # ' `D'0 &>>&-0 X' '-' D'0 <@'<j >1- 9 D<' KD1 1' A'+1 0' F ' 0' <' D1' ?' ' `&=' D1' <j '10) ' #1' 01+1 <@ ' A' 1B 1A' &' D1 '==0 &=' D1' 1<@>9 &' ' 1' ='+1 0 1 0&-0 # ' D1' ' #1='10 D1' 0<>1' D1 '==0 <= 1 ' D1' F ' 0' &' '>>' 0&' A' 1 1A9 <a1' . 1<' ?>0 &=' &-1 ' &=' D1' < '10 KD'BD' #1' 0&' C? 0?1A9 =& ' D ' ' -C '01G <-A' >& 1&+1 ' D1' < 'A' #1 'Q' A&' <a1' . 1<' ?>0 &=' &-1 9 &' 1>#1\\@1' D1' , '-./0' F ' 0' @<' A'+1 0 <010 9 &' D1' . 1<' >C1A'>1- ' <-A' '-A1 <-B1' &=' ='@1' < '10 C? 0?'-.9)' &' D1' . 1<' CC 100'&-' <-A' >C&8 +1 '0 ' 9 &=' D1' B&>>&-' 1 H =1' &=' D1' 1<@>G -A' `KD1 1<00X' F ' 0' #1' A' 1<1A' &' A'1' 0<'A' D1 ' I ' &' '>C<-1@ A'+1 0 1 0&-0 &' C<00' '-' -H?10 0 #1 K' L ' < j '10 9 <-A' (' 1 ? -' <-A' #1 f ' D1' ' <>10 '-' D1' , '-./0 &? 0 9 D1' 0<>1' D1 '==0 A &' 1 ? -' <-A' B1 '= ' # ' +' '?1' &=' D1' 0<'A' F ' 0 9 D1' <>10 &=' A'+1 0 1-' '>j C<-1@1A9 K' D&?' <D ' F < -'-.' D1 1&=' ><A1' &' D1>9 &' D1' ' . 1<' &00 <-A' " <>< .1;' ' '0' & A '-1A' <-A' 0 <#@'0D1AZX' D<' 1+1 ' D1 '==' =& ' D1' '>1' #1'-.9 0D<@@ 1 ? -' D1' F ' 0' &' D' >' A@ 1= 1A' `'- /X' D1' , '-./0 &> 09 <' 0?BD' " < 0' <0' 1 ' #1' 1 ? -<#@1' ' <-A' D< ' D1' 0<>1' D1 '==0 '-' 1<0&-<#@1' '>1' K< -' <'@ D1' 1 8 ! !' '>C<-1@@1A' &' C<00 '-' '-H?10 0' '-' D1' , '-./0' &? >9 D< ' =B ' >< ' <CC1< ' < '0?BD' < 0' <0 D= ' D<+1' # ' D1' , '@@/0' F ' 1;' -A' '=' <-' D1 ' A&' D1' B&- < ' &=' <-' &=' D1' 0<'A' 'B@10 @ 1-' A'1' < ' D<' =11@1 D' D''-5d@=' . '1+1A9 >< '0?1' # ' '@@ & ' F a' K /' ?C&-' D'0 <01' <.<'-0 ' D1' D1 '==9 <0 K1@@ '-' D1' LBD1H?1 ' <0 D ' <-' 1 D1 ' &=' D1' , '-.0' &? 0G '-' KD'BD' ?' 1' '=' D1' 0)' D1 ==#1' B&-+'=@9 D1' ? ' D< '0?1 D'0D<@@ 1B&+1 ' '-' D1' 0<>1' ?' 'D'0' " &?#@1' " <> 10;' -A' D< ' D1' ?0 'B10 &=' 1<B1 9 1K< 1' &=' 11 1' <-A3 ?-A 1A0 9 D<+1' &K1 ' &' 1-H?' 1' &='0?BD' =1C '0'&- ' <-A' " 1=<?@ 0' &=' D1' 0 'A' #1 ' I 9 <-A' &' B1 '= ' D1' ' 0<'A' -H?D'10 #1=& 1' D1' ?0 'B10 &=' " 1='+1 <-B1' 0& D< ' D1 ' >< ' C? ' D1' 0 'A' ? '10 &' <-0K1 'G' ?C&-' KD'BD' -0K1 ' '=' D1 ' #1' =&?-A' .?'@ 9 D1 ' 0D<@@ ><a1' ! '1' <-A' <-0&>' &' D1' , '-.;' -A' D'0' A' >@-B1' 0D<@@ 1-A? 1' '@@ D1' -1L ' < @'<>1- ;' -A' <0' &' D1' @1 '-.' &' <'-C '01 9 D1' <8 >10 ><A1> '>10 C<0 ' <-A'-& ' 1C1 '1A9 #1' -.' '-' D1' ' =& K - X' = <8B1' ''<@@ #1' D&@A1-'<-A' a1C ' '-'< ' &'- 0

}+@!'. "' 'Q ' $* '
}. ' 2 &!' N$ ' L ; ' C ' " ' 5
* % \' KD1 1' N$ ' * ' ! <001- 1A' '! '6
' '- &' N$ ' ' ;' .' % 0<'A' N$ + *+

'0B&^'D' ' . ' !'&C ' - ' E1 *' 4 &+=' - . ' "! 0"-&-*' F ' 0 BB+

!'% Z' 2 +' /0!+#'" '! 0"-' V "& 2 ' -/' 7 "-' H0 ."2' 1 -! !/

@#'&-' * &-2 ' !' <!"& +B' ; @' !' 3 " @' *"&! ' ! / =' Ka,' &?#@1' 1 *!Z_

-/' 3!& <@ B&-!' -/' 1 "i2. -< 1!-

¶ % 6!#& ⁄ . ' !' 0 !' ' ' ! - "!#& -* ' '^/ 7 ' ' 2 & ' ' 1!-/1!-' . ' ''' . "2' &-' 3".#!2 ' ;@' &2 "%2&. -' ' +!" ' 7!+⁄ !" 0/*1!-' 2 ;! ."!=

' F D1 1<0' < ' D1' < @'<>1- ' D&@A1-' < ' F 10 ' >'-0 1 ' D1' 1B&-A' " < ' &=' < ' D1' '- D ' 1< ' &=' D1' 1' .-' &=' , '- .' 1- ' !< D1 ' &=' &? ' & A' D1' , '- .' D<' -&K' '0' ' K<0' 1D1< 01A' D&K' D< ' < ' D1' < @'<>1- ' D&@A1-' < ' F 10 >'-0 1 ' D1' L'+ ' 1< ' &=' , '- .' AK< A' D1' D' A' ' ' K<0'& A 1A' # ' D1' ? D& ' 'BQ' D1'0<'A' < @'<>1- ' D< ' =& ' '0C '0'&-' &=' <' @1 a' '-' KD< 0&j 1+1 ' @<B1' ' ' #1' -& ' &B100' & ' @1<' 0D&?@A' #1' ?-A&-1' -& ' A'0B&- '-?1A' # ' +1 0' .D ' '-' F ' '-.' <' 1 1 ' & ' @@<#@1' &&' >?BD' & ' &&' @' @1'#?' .' 0&&-' <0' D1' D'-.' K1 1' C1 B1'+1A' # ' D<@@1-.1' &=' D1' < '10' & ' '-' & D1 ' <--1 ' '0D&?@A' #1' D<0A@ ' <>><-A1A' '-' A?1' ! & >' K' D&? ' .'+'-.' A+<- <.1' &' D1' < ' D<' BD<@@1-.1 #' D1' 0< '1' #1B<?01' =' 0?BD' '0C '0'&-G' D1' 0<'A' @< 1' , '-.' 1- ' B&-0'A1 '-.' D1' "'+1 0' '10' &=' C'-'&-0' KD'BD' 1-' #<A' ?C&-' D1' 0e?A' < ? 1' <-A' &' C?' D1' D'-.' '-' >#' 1' &C1-' , -&K@1A.1' A'A' A1B@< 1' <-A' & A<'-' # ' ? D& ' ' &=' D1'0<'A' K <>1-' D&@A1-' D1' 0<'A' '- D' 1< ' D<' D1' ?0 'B10' #1=& 1' KD&>' 0?BD' @1<' & ' 1B& A' '0 `> <A1'/P' & ' 0D< ' #1' A1C1-A'-.' <0' K1@@' # ' A &? ->1-' <0' # ' F < ' &=' & ' & ' & D1 K'01' 0D<@@' D<+1' &K1 ' <-A' ? D& ' ' &' <>1-A' 0?BD' 1B& A' <-A' &B100' `<0' K1@@' <= 1 ' ?A.1>1-' .'+1-' <0' #1=& 1' P' # ' ! & B1' &=' D1'0<'A' < ? 1' ><A1'-' D1' '>1' &=' D1' 0<'A' , '-.' AK< A' /)' G KD'BD' A'-<-B1' 0D&?@A' 1-A? 1' '@@ D1' -1L ' < @'<>1- ' +D'BD' 0D&?@A' #1' =' 0 ' D&@A1-' <= 1 ' D1' 1 ? -' &=' D1' 0<'A' , '-.' 1- ' D1' !< D1 ' '- &' -= <-A' = &>' #1 &-A' D1' 1<' <-A' KD'BD' -&K' '0' A1 1 j >'-1A' # ' D1' "1< D' &=' D1' 0<'A' @< 1' , '-.' 1- ' D1' !< D1 G ? ' &+1 1'.-' & A' # ' D1' A+'B1' <-A' 001-' <=& 10<'A' D< D' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' D1' 0<'A' < ? 1' <-A' D1' ==1=' &=' D1' 0<>1' ><A1' D1' 0<'A' '- D' 1< ' 0D<@@' D&@A' 1-. D' ! & B1' <-A' ==1 ' '-' 1+1 ' 1B& A' <-A' &B100' `&=' D1' 0<>1' <0' K1@@ <= 1 ' ?A.1>1-' .'+1-' ?C&-' <' 1 A'<' C<001A' <0' ?C&-' `<' < 1 / P' '-' <K' C@1<A1A' <0' <' < ? 1' <+<'@<#@1' <-A' 1==1A@?<' '-' <K' &' 1-A? 1' =& ' 1+1 ' &+'A1A' <@K< 0' D< ' D'0' < ? 1' A&' -& ' 1L 1-A' &' 1B& A0' <-A' &j B10010' '-' D1' < 0' &=' F <@10' -& ' &' 1B& A0' <-A' &j B10010' KD1 1# ' <- ' 1 0&-' '0' & ' 0D<@@ #1' &? @<K1A' <' <- ' <-/0' ?'

' ? ' 0<'A' &+1 1'.-' & A' D1' , '-.' # ' D1' A+'B1'<-A' 001-' <=& 10<'A' D< D' & A<'-1A' <-A' 10 <#@'0D1A2' D< ' <@@' D1' F ' 1' ?' 0' <-A' &B10010' KD'BD' <@@' D1' , -'.D 0' D< ' K1 1' ><A1' , -'.D 0' # ' D1' , '-.' '-' D1' '>1' &=' D'0' < @'<>1-' D&@A1-' ' D<+1' A1C1-A'-.' <-A' KD'BD' 1+1 ' &=' D1>' D< D' A1C1-A'-.' -& ' A1 1 >'-1A' #1' .&&A' <-A' 1=@=1= ?<@' % ' <#< 1<#@1' # ' D1' <K' #1B<?01' D<' D1 ' #1' ><A1' , -'.D 0' & ' #1B<?01' D<' <- ' &=' D1>' '0' ><A1' , -'.D

' F D1 1<0' D1' -&#@1' , '-.' 'BD< A' D1' 1B&-A' <= 1 ' D1' &-H?10 ' <' D'0' < @'<>1-' D&@A1-' <' F 10 j >'-0 1 ' D1' !'= 11- D' " < ' &=' <'-' '@< ' D1' 1+1-j 11- D' 1< ' &='D'0' 1' .-' <' = 1' 0C1B'<' 1H?10 ' &=' D1' &>>&-0' &=' D1'0<>1' < @'<>1-' ' A'A' . <-' 'B1-B1' &' <@@ D'0' @'1.1' 1&C@1' &=' D'0' 1<@>' &=' -.@<-A' &' 0D'C' <-A' B< ' &>' &?' &=' D1' 0<'A' 1<@>' &' KD<' < 0' D1>' C@1<01A' 1LB1C ' &' -1>'10' C< '-.' D1' ?#0'A'10

(' 2' ."!'&2'2 &/' ##."/&-*' .' !B."1'. ' !'2 1!' 0 !' 2' 7!+⁄ !" 0/*1!-'&-' -H" 0# '3+! '6!#."/'."3".#!22' *&'!-' 2' ;! ."!' 0/*1!-' *&' !-'&-' -@ 0#;'3+! '6!#."/'."3".#!22' 2'+.-*' 2' !'2 1!'6!#."/' -/' 3".#!22' &2' ;! ."!' !1'J&-' !' 2 1!' --!" 2' !' 02 &#!2' /'3.7!" .' 1!-/'20# '6!#."/' -/'3".#!22' ;! ."!' 0/*1!-' *&' !-' ' ',' ; '4 ' ' ' " 2' 2' ;.'!' '! '5')'1 !" '! '5

1>' B&>1' <?' C@1>1C ' !- &j' <' F 10 '-' @1' ' ' &? ' A?' <' ' & ' A?' 1.-1' =1' &" 1- " C'1 ' ' =1' @1' &" H& 10 ' 'L f' 1D1 B1' =?'0 ' B&>1-' <'@' C@1- 1-' 1-?\' < F 10 >' <-' A?' 1.-1' @1' >' ' '1 B1' L"' ' f' & A1'.-1' =?' ' '<?= & ' 1' AC' A' ' C@1>1-' H' C? ' >10C '0&-' A1' B@1 B' 1-' HB&-H' C@<B1' B1&' 0&=' -1' &=' CB1001' A1' C@11' <-'1- 1' -1' A'0B&- '-?1' C' >1 1-A 1' 1-' 10B '+<-' ?-1' 1' & ' &?' &C' C& ' >10' 0' &0 ' B&>1' @1' BD&01' , <' <CB1'?1' C' BD<@<' 1' A1 I' C< '10' &?' 1-'<? 1><1' 0&=' '<0 '+1>1<' <>1-A1' 1-' A?1' =&? >1' 0<-\' A&-1' <+/- <.1' <' C< '1' H' B1&' B#<@<-.1' C' B<?01' A1' '1' >10C '0&-' G' @1' A' ' -<A.<'=0' &" 1- " B&-0'A1 <-' ' @<' A@,0' 1' A&CC'-'&-0' H' @1>' <+&=' 0 ' @1' A' ' 10 < ?=' ' I ' C ' -1 1' @1' BD&01' 1-' C@?'0' &, ' B&- 0<?-0' A1A< <' I ' & A'-<' C' <?= & ' 1' A?' A' ' C@1>1-' 1-?\' @1' A' ' <-' 'L f' H' @10' ?0 'B10' A1+ D' ' H?1?L' '1' C@11' &?' 1B& A1' 10 ' =?= ' UU' M'<' C1-A<- ' <#'1-' ?' < & -1>1-' B&>1' C' +&@1' A1 &? ' &?' <? 1>1- ' 1'1- ' C&'< I ' <?=@& ' 1' A<'<1' ^;' '1#' 1B& A1' I ' 001B & > 1' A1+3- ' 10 ' A' ' 0&@&-B' @<' =&? >1' %U' >10>1' @10 < ?' ' 0'#'1-' 3!' ?..1>1-' 1-' 'A' C@11' 1B& A1' &U' CB1001' 1-A?\' B&>1' A1' ' '@1' ?..1>1-' 1-A?\' 1-' '1@L' C@11' 1B& A1' &?' CB1001' <- B&>1' @1\' A= \' 1B& A1' I ' CB1001' 0&'1-' A1+0-' 1?L' 1-' >10>1' @1' ><51' B[>1' ?0 'B10' <+&'1-' C&'< ' A<>1-A1 ' '1@L' 1B& A1' I ' CB1001' A1+3-' ?..1>1-' 1-A?\' C' =& B1' A?' A' ' 10 < ?=' 1-' 1>C0' @1' A' ' &" ' =<' ' B&>1' A10?@G' @<' H?1@1' & A'-<-B1' 1-A? 18' &' ' <-H' <' C0BD1' -' C@1>1-' H' M &=' C '=' >1-' 1-?\' ?!' @1' 1+1-?1' A?' A' ' &" 1- " @1' C'1 ' 1-' -.@1R 1' A1C' A1@<' 1' @<' H?1@1' & 1' 10 ' A1R>' -1' C' @<' >& ' A?' A' ' -<A.<' 0' &" 1- " @1' C'1 ;' @1' &" - 1' 0&C1'-' ' C' <A+'0' I ' <001-' ='@' \' <A' & A'-1' I ' 10 <#@'1' H' @1' A' ' 10< ?' ' I ' 1==1=:=' A'B1@" =1@' @1' A' ' <-' 'L3' 1'.-1' =& B1' +'.& ' I ' 1==1B ' 1-' B='?-' 1B& A1' I ' CB1001' 0'#'1-' ?!' ?..1>1-' 1-A?\' 0 ' ,A' ' C<001' BC>1' 0?' ><' 1' 1-' @1'1' C@1A1' B& >1' 10 < ?' +<'@@<#@1' I ' 1==1(;?1@@ 1-' @1 ' <' &? \' &? 0' <A? 1 ' ? +1?' &? \' =&' \' H' B10' 10 < ?' -1' 01' 1L 1-A1' <0' 1B& A10' I ' CB10010' 10' C< '10' A 1' E<@10' -1' <0' 1B& A10' I ' CB10010' C' H?1?L' <0B?-1' C0&-1' 10' &?' M <' @<.1' <@ 0? ' A<0B?-

1>' -=1' A' ' = ' @1' &" A1' @<A+'0' I ' <001-' 0?'0A' \' <A' & A'-1' I ' 10 <#@'1' H' &? \' @10' # '1=' 0?' 10' I ' CB10010' H' &? \' `@10' P' D'+<@1 0' H" =? 1-' = A \' D'+<@1 0' C' @1' &" 1-' 1>C0' A1' B10 ' C@1>1-' 1-?\' &-' C1-A<- \' I ' H' BD10B?-' A1' 1?L' <A' C1-A<- \' -'1-' A1 >'-1\' 0&'1-' #&-10' I ' 1==1= ?1'L' -'1-' `<#< <@1 '/P' C' @<' @1 ' C' B<?01' H' 01-' =1' \' D'+<@1 0' &?' C' B<?01' H' <0B?-1' A1' 1?L' 10 ' =<' ' D'+<@1

1>' B&>1' @1' -&#@1' &" 'BD< A' 0 A1' C?'0' @1' B&-j H?10 ' H' " '1?' <00&' ' <' 0&-' C< @1>1-' 1-?\' <' F 10 >' <@ H?'-0\1'-1' A1' 1'-' '@@<' <-' A1' 0&-' 1'.-1' L+' ' <' @<' 10 1' 1H?10 ' A10' &10' A1' >10>1' @1' C@1>1-' . <?- <' @'B1-B1' <' &? \' 010' @'1.10' A1' 0&-' &'<@>1' "1-.@1 1' A10a'CC1' I ' <>10-1 ' #@110' D& 0' A?' A' ' &'<@>1' <0' H?1?L' C< '10' H' @&? ' C@1 <' D& 0C '0' <0' 1-1> 0' C< & \

0 - !"+&-!/' ;.' !' !' 7."/' 0 .0 '@!"".-!.02+@' 7"& !-' !" R .0 j') 5 ; ;+!j' N$ ' L' " '

@' V ' <;!!-' 020 +@L' #+ 221/' 2' !" ' .+.72' .-' !' 6.+' &1 1!/& !+@' !" !" ' !!' .2' ' 5

@10 0?#0'A110 I ' A1+&' 0 1- ' A?1\' -'1- ' B&- '0 1<- ' <0B?-' & A'-<-B1' CA<>< B'&-' &? A1=1-01' =1' ' A1+ - ' <' B&- < '1 '1- ><'-0 >10>1' @1' -<A.<' 0 &" +&?@&' ' H' 0&-' &?-01'@ C? &' ' 1< 1'-A 1' @1' A' ' C<00<.1' H<- ' @&? ' 01>#@1 &' ' #&0&'.-<#@1' C? ' C=' ' A? &'<@>1 =1' K?' @1' &" <' @<' 10C<@1' 1H?10 ' A10 &10 A1' B10 ' C01- ' C@1>1- 0 I ' A1' @<A+'0 I ' <001- ' 0?'0A' \0 +&1 ' I ' .W?- 1' H' @1' A' ' 10 < ?' ' 0&' ' 1-?\' I ' .< A10 1-' &? \' C&'- 0 00'- ' H' 0&=' &?-01'= ' C?'001' 10 1'-A 1' @1' A' ' C<00<.1' H<- ' @&? ' 01>#@1 <' C? ' C &?=' ' A? &'<@>1

1>' B&>1' <? C@1>1- ' 1-?\' <' F 10 >' @1' 0BA1' &? ' A1' <' ' <-' A1' 1.-1' @1' &" 1- " H?'- ' C?'0 @1' B&-j H?10 0 C'1 1' <' - 1' _' @1' &" H& 10 ' 'L0 C? ' B1&' H' @<' C '01' A10 <00'010 .15<@>1- ' =?' ' @&-.1>1- ' B1001\' C' &? ' @1' &'<@>1' <' B<?01' A?-1' & A'-<-B1' =<' ' C' @1' A' ' -<A.<' 0 ` &'9 P' O)' B&-0'A1 <- ' @10 A101<010 I ' A<><.10 H?1?L' C@?0&? 0 A1' 010 @'1.10 <+&'1- ' 1?\' I ' 0?0 1-?\' C> ' B1@@1' B1001 0 B&>< -A<' H' @10 ?0 'B10 A.-1 1- ' @10 <00'010>?' ' 0&-' &'<@>1' C' >< 1' <BB?0 ? -1';' ' C? ' 1+' 1 ' A10#' <?-B10 A10 C0&-10 ' @& 0 =1? 1- ' C<001\' I ' C<001 1- ' 1-' @1' +'<.1' A?' A' ' =<A. ? 0 &'9 I ' <?L" h) @10 C0&-10 H" =? 1- ' A1> <- \' 1-' @1' +'B1' >10>1' @1' &" 10 C< '10 A1' & ><-A'1' I ' A1' ! <?-B1 0 & A'-1 0 10 &' ' I ' C? +1?L' H1-' BD10B?-' C 1BB'&<' &+1' @<' B@<?01 0 &@?>?0 <==<' 1' C? ' HB&-H ' A1' >10 <10 @10 C0&-10 , &' ' 1-' @<' B@<?01' A1LB1CB'&-' B&- 1-?\' 1-' 'B1@@1' &>'00'&-' A1' B10 10 C&@10 <00'01'-&+1' A'00 1' ' 1 ' H8 &? \' B1?LC 1BB'&-0 0&'1- ' <@@&?<#@1\" I ' <@@&?1\' C? ' 1?L' I ' B=1?-' A1' 1]9 1-' &? \' @10 &? 10 A?' &" I ' <'@@&? 0 &?' A1@1' C 1BB'&=' 0&' ' >'0 <+&' C? ' <0B?-1' '@1' C0&-1' 1-' &? \' C@110 A<00'010 0'#'1-' A1' -&+1@" A'00 1' B&>1' A1' = 10 =&B1' 0<-\' <0B -' A'=='B?@ 1 C? +1?' &? \' =&' \' H' @10 ?..18 >< 0' < 1-A 1\' A1@& 0 1-<+/-' 1-' '1@L' <0<010 < <'-'1 &?' < <'-'1 \' -1' &'1= ' > 1' C HA'B'1@L' <0' <0B?-0 A10 A' \' C0&-10 '00'-' A1> <- 0 1-' @1' M+'B1' A?' &" CA1@<9 B&- 1' A1+=' ' 10 ' A' 9 H<+&'1- ' <0B?-' BD&01' 1-' 1-0'&-' &?' 1-' 1C'<'-A 1' 1-' R 10 &?' 1- 0 A&- ' '1?L' <00'010 =? 1- ' &?' M &'1- ' < <'-'1\9 0'@0 H<+&'1- ' 1-' 1-0'&-' &?' 1-' 1><'-A 1' 1-' '1@L' R 10 &?' 1- 0 -1' M &'1- ' -A>1\' 1-' >10>10 @<00'010 >1 ' H1@0 M &'1- ' 1- 0 1?L' &?' +&'A1\G 1' A? 1 &' ' B10 1' & A'-<-B1' <-H<@ C@1>1- ' H' &' ' C ' 1>1- ' 1= ?\' C?'0 @<' C0BD1'-' 1+1-?1' A?' A' ' -<A.<' 0 &" 1-' -.@1 1' G ' 0" >10>1' @& A'-<- 1' &?BD<-' @10 A'=\' C0&-10 O)' H' @& 0 =? 1- ' C<001\' &?' C<001 1-' 1-' @1' A' ' +'<.1' -1' =?' ' > ' 0?=='B'<-' C? ' @1<01' I ' 01? 1' A1' 1?L9 BB& A1\' ='' ' <?L" C' <001- ?\' H' `' ?!' A?' &?-01'@@ A?' &" C? ' @1' 1>C0 10 1<- \' <C&'1- ' C@1' -' C&@<' C' <?A@&- 1' A?' A' ' C@1>1- ' A1' >1 1' & A'5' I ' C? +&' '0?=='B'<- ' 1>1A'1 C? ' @1<01' I ' 01? 1' A1'=0 &? \' >10>10 @10 C0&-10 B&>1' C? ' 1?L' B' BD?-' A1' 1?]' 01>#@1 &' ' <0 A' \' = 0' @1' C@? 0 +<'@@<#@1' I ' 1LC1A'1- ' 1-' @<' B<0 0&@&-B' @&? ' #&-1' <A+'0 I ' A'0B 1B'&-0 9

) - !"+&-!/'.-' !' 6.++
2+! 6 .&' J / !' 0 ' B ' #' J
0 &22&-' / ! 1 0 "" - j' ! '+!'$' &#!' / 0' 6 .@' '-"" "%' 'N$ S' / !+ ' ' +%&' .0# -' +!2' / & j' 2.-!2' ' '& ' 4 ']] '

<-A' `" 1+& h P' D1 1&=' A?1 -& K' D0 <-A'-.' <-' A'-<-B1 &B@<>< '&-9 & ' " 1=1-B1' ><A1' #1=& 1' & D1' B&- < G 1+1 D1@100 D1' 0<>1' @< 1', '-.'`K '@@'-. P' D<' D'0 &?-B'@ >'.D ' 10 <'-' D1' 0<'A' <00<.1' KD1-' &' D1>' 011>1A' -11A=?@ =& ' D1' &=' ' &=' D1' 1<@>G ? ' &+1 1'.-' & A' D1' , '-.9 <' D1' 10C1B'<@ 1H?10 ' &=' D1' &>>&-0 &=' D'0 C 101-' < @'<>1-9 <-A'# ' D1' A+'B1' <-A' 001-' <=& 10<'A9 K'@@ <-A' . < ' 1 D9 D<' D1' 0<'A' < ? 1'#1' D&@A1-<-A' a1C ' '-' <@@ &'-0 G 0& D<' D'0 &?-B'@ >< ' 10 <'-' D1' 0<'A' <00<.1' KD1-' &' D1>' 0D<@@ 011>' -1B100< ' =& ' D1' &=' ' &=' D1' 1<@>

9 F D1 1<0 <' D1' < @'<>1-' D&@A1-' <' F 10 j >'-0 1' D1' 1B&-A' " < ' &=' < 9 D1' 'L' 1<' ' &=' D1' 1'.-' &=', '-.' 1- ' D1' ! '= D9 h) ! < D1 ' &'&?' &+1j 1'.-' & A' D1', '-.' D< ' -&K' '09#1B<?01' D<' D1' <a'-.' &=' 00'010 `K<0'.1-1 <@@ OP' B1<01A' D &?.D' D1' 1<@>9 # ' 1<0&-' &=' <-' A'-<-B1' ><A1' # ' D1' 0<A' @< 1', '-.G `'&?' &+1 1'.-' & A' D1', '-.'0P' B&-0'A1 '-.' D1' "'0j 1<010 <-A' "<><.19 KD'BD' ><-' &=' D'0 @'1.1' 1&C@1' `D<+1 0P' D<A' <-A' 0?0 <'-1A' # ' D1' 0<>1' B1<0'-.9 `B&>8' ><-A1=D9 f P' D< ' D1' ?0AB h' ``0D<@@ 0P' D&@A' D1' 00'010 D &?.D' ` D1/P' 1<@>' '-' D1' <--1 ' <BB?0 &>1A;' -A' =& ' &' 10BD1K' D1' "'0D1 '0&-' &=' 1 0&-0 KD'BD' D1-' F1 1' C<001A' <-A' 0D&?@A' C<00 '-' D1' & <.1' &=' D1' 0<'A' @< 1', '-.9 <-A' <@0&' &=' D1' 1 0&-0 KD'BD' K1 1' <#'A'-.' '-' D1' 1 +'B1' &=' D1' 0<'A', '-.' '-' D1' < 0' &=' & '<-A ' <-A' C <-B1' ' K<0 & A<'-1A' <-A' C &+'A1A ' D< ' '-' 1+1 '= & 1A@'&-' K' D' D1' @<?01' &@?>?0' & #1' ><A1' =& ' <- ' = D1' 0<>1' 1 0&-09 D1 1' 0D&?@A' #1' '-' D1' @<?01' &=' LB1C '&-' B&- ==' -1A' '-' D1' <>19 >'00'&-' &=' D h1' F & A09 00'01' -&+1' A'001'0'-1G -A' D< '<@@ D&01' 1=='&-0 0D&?@A' #1' <@@&K<#@1' <-A' <@@&K1A' =& ' D1>' <-A' 1+1 '&=' D1-e' '-' <@@ D1', '-./0 &? 0' <-A' & D1 ' @<B10 9 KD1 1' 0?BD' & 1=@'&-0 #1' 1' =& D' =& ' <-' 0?BD' 1 0&-09 '-' <@@ @1<0' &=' 00'0 h' <0' K1@@ &=' C A' " '00<0'-' <0' &=' = 10D' ! & B1 9 K' D&?' <-' ' " '==' B?@ X &+'A1A' <@K< 0' D< ' D1' @&A.1>1- 0' &' #1' .'+1-' = &>' `D1-B1=& D'3'P' '-' 0?BD' 00'0 h' < <'.-1A' & ' &' #1' < j <'.-1A9 `0D<@@eOP' -& ' #1' C 1 ?A'B'<@ &' <-' 1 0&-0 0&' <#'A'-.' '-' D1', '-./0 1 +'B1' #1 &-A' D1' 1<9 <0' <=& 1' '0' 0<'A9 KD'BD' `D<+1 OP' <-' D'-.' '-' 1+1 0'&-' & ' '-' 1><'-A1 ' '-' <-A0' & ' 1-1>1- 09 KD1 1&=' 0?BD' 0j 0'010 K1 1' & ' 0D&?@A' #1' < <'.-1A9 '=' D1 ' KD'BD' D<A' '-' 1+1 0'&-' & ' '-' 1><'-A1 ' '-' 0?BD' <-A0' & ' 1-1j >1-09 0D&?@A' -& ' #1' -<>1A' '-' D1' 0<>1' 00'0 h9 #?' D<' D1 ' 0D&?@A' #1' <.<'-0 ' D1>' F D&@@ ' +&'AG -A' ` D'0' A'-<-B1' 0D<@@J P' 1-A? 1' '@@ D1' < < -1-' KD'BD' `0D<@@ W'P' #1' =' 0 ' D&@A1-' <= 1 ' D1' -1L ' 1 ? -' &=' D1' <'A' @< 1', '-.' '- &' -.@<-A'G -A' '=' D1' 0<>1' A'-<-B1' &?BD'-.' D1' 00' ' 1 0&-0 0&' <#'A'-.' '-' D1', '-./0 1 +'B1' #1 &-A' D1' 1<9 <-A' <@0&' &?BD'-.' D1' 0<'A' 1 0&-0 F D'BD' D1-' K1 1' C<001A' &' 0D&?@A' C<00 '-' D1' 0<'A' & <.19 K1 1' -&' 0?=='B'1-' =& ' D1' <01' <-A' ? 1 ' &=' D1>' ' K<0 <@0&' <BB& A1A' <-A' <001-1A' D<' D1' & A0' &=' D1', '-./0 &?-B'@' =& ' D1' '>1' #1' -.9 0D&?@A' D<+1'=?@@ &K1' #' ? D& ' ' &=' D1' 0<'A' < @'<>1-9 & 01 9 & A<>9 <-A' C &+'A1' 0?=='B'1-' 1>1A' =& ' D1 <01' <-A' ? 1 ' &=' <@@ D1' 0<>1' 1 0&-09 <0' =& ' D1>' <-A' 1+1 '&=' D1>' 0D&?@A' 011>' &' D1' 0<'A' & A0 >&0' 1LC1A'1-' <-A' <+<'@<#@1' '-' D1' <01@ <= 1' D1' ' .&&A' A+'B1' <-A' "'0B 1 '&-0G

(C ') O % 5 # 5'!)F6 ' 7 0
' @1 ** '' %'$ 1' J 'E 1' 'M %
' B&>><-A1A' ! '6 ' $"*% ,
K' !-C 0B<' +' ! ' $"*%))' %
' % ' $"*%

!'2 &/ 0 ! ". - &"1!/

) !#& ' . ' !' 0 !' ! - ' 2 &' # ' ' 2 . ' 3". ! .-2 · ' 3!"2.-2&-' !' M&-*(2 !"'&#!'&-' V '"&-' 3 " ' ;". /

F D'BD' A'-<-B1' ' 'A1 1 >'-1A' # ' D1' " 1< D' &=' D1'0<'A' @< 1' , '- .;' ? ' &+K1' . -' & A' D1' , '- .'B&-0'A1 '- .' D1' .&&A' <-A' <. 1K#@1' 1 +'B1@ KD'BD' >< - ' &=' D'0' =1' #=?@ ?# 1=@ ' D<+1' A&-1' &' D'>@ <-A' `'A<'@ ' A & ' '-' D1' < 0' #1 &-A' D1' 1<@ '-' D1' & >C<- ' &=' D'0' A1< ' -B@1' D1' 1.1- '&=' ! <-B1' " ?a1'&=' 1A=& A@ <-A' &=' D'0' "1C? '10' `'-' D1' < 0' &=' ! <-B1@ ' <-A' =& ' 0&' >?BD' K'@@'-.'=& ' D1' ' <01' <-A' ? 1 '@'a1K'01' &' & A<'-' <-A' C &+'A1' '-' D'0' <01¢ &=' D1' 001- ' <-A' A+'B1' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@@ <-A' <@0&' &=' D1' & > >&-0' !' <?1' '-' D'0' < @'<>1- ' ? 01>#'1A@ D< D@ & A<'-1A ' D< ' D1' B& '-?1A' =& ' A'-<-B1' ><A1' D1'0<'A' 'L ' 1< ' 0D<@@ 0 <-A' <0' < "!!'A! "2' < ? 1' <-A' <K' 1==1= ?<@ <-A' <+<'@<#@1' '-' <@@ &'- 0' =& ' <@@ 1 0&-0' KD'BD' -&K' #1' <-A' D1 1<= 1 ' 0D<@@ #1' <#'A' -.' '-' D1' , '- ./0' 1 +'B1' '-' D1' &- <- ' &=' D1' 0<'A' 1j .1- @ & ' &=' D'0' "1C? '10' '-' D1' < 0' &=' !D?-B1' <-A' &=' & ><-A @ &' 1-A? 1' = &>' D1' !' 0 ' " < ' &=' ?-1@ D1' !&? D' 1< ' &=' D1' 1'. -' &=' &? ' 0<'A' &+1 1'. -' & A' D1' , '- .' /)' '@@ D1' -A' &=' D 11' 1< 0' D1-' -1L ' =&@j @&K'- .;' &+'A1A' <@K< 0 ' D< ' <@@ D1' - '10' &' #1' ><A1' <= 1 ' D1' 0<'A' ! ' 0 ' " < ' &=' ?-1' 0D<@@ -& ' #1' B& > j C '01A' '-' D'0' C 101- ' A'-<-B1¢ <-A' D< ' -&-1@ KD'BD' 0D<@@ ><a1'0?BD' - '10' <= 1 ' D1' 0<'A' ! ' 0 ' " < ' &=' ?-1@ 0D<@@ D<+1'<- ' 1-1=' ' &=' D1' 0< >1' A'-<-B1

' %'%$' %' ' ' T" / ' $'%$'% ' .' ' -. 7 'a2 ' ' 5

@<' H?1@1' & A'-<-B1' 10 ' A1R > '-1' C' @<' > & ' A?' A' ' -<A.<' 0' ';' =1' ' @1' &" B& '0'A1 <- ' @1' DD' 1' I ' . 1<#@1' , +'B1' H' C@?0&? 0' A1' 010' =&'<@L' @'1.10' @? ' &?- ' =''' \@ I ' =&?- ' I ' =<' 1' B&+'1-=' A1' &? ' 1-' <? 1@ 10' C< '10' A1C' 1'<' 1-' @1' B&>C<-'1' A1' 0&-' D1<@ ?-B@1' @1' 1.1- ' A1' ! <-B1' " ?1' A1' 1A=& A' I ' .10 ' " 110@ I ' +&' <- ' C? ' <- ' C? ' @&? ' 1<01' I ' 01? 1' 01>#@a#@1>1- ' & A'-1 ' I ' C? +&' ' 1-' B1&' B<0@ A1' @<A+'0' I ' <001- ' A1' 0' 10C?1@L' ' I ' 1>C& 1@0' I ' <?L" A1' &10' A1' B10 1' < @1>1- @ A' & A'-1\' H' @<' A f ' & A'-<-B1'@='''' ' @1' A 1' <-' 'L/' 10 & I 1' B&>1' 10 < ?' I ' @1 ' 1==1= ?1 ' I ' <+<'@@<#@1' 1-' &? \' C&'- \@ C? ' &? \' C0&-10' H" 0&- ' <?' C01- ' I ' M &- ' 1-<C0' A1>/ <- \' 1-' @1' ,+'B1' A<' &" < ' @1' B&>C<-'1' A?' A' ' 1.1- '&-' A1' 010' A1C- 110' 10' C< '10' A1' ! <-B1' ' I ' & ><-A'1@ <A? 1 ' A1@ C ' >1 ' &? ' A1' ? -' <-' A ' 1.-1' A?' -=1' A' ' @1' &" H?& 10 ' H?< ' <-H<@ = -' A1' &'0' <-0' @& 0' C0BD1'-' 1-0?<< \;' ? +1?' &? \' +& 10' H' &? \' @10' 1- 110' <=' ? \' < ' @1' A' ' C '>1 ' &? ' A1' ? -' -1' 0&'1-' B&>C '01\' 1-' B10 1' C01-' & A'-<-B1¢ I' H' -?@@ H' =1 <' <? '1@L' 1- 110' <C0' @1' A' ' C '' ' &? ' A1' ? ?' <' ' <0B?-' #1-1='B1' A1' >10>1' @& A'-<-B1

)) >W ! # 0 ' ' -/?:

+' +.+' ' 9 %%' / +/ -'A'+' AA+' A+ N

' D ' (

* ' ' ? ' E ' ' ' ' ' ' E'

BE' = ' ' ' G '6 #' H%' '$ =1' ' @1' & ' <' 0&-' C@1>1- ' 1-?\' <' @ 10 >' <' @<' H?'-0\'0>1' A1' 1'- ' 'BD1@@ <-' A1' 0&-' 1.-1' 3J@ C' <A+ 0' I ' <001- ' A1' 0' 10C?1@L' I ' 1>C1@L' I ' <@ 10C<@1' 1H?10 ' A10' &10' A1' 0&-' &'<@>1' 1-' @1' A' ' C< @1>1- ' <00<-#@1\@ <A' =<' ' =1' 1' R 1'-0' 10=< ? \' I ' & A'-<-B10' <' @&-? ' A1' " '1?' I ' C? ' @1' # 1-' I ' 1<01' A1' 0&-' C&1C@1' 1-' @<' =& >1' H1-0? ;

-' C '>10' C? ' B1&' H' A' ! 0' A10' @&'<@L' @'1.10' -=1' A' ' ' @1' & @ C' =<?L' ><.'-<B'&-' B&>1 1>1- ' I ' B&-0C'8' <B'1' A10' 1'-0' ><@1=10& 0@ 0&- ' 1-A' 1\' A1+ - ' @1' & ' 1-' 0&-' <-a' A1' A' 010' =1@&-'10' I ' 10&-0@ C' ? &/0' 0?0C1= \' I ' <' B1&' C' B&-=1A1 <B'1' I ' B&- 1= ? 1' A10' Aa \' B&-0 >< & 0' @&K1\' I ' C1? 1\@ C' =& B1' A10' H?1?L' 1-A' 1>1- \' <C'<0' 10 ' <.< A1' <@ '0B&?- ' A1@ &?- 11' &?' @1' A' ' <-a' 10 @ 1 & -<#@1' A1'-\' A1?L' &?' H?< 1' & 0@ <' H?1 ' & @ 0" @<' C< '1' 1-A' 1' -1' +1' . -1' L' . 1-A' 10 ' <.< A1@ C' H&" @10' #'1-0' I ' BD< 1?L' A10' A' \' 1-A' \' 0&- ' =# =<' \' <?' & @ <' =' -<@ A10 ?BB'&-' A1' A' 0' A10' @&'<@L' @'1.10' A1' -=1' A' ' ' @1' & @ #' B&>1' >10>1' -=1' ' <A' B&-B1?' <' @<' .'1+&?01' B&>8' C@1' - ' A10' A' \' &10' <' @? ' 8=1' 1' 1-' @1' A' ' C@1>1- G9

-/&/ 1 ! - 2' .0-/' &-' ;!' M&-*(Z 4 ! -# ' ;@ 0" .''2' 0?0C1A1A)' .'" 0-/ <+@' 2.#0"!/' _

' & A' D1' , '- .' < ' D'0' < @'<>1- ' D&@A1-' < ' F 10 >'-0 1 ' D1' !'= 11- D' &=' <'- ' 'BD<1@@ D1' 'L D' 1< ' &=' D'0' 1'. -@ # ' D1' A+'B1' <-A' 001- ' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@@ <-A' < ' D1' 0C1B'<@ ` -0 <-B1' <-A ' 1H?10 ' &=' D1' &> >&-0' &=' D'0' 1<@>' '-' D1' 0<'A' < @'<>1- ' <001>#@1A@ D< D' B<?01A' &' #1' ><A1' B1 <'-' < ? 10' <-A' A'-<-B10@ &' D1' &-&? ' &=' E&A@ <-A' =& ' D1' F1<@ <-A' <01' &=' D'0' 1&C@1' '-' D1' ` <- -1 ' <-A ' ! & >' =&@@&K'- .' ;

! @ ! & ' D< ' A'+1 0 ' &=' D1' , '- ./0' =1' D=?@ ?#@ 1=@0' # ' = '@01' <==' B1@ &+'-@ <-A' &-0C' <B ' &=' B1 <'-' 1+'@ 1 0&-0' #1' '-A'= 1A' #1=& 1' ?' & A' D1' , '- .' '-' D'0' 1-BD@ &=' A'+1 0' ! 1@&-'10' <-A' 1<0&-0@ # ' 0?0C1A@ ? & 0@ D' 1A' <-A' C &B? 1A' &' D1' 0<>1' # ' &-=1A1 <B ' <-A' &+>' &=' D1' 0<'A' >0C' < & 0@ # ' ! & B1' &=' KD'BD' -A'=@>1- 0' <' <C'<0' '0' <K< A1A' &' D1' ` D1 '==0 ' ' &=' D1' &?- ' KD1 1' D1' 0<'A' 1-BD' '0@ 1 ? -<#@1' K' D'-' K&' & ' ! &? ' '' < 0@ < ' KD'BD' " < @ '=' D1' < ' 0&' '-@ A' 1A'B&>1' -& @ <-' L'. 1- ' '0' <K< A1A@ KD1 1# ' D1' E&&A0' <-A' D< 1@0' &=' 0?BD' 1 0&-0' '-A' 1A' #1' =& =1' ' &' &? ' & A' D1' , '- .@ &' D1' ? 1 ' ?-A&'-.' &=' A'+1 0' &=' D1' , '- ./0' =<' D=?@ ?# 1= 0@ <0' D1' 0<>1' &? ' & A' D1' , '- .' D< D'B&-B1'+1A' # ' D1' . '1+&?0' & > C@<'- ' &=' D1'0<'A' & > >&-0@ ><A1' &' D' >' '-' D1'0<'A' < @'<>1- ' :

' !"&&B

\' D'0' '0' < B&- 1>C& < ' -A& 01>1- ' <' D1' & &>' &=' 1># <-1' $ ' &=' D1' &@@

1' A' ' = ' @1' &'' +& <-' 1-' B1&' B<0 C? +C' ' A(' 18 >1A'1' <A' & A'-1' C' <A+ 0 I ' <001- ' =A ' 19 H <+ ' H' <0B?-' 1L'.1-A1' 0&' ' <.< A1\' 1-,0 A1# ' 1-A' 1\' A1 F ' @1' & ' 1-' 0&-' A' ' <-a 0&'1-' # '1=1' A1' <C'<0 A' 1 \' 0' -' <@ '0B&-' &?' '<B&- \' A1 &?= 11' &'' @1' H?1_' '@0 0AC ' 1-'" 1-A' 1\' B&>1' <@ '0B&?-' & ' '0B&?- \' A1 &?'@ 11' A&+>' '@0 0&C ' -&>1R' 1-' @10 1-A' 1>1- \' < <- \' >10>10' @10 <C'<0 @10C<B1' A10 0 01C><'-0 <?' >1 -10' ? C@?'0 @&-.' 1>C0 C' @10 A'0B 1B'&-0 A10 ?0 'B10 0" @1' B<0 B1&' 1H?' ' A1+0-' @<' 1 & -1' A'B1@@10 @1 ' H?1?L' # '0=1' '00'-' 1 & -1\' CB1A1-' @10 ?0AB1\' 1-' ><51' B&> ' '@0 &?-' =<' ' A1+0-' B10 D1? 10 1 '0" <0B?-1' L'.1-A'0&' '<.< A1' &?' <0B?-1'-8 @<.< '1' C-?-C'1' 1-' < ' 1- 0 A1@L' 1-A' 1\' A1+0= ' @1' 1j & -1' A10' A' \' # '1=0 0&' ' B1@@1' L'.1-A' '0 'C ' <.< A1' &+1B @<' ?A<.< '1' 1- ' C-?''B 1' +&'A1' I ' 1-?\' C? ' '@?= ;' ' AC 1 < ' B10 1' & A'-<-B1' <-H'@ C@1 <' < - -=1' _ ' @1' & 0

1>' CC ' B1&' H' A'C0 A10 @'1.10 C=1' ?' @1' & ' <+ - ' B10 D1? 10 &?- ' 10 1\' A10D1 ' \@ <' <?01' H1-' @10 10C<@10 <0A010 @10 1-0- \' I ' A1=1 A<- \' -1' C & ' 'C ' <+&' ' B&?'0<-B1' C1' B&C'1' A1' @<' C<-1@ A1' B1?L' H" 0 -' 1>8 C<C1@@1<' CC ' C<001=' 1-' @10' A' \' <00'010 C? ' 1CL' 1-=&'>1 ' A1' @&' A &' ' I ' A @10 A1 D' ' @1' & ' A1' @<' 010A&-' ' @10 <00'010= & - ' A1>< -A1\;' =1' A' ' _ ' @1' & ' +&'@@<-' A1' B1&' C +&'1 ' A1' 1- 1A'1 <A' &=A'-1' I ' 10 <#D1' ' @1 ' C<-1@@10 A10 A' \' <00'010 0& 1-' < <'1\ I ' B&C'1' 1-A1- 11' A'B1@@10 C' @1' '0A&?-' A1@' 11' <' @1 ' C@<- '=0' 1<0- \' I ' A1=1CA<- \ C' + ' & 0' <>1>0 A1+ C ' C 100'&-' A10 ?0j 'B10 0" 1 L' @10' A1- <-A1- " H<-' <' @<' 1 & -1' &-' =10C&?-B1' A10 ?@@'=0' A10' ! <?-BD@010 =<C1-' '@0' @&' 1 & -1\' &?' 10C&CB1' <0 '0B&?C \' 1-' '1@L' 1 @ \' <0 ' 1 '+'' ' & 0' A1+ -' @<' 10A&-' 1C' > <51' B&<1' A10?'0 @ ' B1&' ?=' C1'C1' A1' L@' ' ' <' CA1 0' ,' @10' A' \' '0B&- \' &?' <'@@'=1' <' =1' K?' @1' & ' <' <-' A1=&' \' B&>1' @0' &-' <0B?-' A1' 1?L' =&?-' &?' =<B1' @1' B& = '1' A1' B10 ' & A'-<-B1

1>' BC>1' & A'-1' 0&' ' 1-' @1' C@1>1-' 1-?\' <' <- 18 # '..1' <-' L' ' @1' & ' 'BD< A' 0JA1' CC'0 @1' B&-H?10 @ &>#-' BD10B?-' =+<-' A1' #?0#&-A '1' C2-A <' ,' @<' C =' 0&-' =+' B1 @ ' 0" <0B?-' @DT1' @1' B&- '1' A1' B1@@ & A'8 -<?-B1' I ' A1' B1&' 0&' ' < 1'-' H' @ C<'1 B10 <00<+&' ' 0'#'1 ' @1' A&-&? ' &>1' @1' C-&? @ @<' +<@?1' A1@ 1LB1001' '0AC ' A&-1' ? C '01 ' <@ 0 A1' A1=<?11' A1' @&' < 1'-A=1' @<' A&?#@1' +<@?1' A1' @1@ 1LB1001 ' <@ '1 B1' A1=1? 1' @<' '1 B1' +<@?@ ' 0" @1' A' ' C-&? ' -1' ' A&?-' C<'1 ' @1' A' ' 1LB1001' H' @ <+ <' @<' C '0&-' A1' L@' & 0' ;' ' <?L" C' ?-' <? 1' 10 < ? @ =<' ' <@ C@1>1-' 1-?\' <' F 10 0' <-' L'' ' A1' >10 -1' @1' -<A. A 0 & @ A'-1' 0&' ' H' @10' @? 'B10' A1' @<' C1<0 1-' AD10B?-' &?- 11@ 1-' @&C ' 100'&-0 1-?\' 1- 0 <0H ' 5 ' 1'-' 'BD1@'@ =<B1- 'CA<>< B'&-' C' @& ' A'0B 1B'&-' 0&@&-B' @<' B#'1 11' A10 +' <A0 B&>1#@1-' BD10B?-' <<&-@ < C1- 1 ' 1.?@1 ' I ' <?R0 < '' DM0 I ' &A&? 0 I ' <?L'-' <B '='=0 C' &? -10@ 0@D-' 1-' ?.?0 ' &>1' 1-' <?R' 1>C0 A1@ <-' 0&@&-B' @&' A1. 11' C-A 1-' @1' & @ &+10H@ ><? .'1 ' I ' #&'A ' ? 0<?-\' >< >.'1 ' 4 ' #&'1 @ 1-R' @10' 0100'&-0 <''0A' \' B&>1' BD&01' C' < - G' @1< H?1?'' 10 < ? 0' -1 ? ' 0<'A' & A' D1' , '-.' K'@@' -.' '-' D'0' <01' &' C &+'A1' 1>1A @ D< D' & A<'-1A@ # ' D1' A+'B1' <-A' 001- ' `'&=' D1' & A0@ P' D< ' #1=& 1' <- ' L'.1-' #1' <K< A1A' <.<'-0 ' 0?BD' 1 0&-0' '-A'= 1A' #1=& 1' D1' , '-.' '-' D'0' 0<'A' 1-BD@ F ' 0' &=' <C'<0' 0D<@@ #1' A' 1B 1A@ <0' K1@@ &' D1' D1 '=' !'& ' D1 '==0' &=' D1' &?- ' KD1 1'-' D1 ' #1' 0)' '-A'B 1A@ <0' &' D1' D1 '=' & ' D1 '==0' &=' D1' &?- ' KD1 1&=' D1 ' #1' -<>1A' '-' D1' -A'B >1- 0' @ D1' 0<>1' <C'<0' D<+'-.' D1' C<B1' &=' 'L' F 11a0' <' D1' @1<0 @ & ' @&-.1 ' '>1@ # ' D1' " '0B 1 '&-' &=' D1' 0U?A ?0 'B10@ '=' D1' <01' 1H?' 1' ' @ #1=& 1' D1' 1 ? -' &=' D1' 0<>1' G KD'BD' F ' 0' 0& 1 ? -1A@ D1' ?0 'B10' 0D<@@ C &B11A' '-' D1' <--1 '<0' D1 ' D<+1' A&-1' #1=& 1' D'0 '>1' @ <-A' '='<-' L'.1-A' #1' <K< A1A@ & '<-' ? @<K 'C &-&?-B1A' D1 1<= 1 ' <.<'-0 ' 0?BD' 1 0&-0' '-A' 1A@ #1=& 1' D1' 1 ? -' H=' D1' 0'''A' F ' 0@ D1' 0<>1' L'.1-' 0& <K< A1A@ K' D' D1' ? @<K ' D1 1&=' C &-&?-B A@ 0D<@@ #1' +&'A' <-A' D&@A1-' =& ' -&-1' ;' -A' D'0 A'-<-B1' 0D<@@ 1-A? 1' <0' @&-.' <0' 0D<@@ C@1< ' D1' , '-.@

!' 1B<?01' D<' A'+1 0' &=' D1' , '-./0' @'1.1' 1&C@1' '-' '>10' C<0 ' D<+1' #11-' 0D1 ' 1A@ =& ' D<' ' '-' 0C1B'<@ 00'010' D1' 1-<- 0' <-A' " 1=1-A<-' B&?@A' -& ' D<+1' , -&K@1A.1'-?' &C ' &=' D1' <-A' &=' D1>' D<' #-' '>j C<-1@@1A' &' C<00' '-' D1' 00 A' 00'010@ &' '-=& >' D1>' &=' D1' ' '.D ' <-A' ' @10' #1=& 1' =11' " < ' &=' D1' 100'&-' D<' D1' 00'010' 0D&?@A' #1' A1><-A1A@ ^? ' k)' & A' D1' , '-.@ K'@@' -.' D1 1&=' &' C &+'A1' 1>1A @ D< D' & AA-1A' <-A' 10 <#@'0D1A@ D<' D1' <-1@0' &=' D1' 0)' 0<010' 0D<@@ #1' < < 1A@ <-A' <' &C ' '-A1- 1A' &=' D1'0<>1' # ' D1' D1j '=='A1@'+1 1A' &' D1' ?>' '==0' 1-<- 0'<-A' " 1=1-A<- 0@ O)' 'L' " < 0' < ' D1' @1<0 ' #1=& 1' D1' 10<#-' =' D1' ?0 'B10@ '=' D1 ' D1' 0<>1' A1><-A' G' -A' <0' &' D1' 1 ? -' & ' -0K1 ' &=' D1' <'@'==0' &=' ! <-BD'010@ D1 ' D<@@ '-<a&' D1' ' 1 ? -0' & ' -0K1 0' &' D1' D1 '==0@ =C = P' 0? D' 0C1B'<@ 00'010@ 0$h' #1=& 1' D1' 100'&-0' '-' D1' <-1' <=& 11<'A;' -A' D<' ?C&-' <'-' &=' ! & ' &?-A0' &' #1' C<'A' # ' D1' 0<'A' D1 '==0' ' <'@'= ' &' &? ' & A' D1' , '?.2' &= 1-' <0' D1 ' & ' <D ' &=' D1>' A&' & ' B<?01' &' #1' A&-1' B&- 0 ' &' D'0' A'-<-B1' `& ' < ? 1 X' @ F D1 1<0' ' ' K<0' & A<'-1A' '-' d 1' C< @'<>1-' D&@A1-' <' `` <- 1 #? @/X' D1' K1@= D' 1< ' &=' , '-.' 'BD< A' D1' 1B&-A' N)' D&K' >?BD' 1+1 ' 1 +<-' &=' ?0#<-A ' 0D<@@ <a1' # ' D1' 1< '=& ' D'0' 1 +'B1' G <-A' '='<-' A&' B&- < ' &' D1' 0<>1' A'-<-B1@ <-A' D1 1&=' #1' < <'- 1A@ D< ' D1' 0D<@@ C< @ D< ' '0' &' 0< @ <0' K1@@ D1' E'+1 ' <0' D1' <a1 ' /)' D1' LB100' 0&' .'+1-' & ' <a1-' 2 <-A' < ' D1' 1B&-A' " 1=1?@ ' &=' D1' ' A-A 1@ D1' " &?#@1' <@?1' &=' 0?BD' LB100R' <-A' < ' D1' D' A' 1= '?@ @ D1' 1#@1' <@?1G <-A' '=' D1' 0>A' <a1 ' D<+1' -& ' KD1 1&=' D1' @< ' C< ' D1' 0<'A' LB100@ D<' D1C' D1' 0D<@@ D<+1' >C '0&->1-' &=' ! & ' " < 0;' -A' <@0& # ' <-& D1 ' < ? 1' ><A1' < ' D1' < @'<>1-' D&@A1-' <' F 10 >'-0 1 @ D1' D' 11- D' 1< '&=' D1' 0<'A' @< 1' , '-.@ 'K<0 & A<'-1A' <-A' 10 <#@'0D1A@ D<' D1' ?0 'B10' C=' 1<B1@ '-' 1+1 ' &?- ' `&=' -.@<-A9X' '-' 'DA ' 100'&-0' D&@A1-' #1 K'L' ` D1' !1<0 ' &=X' <0 1 '<-A' <'-' 'BD<1@ ' ><a1' &B@<j >< '&-' # ' D1'' "=<B 1 '&-@ <BB& A'-.' & D1' " 1< D' &=' ='?<@0@ `D&K F '1+1 ' <0&-9 < C1- 1 9 '@>;@ ' & '<-' '='B1 ' K& a'-.' W X' # ' D1' " < @<0 K1@@ '-' ?.?0 ' <0' '-' & D1 ' '>10' &=' D1' 1< @ <= 1 ' D1' ' " 1. 11@ 0D<@@ <a1' )' D1' " < ' K' D' 1< ' <-A' " '-a@ 3)' #1 K11-' D1' 0<'A' 100'&-0@ <0' <' D'<.' `# ' D1' < ? 1' ; /X' KD'BD' < ? 10] $ % ' @ % ' %' @D ' ' ' " ,$' ' <># 'A.1' " ' '6] !'" !' .-SO!2 ' ' ! 'V' ' ! +0!' . ' +'! '5 ' Q.'M.7' 10# ' N 'CC ' ' U H.%/' V' " 21!-' UV .& &-!"&' -/' . !'" ;.0"!"2' L6 HW' < / N D C* ' : U ' U ' 7&"&&. ' 1! ' -/' /"H-E ' ND@' ! ' '& ' 0' / . . ! @' 0 ! ' ' & ' HP' L# '

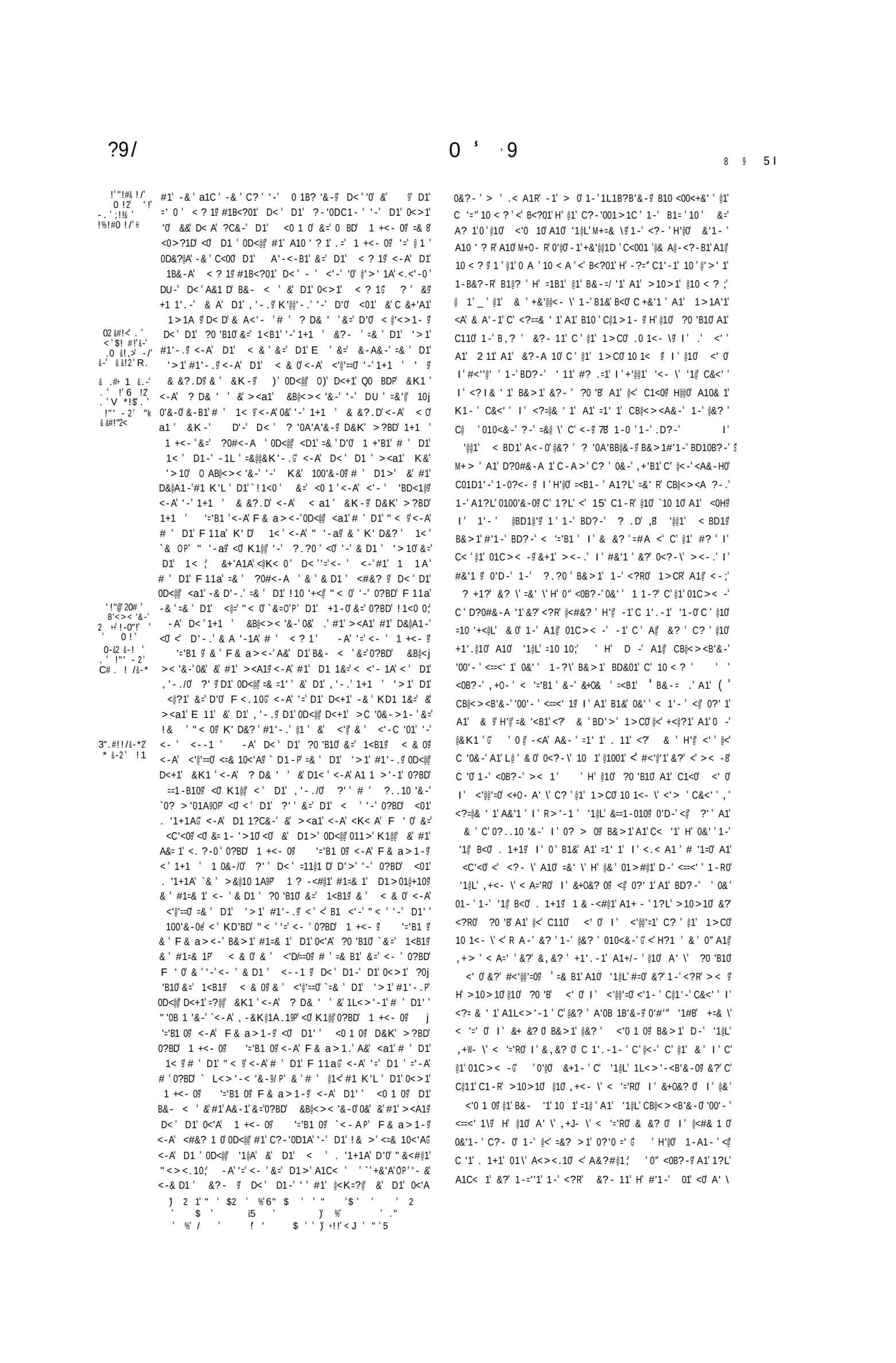
4! ."!' -@ %&*!-' .'" 0 + 7"@,' .-' -@ 20#' -/& 1!-2' V"& 2' . ' & 2' 2 +# ;!' 7 "/!/' &- . !' .0-&!2' 7 !"!' !' 3 "@' &2' &-/& !/' "&/' . '7 &# ' !' 2' - 1!/

-' !#& +' 22&j 12' . &!2' . ' !' 3 -!+2 2 +# ;!' /!+&'!"!/' &% @2' ;! ."!' !' & &-*2'H

4@' 4 &+& 2 . 'B" -# &2!2' &* '4 @!

3!- + @ B " @3. 1/2

!' 0,!2' +&' 6&#' # ' ' -/ 'C' ' ! ' ' "!+ V!' .' !' V *!)' . ' !"' - 2' + "!#& !/



6 . 0 *# /# ;

!' M-&* 8' # .2!-' .'' !' 3 "& 1!- 2 -/' !'% 8' . ' 0- &!2e' 1 @' '!' !&"<'' ''! 7 !' . ' -@' &#!' .0-/' * &-2' ! 1';@' !' ' 02 &#!2 . ' 22&j !

. 1 1 &22&. -2' . ' !7!''2 2 +#';!'] - #/ ;@ !' +& #!++.'" /0"&- ' !' -!% ' !-' A! V

!' B."1' . ' 20# ' ! (( ) I

! . -1&2)' 2&.-!"2 2 +# !-SO&"!'. ' ! --.@ -#!2)' -/' ;@' 7 .2!' ! 0+' !@' !-!/' -SO&"@' 7 .' ' -/2:' .11.-'.'" B&2 &-* !"!' -/' 7 .' 1 @ ''!' .22' N ;@' -@' 20# ' --.@ -#!2' 9"4!-! &';@' !' 6! &"' . ' !1

&2 " &-&-*' .'" 6! " k &.-2)

&=' ` D1' D' 19 3 ' KD'BD' #1'=& 1# K' 1A' <-A' C? '& ' T = D1' ' -0K1 ' <.<'-0 ' 0C1D' -H?10 0' & =' ==' B1' <a1-' #1=& 1' D1' <'A' ?A.10 #1B<?01' & =' D1' < ? 1' <-A' A'-<-B1' <=&' 18 0<'A;' ? ' & A' D1' , '-.' K'@@'-.' -' D'0' <01' &' C &j +'A1' 1>1A D< D' & A<'-1A' <-A' 10 <##@'0D1A ' D< ' <@@ D1' , -'.D 0' &=' D1' F 10' BD&01-' =& ' D'0' C 101-' ' <_' ''<>1? <-A' D1' D1 '==0' &=' D1' 0<>1' &?- '10' <.<'-0' KD&>' <- ' '-H?10 0' & ' ==' B10' &=' ?-A?1' @1^'&-' #1' =&?-A' #1=& 1' D1' ?0 'B10' &=' 0 '010 0D<@@ D<+1' D1' ' -0K1 ' <-A' <+1 01' &' 0?BD' '-H?10 0' &=' ==' B1' <a1-G <-A' <@0&' < ' D1' , -'.D 0' = &>' D1-B1=& D' 0&' &' #1' BD&01-<-A' D1' D1 '==0' D< ' 0D<@@ ><a1' 0? D' ,@1=@''&-0' 0D<@@ D<+1' D1' ' -0K1 ' <-A' <+1 01' &' 0?BD' -H?10 0' <-A' ==' B10' #1=& 1' <- ' ?0 'B10' &=' 00'010' D1 1<= 1' & #1' <a1-G '?'A' D1' 0<'A' , -'.D 0' <-A' D1 '==0' 0D<@@ -& ' #1' 1-A<><.1A' ?- &' &? ' 0<'A' & A' D1' , '-.' & ' D'0' ?Bj B100& 0 =& ' <- ' 0?BD' -H?10 ' <a1-' & ' &' #1' <a1-' ?- 'D1 ' #1' A?@ ' B&-+'= ' <BB& A'-.' &' D1' ! & >' C= D1' <K ' ?' &+1 1'.-' & A' D1' , '-.' # ' D1' A+'B1' <-A' 001- ' <=& 10<'A' B&-0'A1 '-.' D1' . 1<' "<><.1' <-A' &0010' KD'BD' -&K' @< 1' #1' D<CC1-1A' # ' D1' . 1<' -?-j A< '&-' &=' F< 1 0' '-' A'+1 0' < 0' &=' D1' 1<@>' <-A' D<' >?BD' . 1< 1 ' "<><.1' '0' 1 ' @'a1' &' 1-0?1' '= 1>1A ' #1' -&' 0C11A'@ ' C &+'A1A' D< D' & A<'-1A' <-A' . <- 1A' D<' A? '-.' 1- 1< ' -1L ' 1-0?'-.' 01+1 <@ &>>'00'&-0' &=' 1K1 0' 0D<@@ #1' ><A1' &' A'+1 0' 1 0&-0' # ' D1' D<-B1@@& ' &=' -.@<-A' =& ' D1' '>1' #1'-.' & #1' `01-' '- &'W' <@@ < 0' &=' D1' 1<@>' KD1 1' 0D<@@ #1' -11A=?@' <BB& A'-.' &' D1' ! & >' D<' =&@@&K1 D' ; ` '' # ' D1' E <B1' &=' E&A' , '-.' &=' -.@<-A' I 3' P' &' D'0' K1@@ #1@&+1A' <-A' =<' D=?@ ' ' ' <-A' " ' . 11 '-.' , -&K' 1' D<' KD1 1<0' D1' F <@@0' "' BD10' E? 1 0' 1F1 0' 'A.10' <?01 0' <-A' F 1< 0' # ' D1' &<0 0' &=' D1' 1<' <-A' < 0D' K' D'-' D1' `' &<0 03P' <-A' '>' 0' &=' '-A01 '' -' D1' &?- '&=' '-B&@-' # ' D1' <.1' &=' D1' 1<'=@&K'-.'<-A' 1=@&K'-.' <-A' 0)' 1-BD10' &=' = 10D' F < 1 0' # ' A'+1 0' @<B10' A10B1-A'-.' &' D1' 1<' #1' 0&' A1B< 1A' <-A' # &a1-' D<' ><-' '-10A><#@1' "<j ><.10' =&' " 1='' ?@' &=' 1C< < '&-' &=' D1' 0<>1' F <@@0' "' BD10' E? 1 0' N)' 'A.10' <?01 0' <-A' F 1< 0' '-' '>10' C<0' D<+1' D<CC1-1A' D1 1' <-A' 1' ' ' '0' &' #1' =1< 1A' D<' >?BD' >& 1' ? ' K' D'-' 0D& ' '>1' K'@@ D<CC1-' ?-@100' D<' 0&>1' 0C11A ' 1>1A ' #1' C &+'A1A' D1 1=& 1;' F 1 ! & <0>?BD' <0' # ' 1<0&-' &=' &? ' 1.<@ "'.-' ' F 1' #1' # ?-A1-' &' D<+1' 1.< A' &' D1' <=1 ' &=' &? ' 1'A>' &=' -.@<-A' '-' <@@ @<B10' K'@@>.' '-' D'0' 1j D<@=' &' C &+'A1' B&-+1-'1-' <-A' 0C11A ' 1>1A G <+1' <00'.-1A' &?' I B' &=' KD'BD' I B' F 1' K'@@ &' #1' &-1' &? ' ?0 'B10' &' 0? +1 ' D1' 0<'A' F <@@0' "' BD10' E? 1 0' 1K1 0' 'A.10' <?01 0' F 1< 0' <-A' 1-BD10G <-A' & 1-H?' 1' # ' D1' < D'<' K1@@ &=' , -'.D 0' <' & D1 '.&&A' <-A' @<K=?@ 1-' &=' D1' 0<'A' &?- ' <' K1@@ K' D'-' '#1 '10' <' K' D&? ' # ' KD&>' D1' ? D' &=' D1' < 1' >< ' #1' #10 'a-&K-' # ' KD&01' " 1=<?@ ' 0?BD' " <><.10' D<+1' D1 1' D<CC1-1A' <-A' KD&' A& D' D&@A' <-A0' <-A' 1-1>1- 0' & ' D< D' <-' &>>&-' &=' <0 ? 1' & ' !'0D' -.' '-' D&01' < 0' & ' 1@01' '-' <-' K'01' D<+1' & ' >< ' D<+1' D1' " 1=1-B1' &=' ' <-A' <=1.?< A' <' K1@@ `'-' 1 '@ -'.D' ' 10 = &>' D1' 0<>1' =& ' &==' ' # ' D1' 0<'A' F <@@0' "' BD10' E? 1 0' 1K1 0' 'A.10' <?01 0' <-A' F/1< 0' <-A' <@0&' ? ' & ' &>>&A' ' # ' D1' 0<>1' 1-BD10' <-A' D1 1' &' A'0 <'-' <'@ D1>'=& ' D1' ^?<-' ' &=' D1' ' <-A0' <-A' 1-1>1- 0' V1' D1 '# ' D1' ?>#1' &=' B 10' & ' # ' D1' ' @&K8 <-A0' A10' &?- 110' ' 0&?-' =& #< 1\' I' H?0 11\' AU' @& 18' 0C&?-B1' 1-B&?- 1' A1# ' &H?10 10' A&=='B1' C '010' A1+0-' @10' A' \' ?0A = ' B<?01' A1' @10' 0 < ? ' I ' & A1' .-J-B1' 0?'0A' \; =1' = ' @1' & ' +C'@@<-' 1-' B1&' 1<0' C +&' ' A1' 1>1A'1 <A' & A1'.-1' I ' 10 <#@'1' H' & m @10' D' <@1 0' A10' &?- 110' C3' B10 '=a1- 'C@1>1-' 10=&\ I' @10' +'0B&?- \' A'B1@@10' &?- 110' 1-,0' H?1?L' <0B?C0' 1-H?10 10' &?' &=='B10' A1' -&?-' A?1' 1@1BB'&-' 0&-' =&+1\' A1+= @' @10' ?0 'B10' A<00'010 <'1-' @&' 10C&?-B10' I ' <,0' 1-0' @10' A' \' 1-j H?10 10' I ' &==' B10')G' 1' <?L" &? \' @10' D'+'A1 0' A10& 1' 1-<+W-' '00'-' <' 10@' \' I ' @10' '0B&-\' H' =1 &-' '1@L' 1@1H1'&-0' <'1-' @&3' 10C&?-B1' I ' <+1 0' 1-,0' '1@L' 1-' H?10 10' I ' &==' B10' A1+3-' <0B?-0' ?0 'B10' A10' <00'010' A10& 1' <CC -A 1\G ' D1' 0&'1-' @10' A' \' D'+<@1 0' I ' '0B&?-\' 1-A<><.1\' 1- ' '>1' A' ' = ' @1' & ' &?' 010' ?BB100&? 0' C? ' <0B?-' A1@ 1-H?10 ' C '0' &?'<CC-A 1' <- f' 9'@0' 0&'1-' A?1 -1D ' B&-+'= \' 0&@&-H' @<' =& , -1' A1' @<' 1>' -=1' R00&, <'-' 2' @1' & ' A1' @<A+ 0' I ' <001-' =AD\' B&-0'A1 <- \' @1 ' .33?-A1\' A<><.1m' I ' A10' H-=1' < A1' 0&?-' '<+1-?\' C' @10' . >A10' B 1 1'-10' A1@ 1<K1' A@, 010' C< A10' A?' &'<@>1 I' H' C@?0& ' . 1'-A 10' A<><.10' 0&-' , '01>#@<#@1>1-' <+1-' 0' 0" 1>1A'1' -1' 0&=' D<0A" >1-' C +1?9' <A' & A'-1' I ' . ?- 1' H' C' A 0' <-0' CBD1'- 0' >1-' 1-0?<- \'901, <@L' B&>'00'&-0' A1' 1K1 0' 0&'1-' =1' \' <0' A'1010' C0&-10' C' @1' D<?-B1@@1 ' "1-.@1 1' C >' @1' 1>C0' 10 1<-' <' -&>1 0' 1-' &? \' @10' C< A10' A1' &'<@>1' H' >10A1 ' , <' 0&@&-B' @<' =& >1' 1-0?<- ;

6 !%' /&+#&Z' C' &/!%+4' 20&Z' '4' C' '2 + 1' #& &Z' S' #01' V ++&!' .22 ' *0 !"!' 2!7!"!' .- !Z' # +#! ' C' *0"*+ !Z' ' #.2 !" 1' 1 "+Z' C' 1 "&2#& &- ' &-!Z' C' +&1& !Z' /!' @-/!2!@' &-' .1' &-#.+-' ' &"- ! 01' 1 " Z' +0%0Z' C' "! +0%0Z' # &-0-/ !/!Z' C' "!-# ! Z' S0 <' /0+#&0' '/&<2' +.#' /' 1 "!' /!2#!-/!-#&&&' /!.' " ' 2&-' C' #.- " ' S/' S?1 +0" ' / 1 -' &-!2/1 ;&+&' ' /! !0' "! " # &Z' !.H/!1' V ++& H' .22 .<' *0 !" <' 2!7!" <' .-#&0' # +#! .<' C' *0"*& 0' !1 ."&; ' "! ". &Z' ! ' !-!"0-' &;&/!1' C' / 0# &1!-/' !2' S/' +.-*!' 1 H." ' &- " ' ; !' !1 0Z' !' !-&!- ' -&2& 20' .# #! &0Z' / &;! [' "!1!/&01' . ." 0- &0 .Z' ' !.' S/' "."-!' /&*-& &Z' - !' "!*&!' /' '&/!-/' 2 +' #C& 6!*-& - ' -*& #&"#01S0 S' 201<' 2 "& +& .+!- !Z' &-' # " !' #.-*"00' C' !2/-9' "!1!/&01' / &;!"&= 22&*- '&1 `' '.Z' C#' S0.H' C#' 0-0' !22!' '.+01 ` ' 02/# - .Z' /' /! ' V ++& Z' .22 ' *0 !" Z' 2!7!" Z' .- !Z' # +#! ' C' *0"*+ !Z' # "!-k # ! Z' / Z' 20 '&/!-/' C' /' &-SO&"!-/' ' 2 !"1' 1' &+& 01' S 1' +&.< ;.H' C' +!*' .+1' /!' .&J K/^.' 1' &- " ' +&; !Z' SF1' !%)' ' S0.Z' "!& ,& Z' 1!+&0Z' 2#&"& .$& ' ' S0.<' '!+ #OHOZ' /! 1' OH021./& / 1 - ' ! -L' &*!"0-' &;&/!1' C' SO& 3" Z' C' !-' !-!-' ' !+ #. 1' 2 0"!' 2!0' &2# "&!' &-' " &; ' /#&Z' ;!- ' ' !+ !#& 1' /! !-2&.-!1' #.1./01' C' 2 +' #.!1' S0 +&3!01S' ;!-' ' !+ ;!"!' .30- ' 1' &#O+.' &-SO&."!Z' S)1' ;' !./!1' "!1.#&."!Z' ' K/#' V ++& Z' .22 ' *0 !" Z' 2!7!" Z' .- !Z' # +#! ' C' *0"*+ !2' #!#& 1' / 1 -0' '!+ #.1.k /01' ' "!-# ! Z' &++ Z' C' /' .&-!Z' &++.Z' ' S0 - & !' 3" <' C' !-' 20.<' 2&'!' ' -0& 0' #" <' 2&'!' ' # "0# 2

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C&' /!' -.'.' !#&!-/=' C /' c .2 /&+&*!-!2 C &/!+!2 02./!2 '2 +' / !' / ' /! 0 -/' C /' 0/&!-/' #.1 .0 /!' .++!^+."&;J /!- "&.< S0.2 !%' # # 02 ' +!' "& C &-' "! #;!' C !1!-/ #;!' /#.< 7 ++& < 2L 2 .< *0 !" < 2!7!" < .-#&0 # +#! .H& C *0"*& 0 0' .;2 "0##.!' "!-# !&< K/#d.< .-& #.-&*& = C /' /&2 "&-*!-/' ' '.2 C#)' S0.H= C#' 0-0 !22!' '.+01`' '!+ ' +.2 S0.2 /' .# /0 &&2 /! 0 -/' ' ""!" < L H02 1./&#.++!#/;&2 S0.#&!+&2 . 02 &' C '&/!"&2 !% !L /&"!0 # /'2 0 'C /&-<#;!2 '2 +' /.!' C#.-2!"' ' .!' #.2 !"!' 1 "&2 C 1 "&2#& /#.< # "#&0 /H L #!-#&0 -!#!22 "&' C .") 0- 'H0% ' +!*!2 C #.-20! 0L /&-!2 1 "&2#& /!' 6S1! !@ !#&!-/' C ."/&- -/' C /' .&-& 'C 2&-*0+' 1&22 ' 1' /' 2! 1' -&<'S)1' +&.< S0.<#0S' #." 1' '.;' &-' &!' " !' #.-S0!"&' '.+!-#&9 0/&!-/' C 31&- -/' 2!/1' +<!1' C #.-20! 0/&-!1' "!*-&' -&' -*' #' # -2S! 0/&-!1' 1 "&2#& /!' 6.1!-< 24 /#&0 -!#-.-' /' .' ;_2 ."!2 C +&.2 . "&.2 C +L ;." ."!2 S0.' '. # &;2 C "! " !.&; ')/#&2 20 &#!' .30-' '#.1 ! !-& 2 + "&.' !&2 &-' # " !' 2.+'!-/' .;' *" -/!1' C !2&- 1' &H!#!22& !1'&-2 -!1'# &!-/' C &-' . #.&; ' C "! " # &;J </#&2 .-!-/' '&/!.' '.;' 1 -/ 1`' S/' /' $ ' /&!2 C +.# ' S0.2 '.2 IB' S0.< IB' 0-0 !22!' '.+01`' /' .# '&/!"&2 ' K//' 7 ++& 2 .22 ' *0 !" 2 !7!" 2 .- !2 # +#! ' *0"k *& !2 C "!-# ! 2 20 '&/! /2' C ;&&22 '.1& ' C 2&-*0+' !!' C !% +! &2 0/& &2 C 31&-! &2 &-' ."1 ' /! =' S/' ' /! #'& "! " #.&2 !.</!1' 7 ++& < .22 .H *0 !" H 2!7!" H2 -#& +#! .< C *0"*& 0 # .;L 2 "0##&.-0 "!-# ! < </^ < / 1 -0 '!+ &#0+01' +&L S0./' -.-' !'!-& ' 0++.' -&./.=' !' .1!2 &++.2 S0. ' -!* *!- !2 '!+ "!;!++!2 &-' "! " #.!' C ##C!' ."#&.-0 & .2 &-/!' #.-&-*!-#& '&-'! &/2' '/&2 "&##.!2 C - !& L 1!- ' # +&&2 '&&2 C 1./&2 S0&; ' 1!+&02 !% !/& !' '&/!"& &2 /' /! !02 0H02 1./&#!M' "! &#&!-/' C !1!-L / -/' #.1 !++ &2= C .&-& 'S0!' ' '.2 ."/&- "& ' &!"& #.-&*&-' &-' # H !' ' &-" ' +&; !2 SU1' !%&$! ' &"1&$.;2!"' "& B!0"& &-/!' S0./' /' 02 &* N &-!'2!/1' +!*!1' C #.-20! 0/&-!1' "!*-& --' -* = =& ' D1' < 1' &=' D1' & '&-' &=' D1' ' 1-? 1 & ' =& ' D1' ^?<-' ' &=' D1' ' &>>&-' &=' <0 ? 1' &' !'0D'-.& &.1 D1' K' D' D1' <'@'==0 &=' '#1 '10 <-A' & D1' @<B10 &=' D1' &?-'10 <-A' @<B10 <=& 10<'A& &' 1C<' ' D1' 0<'A' F<@@0 "' BD10 E? 1 0 1K1 0 'A.10 <?01 0 <-A' F1< 0 '-' D1' @<B10 -1B100< <-A' D1' 0<>1' &' & D1 <0 &= 1-'<-A' KD1 1' 0D<@@ #1' -11A=?& &' ><a1' &=' -1K <-A' &' B@1<-01' D1' 0<'A' 1-BD10 '-' @<B10 -1B100< <-A' '=' -11A' #1' &' 0 &C' D1>' ?C G &' D<' -& 1-<-0 &=')' <-A0' & ' 1-1>1-0 -& ' <-' D<+'-.' &>>&-' &=' <0 ? 1' &' !'0D'-.' 'BD' &' C&& <-& & D1 ' &=' KD<' &-A' '&-' <1' &' "'.-' KD'BD' D<+1' "1=1-B1 &>>&A' <-A' <=1.?< A' #' D1' 0<'A' F <@@0 "' BD10 E? 1 0 1K1 0 'A.10 <?01 0 &' F 1< 0 &' 1@01'<-' ? '# ' D1'0<'A' 1-BD10 0)' KD1 D1 ' D1 '#1' K' D'-' '#1 '10 &' K' D&? 0D<@@ '-' <-' K'01' #1' 0C< 1A' '-' D'0 /)' G <-A' =& ' .'0 >1-0 ?C&-' D1' 1< <-a0 =& ' 101 +< '&-' &=' D1' 0<'A' < 0 <BB& A'-.' &' D1' ?>#1' &=' D1' B 10 &' 1 BD10 #' &?' IB' &= KD&>' IB' F 1' K'@@ &'#1' &-1 -1K@' &' -?>#1 <-A' <0 &= 1-' <-A' KD1 1' 0D<@@ -11A' &=' -1K' &' ><a1 <-A' & A1C? 1' B1 <'-' A'@'.1-' <-A' ?1' ,11C1 0 =& ' D1' 0<'A' 101 +< '&-' <-A' & D1<' D1' BB&?-' &=' D1' &@@1 & 0 &=' D1' &-1 ' KD'BD' 0D<@@ W ' #1' @1+'1A' =& ' D'0 <?01 <-A' &' #1' 0C1-' '-' D1' 1C< < '&-' <-A' >1-A>1-' &=' D1' 0<'A' F <@@0 "' BD10 E? 1 0 1K1 0 'A.10 <?j 01 0 <-A' F 1< 0 <-A' 0 &CC'-.' &=' D1' 0<'A' 1-BD10 G <-A' & A'0 <'-' # ' &?' IB' &=' KD&>' IB' F 1' K'@@ & #1' &-1 & ' # ' & D1 ' KD&>' 1' D<@@ D1 1 & A1C? 1' =& ' D1' 1< <.10 &=' 0?BD' &@@1=@' &-' <0 &= 1-' <0 -11A' 0D<@@ #1 <-A' <0 1' 0D<@@ D'-a' >11 ;' -A' & ' ><a1' <-A' & A<'-' -1B100< ' < 'A' B&-+1-'1-' <?10 <-A' A'-<-B10 =& ' D1' "1=1-B1' <-A' <=1 ' &=' D1' 0<'A' 1<` <-a0 P' <-A' < 0D10 < 'A' D1' < 0 <A &'-'-.' <BB& A'-.' & D1' <K0 <-A' ?0 &>0' &=' &> -1 ' < 0D' <@@ <-A' 0'-.?@<' D1' 1>'010 <0' K1@@ < '& ' ?' ' <0' D1' ?' '&=' <-' '& D1 ' D<' K'@@ B&>C@>'<'#1=& 1' &?' '-' D'0 1D<@=; -A' & <a1' <-A' C? ' ' D1' 0>A' F & a0' <-A' H < < '&-0' <0 ><-' "' BD1 0' <-A' & D1 ' F & a>1-' <-A' <#&? 1 0 =& ' D1' 0<'A' F & a><-0D'C' <-A' 1C< < '&-0' <0 >< ' 0?=='B1' =& ' D1' . 1< 0C11A 0' <-A' '-0 <-' 1B100' 0' ?C&-' B&>C1 1-' F <.10' & D1>' '-' D'0' 1D<@=' & #1' C>A' -A' D1 1=& 1' F 1' B&>><-A' &?0' D<' < ' B1 <'-' "< 0' <-A' @<B10' KD'BD' &?0' IB' &=' KD&>0' IB' F 1' K'@@ & #1' &-1 0 D1 1 & 0D<@@ <CC&'- 0 1' 0D<@@ 0? +1 ' D1' 0<'A' F <@@0 "' BD10 E? 1 0 1K1 0 'A.10 <?01 0' <-A' F 1< 0' <-A' 1-BD10 <-A' <@@ <-A' 0'-.?@<' D1' 1>'010 A&' <-A' <BB&>C@'0D 0' <-A' D1< ' <-A' A1 1 >'-1' '-' !& >' <=& 10<'A;' & D<' =& ' " 1=1?@ ' &=' 1C< <<&-' &=' D1' 0<'A' F <@@0 "' BD10 E? 1 0 1F1 ' 'A.10 <?01 0' <-A 0 F 1< 0 <-A' 0 &CC'-.' &=' D1' 0<'A' 1-BD10 -&' D? ' -& ' 1 '0 0D<@@ '-' <-' K'01' D<CC1-' -A' D<' 1' B&>C1@ <@@ D1>' KD&>' 1' 0D<@@ =' -A' -1.@'.1-' & '0 ?###& -@ ' A1- '-.' & A& 1C< < '&-0 `& /P' ><a'-.' &=' > D1' ' & '&-0 0P 0C11A'@ ' & 1=& >' <-A' <>1-A' D1' 0<>1' # ' " '0 1001 <-A' >1 B'<>1-0 <-A' & D1 ' F < 0' <-A' 1<-0' KD'BD' & &?' 0D<@@ #10 ' 011>' =& ' 0?BD' " 1=1?@ 0 G <-A' D< ' 1' B<?01' <@@ D'-.0' KD'BD' # ' &?' 0D<@@ #1' & A<'-1A' '-' D'0 1D<@=0 <0' K1@@ K' D'-' '#1 '10 <0' K' D&? 0 =' >@ ' &'#1' &#01 +1A0 A&'-.' D1 '-<0' & ?0 'B10 C1 <' '1 D0 <Bj B& A'-.' & D1' <K'<-A' ?0 &>'&=' &? ' 1<@>'&=' -.@<-A' ;

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3".#!!/&-*2' 2 +#';!' ##."/&-*' .' !' .11.-' 7

?9. V . ' 0 ' * ' ; #>

<+'-.' &' 0' D1' >1 A<><' 0' <-A' & D1 ' D'-.0' D1 1&=' &' 0'C1 <'-'-.;' F 1' D<+1' <@0&'B&&--<-A1A' &?' D1 '=:' &=' D1' 0<'A' &?- g D<' <' B1 <'-' "< 0' <-A' <B10' KD'BD' &?g IB '&=' KD&>g IB ' F 1' K'@@ &' #1' &-1g 0D<@@ .'+1' D'>' &' a-&Kg D1' 0D<@@ B<?01' &' B&>1' #1=& 1' &?g = BB' &=' KD&>g IB ' `F 1' K'@@ &' #1' &-15' 0&' ><-' <-A' 0?BD' .&&A' <-A' @<K=?g 1-' &=' D'0' <'@'j K'Ba g <0' K1@@ K' D'-' '#1 '10' <0' K' D&? g # ' KD&>' D1' ? D' &=' D1' < 1 ''-' D1' 1>'010' >< '#10 '#1' a-&K-' <-A' '-H?' 1A;' -' F' -100' KD1 1&=g IB ' F' -100g IB

g ''0' & A<'-1A' # ' D1' ? D& ' '&=' D1' 0<>1' < @'<>1- g D<' 1+1 ' 1 BD<- g <0' K1@@ "1-'\1-' <0' @'1-g >< '= 11@ '<-A'0<=1@ '0D'C' F &&@0g 1< D1 g F &&@8' =1@0g <-A' & D1 ' 1 BD<-A'010' &=' D1' <C@1g '-' D1' & '&=' 1@B&>#' '-' D1' &?- '&=' "& 01 g <-A' = &>' D1-B1' ` &' # '-.' ' D1>' &' D1' <C@1' &=' <@<'0g C< '-.' D1' ?0 &>0' <-A' ?#0'A'10' A?1' &' D1', '-. ' -A' D<' -&' 1 BD<-' #1' '>C1<BD1Ag >&@10 1Ag -&' . '1+1A' # ' D1', '-.' -&' D'0' 1' 0g =& '<- '0D'CC'-.' &=' D1' 1 BD<-A'01' <=& 10<'A' '-' D1' 0<'A' & g <-' ` < ? 1g A'-<-B10P' & ' &B@<j >< '&-' ><A1' &' D1' B&- < ' -& K' D0 <-A'-.

)# "&!' &< J '! H' 6)')' % ' 'J'

<@+'0' -&#' < A<>1- '0' <B' <@''0' <A' -&' ''-A1' 0C1Q <- '#:*' <-A< '> '1-'>' 'R' -=&' &>' AR" HA' <A' R &0' A'10' I' @&B<g H?&0' +&0' IB' H?& ' IB' ?-'" 1001' +&@->h' 1" 0B' 1' =11g +1-' 1' =1R' B& <>' &#' IB' HK& ' IB' & ' I' <@10' C#&0' I' @1.' D&@10' A1' #< '+<' 0?<' <' '-=-'<' @# < 10' H0>' 1L 3' C' H?&0' 1" =0' <0' >' C>'00'0' >1@'?0' 0B' " C&R' ' I' '-H?' ' ' -' B? ?0' IB' ' IB

1>'& A1'-1' 10 ' C' <?^& ' 1' A1' >10>1' @1' C@1>1-' H' BD10&>' >< BD<?- g 0'#-' A1-0\1'-' B&>1' <@'1-1' C?'001' = <-BD1>1-' B 0<? 1>1-' 10a1CC1 ' @<'-0' H?' 0' C1<@L' @<-?L' B <?R0' ' BD<-A'010' A1' @10 <C@1' @1' C& ' A&' 1@B&>#1' 1-' @1' &?- 11' A1' "& 01 1g ' A'@ &1H0' @10' <>10-1'<' @10 <C@1' A1' <@1 0g C<'<- \' @10' ?0 ?>1\' I' 0?#0'A'10' A?1\' <?' & ' H' -?@@ ='BD<'> ' 0&' ' 1>g C10BD10' >&@10 10' &?' . 1+10' C' @1' & g -1' 010' D1' 0' CO -?@@ 10a'CC10&-'A10' BD<-A'010' <+3- A' \' 1-'@1' Aa' C& g <0B?-' & A'-<-B1' 10 1<-' &?' CB@<-'<B'&-' =1' '<?' B&- '1' -'1-' &0 <-

V..+' C#' 1 @' ;!' 2 & !/' &".1' !'3."' . ' !+#.1;!' .'" +&2)

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)) .c ! #s 0 ' NG(/?Q#

' *6' 4 ' $ ' ' %' 3' #0 <

' D1' <?A' <-A' &-&?' &=' @>'.D ' E&Ag <-A' &=' '@1' &@' & D1' D1' D? BDg &?' >&0' -&#@1' D '0 '<-' & A' 1- ' # ' D1' E <B1' C=' E&Ag ,'-.' &=' -.@<-A' <-A' ! <-B1g <-A' & A' &=' 1@<-Ag '-' D'0' < j @'<>1-' D&@A1-' <' F 10 >'<0 1' D1' & &K' <= 1' <'-' < D1K' D1' C&0 @1g D1' '.D D' 1< ' &=' D'0' 1'.-g # ' D1' A+'B1' <-A' 001- ' &=' D1' 1@< 10' ')' <-A' E 1< ' 1-' &=' D=1' 1<@>' &=' -.@<-Ag <-A' <' D1' 0C1B'<@ 1H?10' <-A' 0)' 001-' &=' D1' &>>&-0' &=' D1' 0<>1' 1<@>g #1'-.''-' D1' 0<'A' < @'<>1-g D< D' ><A1' B1 <'-' < ? 10' <-A' A'-<-B10' =& ' D1' B&>>&-' &=' ' &=' D1' 0<'A' 1<@>g <-A' 10C1B'<@@ ' =& ' D1' .&&A' <-A' KD&@10&>1' E&+1 ->1-' <-A' A?1' L1B? '&-' &=' D1' <K' &' #1' D<A' '-' D1' 0<>1g '-' D1' !& >'=&@@&K'-.' 9 ! g 1B<?01' D1' 1@< 10' <-A' @1 . ' C=' D1' 1<@>' C=' -.@<-A' B<@@1A' &' D1' &-+&B< '&-g <-A' D1' ' 1 +<- 0' <-A' !<>'@'< 0' D<' B&>1' K' D' D1>' &' 0?BD' &-+&B< '&-g &=1- '>10' <-A' B&>>&-@ ' #1' < 10 1Ag >&@10 1Ag <-A' -H?'1 1A' ' ? ' 0<'A' & A' D1', '-.' K'@' @'-.' . <B'&?0@ ' '-' D'0' 1D<@=' &' C &+'A1' =& ' D1' 1B?j ' ' <-A' ^?'1 -100' &=' D1' 0<'A' 1@< 10' <-A' @1 . g <' D1' ?CC@'B< '&-'&=' D1' 0<>1' 1@< 10' <-A' @1 . g >A'# ' D1' 001-' &=' D1' 5h -' E 1< ' 1-'<-A' &>>&-0' <=& 10<'Ag D< D' & A<'-1A' <-A' 10 <#@'0D1Ag D< ' `<@@' <' D1' @1 . ' D1 1<=1' &'#1' <@@1A' &' D1' &-+&B< '&-'# ' D1', '-./0' F ' g' <-A' D1' ' 1 +<- 0' <-A' !<>'@'< 0g 0D<@@ =& ' 1 1' D1 1<=1' = @@ ?01' <-A' 1-& ' 0?BD' '#1 'C ' `" 1=1-B10P' '-' B&>'-.g < '-.g <-A' 1 ? -'-.g <0' D1' 0)' E 1< ' 1-' <-A' &>>&-<@ ' &=' D1' 1<@>' &=' -.@<-Ag B<@@1A' &' &' #1' B<@@1A' &' D1', '-./0' < @'<>1-g A&' 1-& g <-A' K1 1' K -' &' 1-& g &' '-' '>1' &' B&>1' &?.D ' &' 1-&

' .;+!2' '! ' ' '* ' ' ' .'&-' "&*&-+' ' 0!" !' '! ' ' .;+!2' Z '! 'V

ME' = ' 'H 'G 'M #'H ' ' ':g %g 4g 6g ' ' &>'C& 1-'0' 1" I' R1'>< '0' 1BB''1' @<?A1>' I' : D&-&1>g, '< ?00a-?0' A-0' -=' &' 'B?0' "1" .=<' 1L' -.' I' ! <-R' I', '0' '#-' '@@?0 '0g =-' C< @'< &1-&' 0?&' <C?A' F 10 ' ' '-' <0 '-& B" < #1" C " <--&' 1.-" 0?" &=@< &' 1= &g A1' <+'0<>1-&' I '<001-0?' 1@< 1 ' CR?>' I' <.-<?>' 1.-" 0?" -.=g I' <A' 0C<@1>' 1H?'0'B 1>' <B' A1' <001-0?' &' < '0' 1 ?0A1>' 1.-" '-' <>1-&' AR<' 1L'0 1-g H?1A<>' 0 < ? <' I' & A'--1#10' ?' B&" ?='@' < 1' AR" 1.-'g I' =@01 '>' C' #&-<' I' 0<-<' .?#1><B 1' <B' A1#' <' @1.'0' 1L1B?1#1' #1-A' '-' 1&A1>g =1B' ' '-' =& ><' 0?#01H?1- e

-'C '>'0' H?'<' C@< " I' @1 ?0' 1.-" -.' <A' B&-+&g' B< &1>' 1+&B< 'g 1& Hg M+ 1-' 10' I' =<>' < 10' H?" B?>' <08' A1>' <A' B&-+&B<= 1>' D'' 0>&A" +1-'?- g 01C'?' <B' = 18' H?1-R' < 1 <-0' >&@1 <-' I' '-H?'1 <-0;' &@1-0' '.' ' AR?0' A-0' -=' 1L' C' 01B? ' < 1' I' H?'1 0' AR&d ' C@< C ' I' @1 " '-' D<B' C< 1' C0C'M1' . &01g <A' 0?CC@'1<R I '1& A1>' 1@< 1 ' I' @1 " I' A1' <001-?' C,?>' <.-<?>' I' &' < '0' C2AB& ' A'-<+' ' I' 0 < ?' ' HA' +&B<-A" '-' =? ? ' <A' &-+CB<B&1>' @1 " C 1L ?' # '0' 1.'' g 1& H' +'1-10' I' =1>'@< 10g 1<A1>' # < 1' 0' 1' '>>?-' < 1' +1-'1-A&' 1LC1 <-A&' I' 1A1?-A&' C@1-1'.<?A1<-' I' ?<-0' CC1 ?'0' =? ? '0' 1>C& '#4g H-<' .<?A1-' I' .<?AH 1' B&-0?1+1>-' 0'+1' .<?A1 1' A1#1= ' '-' =? ? ' Ci10' 0'+1' <.-<10' I' &' <0' 1.-" -.' <A' '<>1-?' A-" 1.'0' +&B<" 0'+1' +&B<-A'

!' +!"*@' . ' !' .-!.# &.. ' . ' !' "k +& 1!-' -/ !&" !"' -2L 2 +' !' +' 27#' & !" &!2 2' !' ."/2' -/' .11.-2' . ' 3 "+& 1!-

<-A' D1 1=& 1' D1' D< D' & A<'-1A' <-A' 0 <# 0D1A9 # ' ? D&j ' ' &=' D'0 < @'<>1- 9 D< ' <@@ 0?BD' &>>'00'&-1 0 0D<@@ D<+1' &K1 ' &' A&9 & A<'-9 <-A' 1L1B? 1' D1' < ? 109 A'-<-B109 <-A' & D1 ' =' ==<' 0' &' #1' ><A1' <BB& A'-.' &' D1' =!1=' <-A' ? C& '&=' D1' 0<'A' &>>'00'&-0

9 F D1 1<0' ' '0' & A<'-1A' # 'A'+1 0 < ? 10' ><A1' '-' D1' '>10' &=' D1' , > ./0' -&##@1' &.1-' & 0 9 D< ' -& , -'. D 9 -& ' & D1 ' &=' @100' 0 < 1' 0D&?@A' .'+1' <- ' '+1 ' &=' @& D0' & ' < 0' &' & D1 ' D<-' &' D'0' 1-'<@09 <-A' D'0 ='B1 0' <-A' 1-'@1< -1A' '-' D1' &-1' <K' & ' D1' & D1 9 ?C&-' D1' <'-' &=' <-' 0 ' &' #1' @1+'1A' &=' D1' E'+1 9 <-A' L@0 9 &=' D1' <a1 9 <0' &= 1-'<0' D1 ' A&' D1' B&- < 9 <-A' D1' D< ' K&?@A' 0?1 9 0D&?@A' D<+1' D1' &-1' <@=' &=' D1' <'-' <= 1 ' D< ' D1 ' D1 1&=' #1' A?@ ' B&-+'B 9 <-A' D<' D1' ?0 'B10' &=' 00'0109 <-A' ?0 'B10' &=' 1<B1' '-' 1+1 ' &?- ' &=' -.@<-A' 0D&?@A' D<+1' &K1 ' = &>' '>1' &' '>1' '-' D1' ' 100'&-09 &' 1-H?' 1' &=' D1' 0<'A' < 1 09 <-A' D1>' &' D1< ' <-A' A1 1 >'-19 <0' '-' D1' 0<'A' < ? 10' <-A' A'-<-B10' =&@@ ' <CC1< 1 D ' KD'BD' < ? 10' <-A' A'-<-B10' D<+1' -& ' #11-' A?@ ' aH2 9 #1B<?01' D<' D1 ' D<' A&' B&- < ' &' D1' 0<'A' < ? 10' <-A' A'-<-B109 #1=& 1' D1' <'A' ?0 'B10' >< ' -& ' #1' '-A' 1A9 =& ' . 1< ' <'- 1-<-B10' '-' D'0 1D<@=' 0);' ? ' &+1 1' . -' & A' D1' , '- .9 K'@@'-.' &' 1LC1 9 0?BD' <'- 1-<-B109 D< D' & A<'@@1A' # ' D1' ? D& ' '<=& 10<'A ' D<' D1' 0<'A' ?0 'B10' 0D<@@ D<+1' &K1 ' # ' D1'0<>1' ? D& ' 9 <0' K1@@< ' D1' , '- ./0' ?' ' <0' D1' < '109 ' &' <K< A' F ' 0' &=' <BD>1-' <-A' "'0 100' <.<'-0 ' <@@ D1>9 KD'BD' = &>' D1-B1=& D' A&' D1' B&- < ' &=' D1' 0<'A' < ? 10' <-A' A'-<-B100' >8 D1' &?- '10' KD1 1' D1 ' D&@A' D1' ' 100'&-09 @' 1='1A' &' D1' D1 '==0' &=' D1' 0<>1' &?- ' 9 @1 ?=-<#@1' # =& 1' D1' 0<>1' ?0 'B10' & ' ` ?0 'B10P' =& ' D1' '>1' #1'-.' '-' D1' ' 100'&-0 G <-A' '=' D1' 0<' A' D1 '=1' 1'?>9 D<' D1 ' <.<'-0 ' KD&>' 0?BD' F ' 0' '00?1A9 D<+1' -& D'-.9 D1-' <' <C'<0' <-A' L'.1-A' 0D<@@ #1' <K< A1A' <.<'-0 ' D1>' '-' D1' <--1 ' <0' 0D<@@ #1' A&-1' <.<'-0 ' D1>' D<' #1' '-A'==1A' #1=& 1' ?0 'B10' &=' 1<B1' &=' 10C<0010' A&-1' K' D' ! & B1' <-A' >0' <.<'-0 ' D1' , '- ./0' 1<B1G <-A' '= D1 ' <CC1< ' `< 0P' <- ' &=' D1' 0<'A' F ' 09 D1' 0<'A' ?0 'B10' 0D<@@ D<+1' &K1 ' # ' ? D& ' ' <=& 10<'A' &' 1L<' ? 1' D >' &=' D1' < 1 0' <=& 10<'AG <-A' D1 ' KD&>' D1 ' ='-A' # ' 'L<'-'-< '&-9 D<' D<+1' A&-1' D1' B&- < ' &=' A'1' 0 'A' < ? 10' <-A' A'-<-B109 0D<@@ '-B? ' D1' <'-' B&>j C '01A' '-' '@1' 0<>1' < ? 10'=' 0)' D<' =1' &' 0< 9 D1' E'+1 ' <-' '0' <-A' D1' <a1 ' L@ i' <0' &= 1-' <0' D1 ' A&' D1' B&-j < 9 '-' D1' <--1 ' <-A' ! & >' <0' D1 ' T <.D' '=' D1 ' K1 1' # ' -H?10 ' A?@ ' #1=& 1' D1' 0<'A' ?0 'B10' B&-+' I 9 0&' D<' D1' 0<'A' < ? 10'<= A' A'-<-B10' 1L 1-A' D1>90P' <0' &' L<>'-< '&-9 &' '+1 '10' =& ' &' #1' .'+1-9 <.<'-0 ' D1' ! & >' &=' D1' 0<'A' < ? 10' D1 1&=' ><A1' #1=& 1' D'0' '>19 <= 1 ' D1' ! 1< ' &=' D '0 ><0' -1L ' B&>'-.' B' &j +'A1A' D<' D1' 0<'A' ` A'-<-B10' /P' 1L 1-A' <0 9 K1@@ `'-'0P' D1' &?- '10' &=' D10 1 ' <-A' <-B<0 1 ' # ' D1' L<>'-< '&-' <-A' &B100' <0' <=& 1' '0' 0<'A' &=' D1' ?0 'B1' &=' D10 1 ' & ' D'0' @'1? 1-<- ' D1 19 <0' # ' L<>'-< '&-' &=' D1' ?0j 'B10' &=' D1' &?- '&=' <-B<0 1 9 0&' &' #1' ><A1' <.<'-0 ' <@@ D1>' KD'BD' 0D<@@ A&' D1'B&- < '&=' D1' 0<'A' /')'S A'j -<-B10' '-' '>1' &' B&>1;' &+'A1A' <@0&9 D<' <@@ D1' < ? 10' <-A' A'-<-B10' #1=& 1' ><A1' <-A' -& ' 1C1<@1A9 &=' '+1 '10' &=' @& D0' # ' & A0' .'+1-' & ' &' #1' .'+1-' <.<'-0 ' D1' ! & >' &=' D1' 0<'A' < ? 109 0D<@@ 0 <-A' '-' D1' ' ! & B1G <-A' D<' D'0' < ? 1' 1L 1-A' -& ' <0' &' D1' L1B? '&-' &=' L<>'-< '&-' &' D1' ` < & ' <-A' D1 '==0' &=' &-A&-'\3P' =& ' D1' '>1' D<' D1 ' 0D<@@ #1' ==' B1 09

)! 1' ' '% ' 5 /' / ' '6' ' '' 0 & '!'G '6' 0 <-A' A'-<-B10' 'G '6 '!$ &E # /' A'-<-B1' =J I '6' 'H 0 10 < ? 10 <-A' '' 'G '6' W' D' '=0' &=' &-A&-9 <'& 0

1 ' C? B1&' <A' & A'-1' I ' 10 <#@'1' ?' <?= & ' 1' A1' B10 1' 01-' C@1>1-' H' &? \' '1@L' &>'00'& 0' <'1-' C&<' ' C? ' =1' ' & A'-1 ' I ' 1L1B? 1@ 10 < ?' 0' & A'-<-B10' I ' <? 0' <==<' \' 0&@&-B' @1==1=' ' I ' C C& 'A1\' &>'00'&-0' <+3- A' \ 1>' B&>1' & A'-1' 0&=' C' A'1010' 10 < ?' 0' =' ' \' 1-' 1>C0' A1\' -&##@10' C.1-' &? 0' -=1' @1' &'9 H' -?@@ D'+<@1 ' &?' <0B?-' <? 1' A1' >1'-A 1' 10 < 1' A& &' ' <0B?-' C11' A1\' A <C0' &?' A10' BD<C&-0' <0' <? 0' H' <' 010' >1-'<@L' I ' &=='B1 0' I ' D&>10' <CC '01\' A?-1' @1 ' &?' A1' @<? 19 0? ' C ' -1' A1' 0 ' A10 1' @1+1\' A1@ A&-&? ' I ' L@0 ' A1@ C-&? ' <' <-' A1' =&' \' H'@0' =<B1-' @1' B&- '19 1 ' B1@@? ' H' +&1 ' 0 1 ' < ' @<' >&= 11' A<' A' 1' C1#1' <C0' B1&' H'@0' 0&'1-' 1-' A?1>1-' B& +'A\9 1 ' H' ?0 'B10' A1\' <00'010' C-A 1' I ' ?0 'B10' A1' C<'0' 1-' BD10B?-' &?- 11' "1-.@1R 1' <'1-' C&<' ' A1' 1>C0' 1-' @1>C0' 1-' =&? '0108 0'&-0' A1-H?1 1 ' A1\' A' \' >< '1 0' I ' B0' &'1 ' I ' R>'-1 9 B&>1' 1-' @1\' A' \' 10 < ?' 0' I ' & A'-<-B10' C@1'-1>1-' < H''1 G @1<' H?1-L' 10 < ?' 0' I ' & A'-<-B10' <1' &?- ' > ' 10 1' A?1>1-' .< A1\' <' B<?01' H' 'B1'L' H" =1B1-' @1' B&-' '1' A10' A' \' 10 < ?' 0' I ' & A'-<-B10' A1 -' @1 ' A' \' ?0 'B10' -1' C&1-' 10 1' 1-A' 1\'C ' . <?-A10' ><'- 1-<-B10' 1-' 'B1 ' C '1' 1 ? \ ;' 1' 5(' @1' &" +&'@@<-' '1@ ><'- 8' -D' 1' &?0 1 ' <A' K=='-1' C' @<?=@& ' 1' 0<@0AB1' '@1 \' ?0 'B10' 0?'0A' \' <'1-' C&<' ' C' >10>1' @<?=@& ' 19 0 #'1-' <@' 0?' 1' A?' &" B&>1' A1@ C< '19 `A1' .< A1 'OP' # 'A=1' A1' < <BD' I ' A'0 1001' 1- 0' &? \' B1?L' H" A10&=1' 1-<+= ' =<B1-' @1' B&- '1' A1\' 10 < ?@ \' I ' & A'-<-B10' 0?'0A' \9 1-' H0' &?- 110' &?' '@0' <.-1-' &?' 0100'&-0' D 1 \' <0' '0j B&?- 0' A1' >10>10' @1\' &?- 110' 1 & -<#@1R' A1+0-' @1\' A' \' ?0 'B10' &?' @1\' ?0 'B10' C' @1' 1>C0' 10 1<-' \' 1-' @&?' 0100'&-0' @' 0" 1 & '1' 0&=' C' @1\' A' \' '0B - 0' 'B1?L' C0' H?1?L' @10' A' \' # '1=1' '001 &-' -1' &?-' '1- 9 <A&-H10' 0>1-' <.< A1\' 1-+/0' 1?L' <C'<0' I ' 1L'.1-A' < ' > I ' B&>1' M <' =<' ' 1- 0' 1?L' H" 0C-' 1-A' 1\' A1+D' ' ?0 'B10' A?' C<'L' A10' R0C<0' =<' ' C+1' =& B1' I ' < >10' 1-8' B&?- 1' @1' C 'L' -=1' @1' &'G 1 ' 0'@0' <CC.1-' <0' <0B?-0' A10' A' \' # '1=0' <'1-' @10' A' \' ?0 'B10' C&<' ' C' <?==& ' 1' 0?'0A=1' A1?L' 1L<>'-1' A1\' >< '1 0' 0?'0==' \9 I ' B1?]' H'@0' &+1-' C' 1L<>'-< '&-' H' &-' =<' \' @1' B&- < '1' A1\' A' \' 10 < ?' 0' I ' & A'-<-B10' 1-B&1 .1-' @<' C1'-1' 1-' @10' A' \' 10 < ?' 0' I ' & A'-<-B10' B& C = 1\9 B1 <00<+&=' @1' A&-&?' ' 8 I ' @1' C-&? ' L@0' <' <-' A1' =&' \' H'@0' =1B1-' @1' B&- '19 1-' ><51' I ' =& >1' B&>1' '@0' A' 0001-' <@0' 1-' =1?001-' C' 1-H?10 10' A?1>1-' A1 -' @1\' A' \' ?0 'B1 i' B&-+'1 \' @ '00'-' H' @10' A' \' 10 < ?' 0' I ' & A'-<-B10' 0& ' 1L0' 1-A1 &-' H0>' <' @1L<>'-<A&-' <0 + F ' A1C?'0' @1' =10 ' A1' &K1@@ C0BD&-' <+1' ' ' <A&-1 \' 1-B&?- 1' @<' =& >1' A1 ' 10 < ?' 0' A1+3-' B10' D1? 10' 1-' =1' \G ? +1?' H' @<' A 1' & A'-<-B1' 01' 1L 1-A1' 0'#'1 '1-'@10' &?- 110' A1' 10 1' I ' <-B<0 19 C' @1] <>'-<B'&-' I ' CB1 01' B&>1' A1+W- '10' A=' A1' @1' ?0 'B1' A1' 10 1' &?' 0&-' 1? 1- - ' '@@&1H109 B&>1' C' 1L<>'-< '&-' A1' @10' ?0 'B10' A1@ &?- 11' A1' <-B<0 1' 1-0" <==<' \9 1-B ?- 1' &? \' B1?L' H" =1 & ' @1' B&- = '1' A1\' A' \' 10 < '- \' I ' & A'-<-110' 1-' 1>C0' <+1-' ' ? +1?' <?L" H' &? \' 10 < ?' 0' I ' & A'-<-B10' A1+ -@ =1' \' I ' -'1- ' 1C1@@1\9 A1\' @'+1 110' A1\' A <C0' C' B?!' A&-1\' &?' <A&-1 \' 1-B&?- 1' @<8 =& >1' A1' >10>10' 10' 10 <j ?' 09 10 &'01- ' 1-' @&? '=& B1' I 1 ' H' B10 ' 10 < ?' ' -1' 1] 1-A1' > ' H<-' 0A' 1L11?A&-' A10' 1L<>'-<B'&-0' <0' '0B&?- 0' A1' &?-A 10' <'' 0' C ' @1' 1>C0' H'@0' 01- ' &=='B1 0'

\' A<.< A'1 ' = ' * 'ZK'' + ' '4:V)

! & ' D1' ? C&01' &=' 1L1B? ' - .' D1' < ? 10' * $ ' $ *%9' I B ' <.<'-0 ' ?-@<K=?@ ' 1 '10@ ?0 'B10' &=' D1' 1<B1@ I B ' >< 'C &j B11A' <.<'-0 ' \' ==1-A1 0' # ' <BD>1- 9 " '0 100@ ' <C'<0@ <-A' L'.1-A

D1' < ? 10' 1L 1-A1A' &' D1' &?- '10' &=' D10 1 ' I ' <-B<0 1

LB1C '&-' <0' &' D1' D1 '==0' &=' &-A&-9 < & 09

B(. ' 0 ' *' /# ; ?/-

-/‘!2 !#& ++@‘ .‘“ .’/!2 ".@‘ !‘B +2 . ./‘ . ’ !6!*“ .“2‘ . ’A 1’# ++!/‘ !1!‘ . !“2’ ’&2 ."/ &-!/‘;@‘.0“2 &/‘ ."/‘ !‘M&-*’R 8‘;@‘ 0 ."& @‘ ."!2 &/’ ’&-‘!’!"@ & @K4.".0* ’ -/‘ .7-‘.’ !‘6! +1’Y. ’ -*+ -/!‘’ #.11.-‘4 + -#!‘2 ++‘;!’7& ’#.11.-‘V!&* 2‘2! +!/’ -/‘ ##."/&-*‘ .’ !‘ -/ "/‘.’ !‘ %# !SO!"’0 .-‘ !‘#.11.-‘ .2 2‘. ’ !‘2 &/‘ & @’4.".0* ’ .“ .7-’ &-‘ !‘M!! &-*‘. ’ !‘ @.“ .-2 ;+!‘. ’ !‘2 1!-‘ 7 &# ’4 + -#!‘ -/‘#.11.-‘V!&* ’ ++‘ !‘ - ;&k -2‘. ’ !‘2 1!‘ & @’4.".0* ’ .“ .7-’ ’ ’!‘ -.’20# ’V!&* 2’ -/‘. !“ ’ ’!’& ’ !@‘ 7&++’ 1 @ "!!+@‘7!&* ’7& .0’ -@‘ &-*‘ @&-*-‘ E&-*‘ -!’!" !+!22‘. ’B."!&*-2‘ .“ !’!"@‘ " 0* ’7& &-‘ !‘ V!&* ’. ’%%‘+&’ ’B " &-*’ -/‘ .“ !’!"@‘ " 0* ’;!k 7&%’B."@‘3.0-/‘ -/‘ -‘ 0-/"!/‘3.0-/‘ -/‘ ’ .02 -/‘3.0-/’ ’3!--@‘ ’ !‘1.2-‘ 7 !"!.’ !‘V!&* 2‘2 ++‘;!‘1 &- &-!/’ -/‘ !‘ &#!“ + 7k 0++@‘7!&* &-*‘"!7 "/!!/’;@‘ !‘ &2#"! &.-‘. ’ !‘# &!’ !-‘. ’ !‘ & @’4.".0* ’ .“ .7-’ ##."/&-*‘ .’ &2‘ !-/ -#!‘ .’ &2‘2 &/‘402&-!22’;!‘ &’1."!’.“ +!22‘ -/‘ ’-.’ -‘;0@‘A "-‘. ’V..+’# ++!/‘PV..++!-‘ A 1’0-+!22‘ !‘V&+‘1 E!‘ +. ’ !“!. ’-.“02!‘V!&* ’ -.“ ! 20"!’-.“. !“ &-*‘&-‘ !‘ + #!‘. ’V!&* ’ .“ ! 20"!’ ’&2-.’2! +!/‘R 8‘ ##."/&-*‘ .’ !‘2 &/‘ -/ "/’-.“2!’ -@‘ &-*‘ .’ !‘2 1!‘;@‘ !‘V @‘. ’ Y #E&-*‘.“ &/&-*)!‘."&-‘ -@‘. !“ --!“ ’ &; &-#"! 2!‘ !‘ ! 20"!’.“ V!&* ’ .“ +!’ !‘4 + -#!‘ .’ ’!‘ &2‘- 0" ‘ .0"2!’0 .-‘ !‘B." !& 0"!’ -/‘31- +@‘ ."!2//’ -/‘ ’ !‘H &2/#!2‘. ’3! #!’ @."2’4 &k +& 2’ -/‘ !7 "/2‘. ’B" -# &2!2’ ’!‘3.7!“;@‘ 0/&.L‘ "&@‘ ."!2 &/‘ .’!% 1&-!‘ !‘ "!2 22!"2‘&-‘ &2‘ 2!’ -/‘ .’&-SO&"!‘&-‘!2 !#& ‘. ’R(8‘ !-/!"2‘ * &-2’ &2‘ "/&- -#!’ -/‘.’/.’ %!#0&.-‘. ’ !1’ ’;!‘ .0-/‘ 0+@‘;@‘ -SO!2 2’.“;@‘ % &1- &.-‘.’;!‘1 /!‘;@‘ !‘ 2 &/‘ 0/*!2‘.“ &#!"2‘&-‘ &2‘ 2!’&-‘ !‘ --!“ 2‘ ."!‘ &2‘2 &/’ -/‘ ’ &2‘ "/&- -#!‘;!‘ .+/!-‘ -/‘ .;2!"’!/‘".1‘ !‘B! 2’S’ 2!“-!%’!-20&-*‘.“!’!"’ -/‘ ’!’!"@‘ &@’0 .-‘3 &-‘.’ <’3.0-/2’!’!"@ 4.".0* ’0 .-‘3 &-‘.’ -‘ 0-/"!/‘ &++&-*2’ -/‘!’!"@ .7-‘7 !"!‘ .-2 ;+!‘&2’0 .-‘3 &-‘. ’B." @‘ &+k +&-*2’ ’!‘ ’#.11.-‘4 + -#!’7& ’V]f 2‘ ##."/&-*‘ .’ !‘2 &/‘ -/ "/’7& &-‘ 7.’ .- 2‘ !“ 3".#+ k 1 &.-‘1 /!‘. ’ &2‘ "/&- -#!‘H‘7 &# ’<31& +@)I‘2 M‘ ;!‘+!’&!/‘*‘ ! 2!‘.’Y.0“ ."/‘ !‘M&-*’2‘. !-‘2‘ !@‘2 ++‘;!‘Y 0+@‘UI’ !“ !‘ &/‘3".#+ 1 &.- ’B." 210# ’2‘.0“ .’!"!&*-‘ ."/‘ !‘M&-*’ ’ !‘*"&!’.02‘ .1 + &-‘.’ &1’1 /!‘;@‘ !‘ .11. ’ .’Y &2‘)I‘6!+1‘.’ -*+ -/’1‘Y !‘0++‘’3 "+E1!-H ’ #.-#!&’!/’ ’ /&’!"2‘*"! ’ &2# &! ’ -/‘20; +!‘ B!+.-&!2‘ -/‘6.;;!"&!2‘ .7‘+ !‘ ’!‘;!!-‘/.-!‘&-‘ !‘ .7-‘.’Y -!;"&/*!‘`I‘ -/‘&-‘. !“ 6 #!2‘&-‘ !‘ Y .0-@‘.’M!- !‘ -/‘ 22!%’ -/‘&-‘ !“ 3+ #!2‘Y&-‘ !‘6! +1!‘.’ <+ -/’;@‘3!. +!‘ !-/!"2‘0-E-.7-’ 7 &# ’1 E!‘/&’!"2‘4&++2’/&"! +!/‘.’/&’!"2‘3!. +!‘.’ !‘ 2 1!‘Y .7-2 [!‘ .0-&!2’ -/‘. !“ 3+ #!2‘Y. ’ !‘ 6! +1!‘.’ -*+ -/’#.11 -/&-*‘ !1‘.’ 0’/&’!"2‘*"! ’ 012‘.’ .-!@&-’#!" &-3+ #!2’7 !"!‘ !‘2 &/‘ !-/!"2‘ 1&* ’Y+&* +@[!‘# ""@‘ !‘2 1!‘ 7@’7& .0’;!&-*‘ E!-‘.“ !"#!&’!/’#!" &@&-*‘&-‘ !‘2 &/‘6&++2’ ’&’ !@‘ 0’ .’ !‘2 1!‘ .-!@‘&-‘ !‘3+ #!2‘;@‘ !‘2 &/‘4&++2‘ 22&*-!/‘ ’’#!" &-‘ @’ ’ !‘2 &/‘ !-/!"2‘7.0+/‘ /.’ !‘*"! !2’ -/’1.2’.0" *!.02‘ !-*! -#!‘ ’ !@‘ 1&* ’.’ ++‘ !1‘ ’7.0+/‘-.’Y2!)I‘20# ’ 012‘ !"!D

! ’ !2<+1!-’ ’ /!2 "0!“+’ 0%! !!‘ /!‘+!2‘"!*" .0"2‘ /0‘ &+!‘ !++!2‘A!1# . !"2’."/&-!j‘!2’ ’- !‘ /&’ 2‘ +!‘6.&‘C‘ ’0+/"& !‘20&2/ !’S‘!-’# !2#0-!‘ &!!‘40"* ’ C‘ &++!‘ /0‘".& +1!‘2.+’0-!‘#;!‘ ; + -#!’.’!# .&21‘2 !-2! +!j‘C‘ ##."/ - j‘ ’+!2 -/ "/‘/!‘+!2# !S!"’20“+’ #.!‘#.2 *!‘/0‘/& !‘ & !‘40"* ’.0‘ &++!’-’+’* "/!/!+‘ &“.0‘ .-2 ;+!2‘/&#!++‘ 2‘SO!0%‘; 0-#!2‘C‘#.!2‘ .&21‘2 .0 j‘+!2‘!- & - j‘/!‘1!21!‘+’ & !!‘40"* ’.-‘ &++!‘S& -.0-’&! # ! 2!2’ !‘ 0,2‘S.0-’ &+2‘’.&++!-’ 0&22!-’ " 0-# !1!-’ .&2!“2 -j‘"&!-‘!-’ +!“=)&*L‘ - 0-’-& - 1!&-2‘/!j‘."!&-2‘ 0“ # !2#0-!‘"!&’/!/!&-j‘ +!‘ .&2‘/!‘%+M‘H‘S)‘C‘ ’# !2#0-’"!&’ !- "!‘%+’!’ ’&&’ H‘.;‘C‘ ’# !2#0-!‘ "!&# !- "!‘ ’!’ ’&’H‘/’ ’+!’ +0&2= /. ’+!j‘ .&21‘2,".-’& &- !-0j‘C‘+. &#!“+.& +L‘ 1!-’ .&2 -’"!* "/!j‘ ’+’ &2#"!#&.’/!‘2‘ &! 2‘/E&/‘ & !!‘40"* ’.-‘ &++!‘2.+.-# 2’!- -/ -#!‘ ’+’ / !‘ .##0 &.-‘2. ‘NC &0&2‘.-‘1 &-20‘ !’<’-- ’ .!‘ # !‘ &+!‘/!‘+ &-!‘ !++!‘V .++!-@!1’ &+‘ -!’ ’.!’!-’ !&“ /" ’-.’02!‘ .&2‘-!‘11 0"!‘-!‘ 0"!‘ &&.2!‘!-’+&!0‘/!‘ .&2‘ .0‘ 1!20"!‘S‘ -!‘2.&’!-2!+!j‘C‘ ##."/ -’ ’+!‘ /&’!2 -/ "/’-!‘1! !‘ 2#&1’# .2!‘ ’ &#!+&‘ ’’.&!‘/!‘ !-/0"!‘ .0‘ #.0 0"!’ 0!-‘ #0-‘ 0,’1 ‘S‘ 0&22!‘ !-#"!#!“+’1! "!‘ .0‘+!‘ .&2’.0‘!1 !/&!“+’; + 0-#!‘ ’ .&“2.-‘- 0"!&’#.0"2‘20“+!2‘ ;" "&&0"!‘C‘ !&-!‘ /!20&2/&)‘ ’S‘+!2‘ 02&#!2‘/!‘B!!2‘ &" ’4 &++&2‘ C‘ !-! # +% &!2‘ " - # &2! ’ &!-’ . &“ ’ 09."&!‘ 20+2/ !‘ /!% 1&-!“+!j‘,2 22.0"2‘ .“ #!.’ # 2’C‘ ’ ! SO!"!“ !-’! 2<’/!‘ .0 j‘,2 22.0"2‘]M.0- "!‘ #!2’ ."/&- -#!’C‘ ’ "&“ !%!#0&.-‘ /&#!0% S& 2.0-’ ". ’!j‘ /!< "’ ’ !-SO!2 !2‘ .0‘ ’!% 11 &.-‘ & &“ ’ Sj‘ /& j‘ 0*!2‘ .0‘ &#!“ !-’ #!.’# 2‘!-’1 ’ #.1!‘ /!2O&2‘ !2’/&’ ’S‘#!2 !‘ ." &- -# ’2.&’ !-0j‘C‘ .;2!"@!j‘ /!‘+!‘B! ’ /!‘3 2 f‘ 2# &-‘!-20 -’ 0“ .0 j‘H.0"2L‘ ’S‘# !2#0-’ &!!‘20 L !&-!‘/!‘%L&+’# !2#0-!‘4 0"<’ 20“ !&-!‘/!‘ ’2‘C‘# !2#0-!‘ &++!‘.0‘0-’ .-!2 ;+!‘ !2’ ’ !&-!‘ &!‘%+’ ’ &‘0-!‘#c!‘; E0-#!‘.’!# .&2!W ##."/ -<’ ’+!‘/&’!2 -/ "/’/!/!&-j‘/!0%‘1.&2‘ <’ ’ 1 &.-‘ "&!‘/!‘#!2 !‘ " &-2 #!=‘+!2‘S0!++!2‘ & !2‘ c".-’+!’!+2‘ /‘.!‘2‘/!‘6.& ’ -’/!‘.& j‘S&+2‘,".-’ ".’!j‘/! ! &2‘/! 0&2‘+’ #+ 1 #&.-‘/!22O&2‘/ d!

1>’ CB1&‘H‘ -=1‘ 2‘@1‘ &’9<’@<‘ . 1+&?01‘B&>C‘ ’- ’ <‘@? ’=<’’C‘@10‘ &?10‘A1‘0&-‘ &’<@>1‘1-’B10’C@1>1-‘9 <A‘ 1- 1-A?‘H‘A‘1010‘ .0?-A10‘ >10BD’1=0‘ I’ 0?# ’1@L‘ =1@&-’10‘&?‘ &D’ ’10‘& 1‘ < A1‘0&- ’<+1-?\‘I’= ? \9 1-’ + ’ ‘@@1‘ A1‘ <- 1# ’..1‘ I’<’@@&? 0‘1-’@1\’ &> 110‘A1‘ <- 1# ’..1‘ I’ 001L‘C‘1-’<?,0‘@’1?L‘ "1-.@1R 19‘?’ .1-0‘><F10&? 0‘A101&-?\9‘H?1?L‘=&?-’A 10‘#’@@10‘ A‘ 1=@\’<0‘A‘ 010‘ .1- 0‘A1‘>10>10‘@10‘ @ 1‘ &?- 110‘I’ <?,0‘@’1?L‘ "< .@1,+19‘@&?’B&><?-A<-’ A1‘ >1 ’ A‘1010‘ .0?-A10‘0&>10‘A< .1- 1-’ I ’-0‘@’1?LG‘&?‘@1\’ A‘ \’ >1=1‘0&? 0‘01‘C &-’ @1.’1 -1-’1>C& 1’ <-< 10& 1‘C ’01\’&?‘<C11?L9‘M ’=’<- \’1-’@1\’A‘ \’#’@@10‘H‘ ’@0‘ -1‘ >1 1-’@1\’ A1-’1 0‘1-’@10‘@’1?L‘C‘ ’1\’A‘ \’#’@’10‘ <00’.-1\’<0‘I 1’-‘ &? 9‘H‘@1\’A‘ \’ >1=<’=&? 0‘=1 &?-’@1‘ C@?’0‘.0?-A1‘I’&? <.1&?0‘+1-.1<H-B1‘H’@0‘C&’1-’<‘ &? \’ ’B1?L‘H“ -1‘+&?A <’’ > ’ ’1#B‘0&>10‘=@@&1H10‘’D1 1’0

? / ,7’%+07’ &,&1-0’#$6’ & / $’ 0#.-’ 0#2!’#(&’@ ’&$’ #.#$(!’ #$6’A !+-0

&’8#$’ 0#.-’ 017’A&&..!$’ B#,$C1$.! ’ 0&’ ’#0!’ %.&00’$&,’ ’!# 1,!’$&,’ / !+-0’E10 #((&,6+$-’0&’ 0!’ 0#$6#,6

;!$#.0+!’ ’ ,!(&2!,#E.!’ E!3&,!’ F1 0+(!’&3’ 0!’;!#(!

;!$#.07’&$’ %+07’&, &/$’ $&.0 0#2+$-’ (&’’&$’ #.#$(!’#$6’ A!+-0

) 1,$+$-’&3’ &1 ! 0’E7’ ;!, &$ ’ !$6@ +$-’ +.. ’0&’ #:: &+$0’ 8&$!7’0&’E!’ .#+6’+$’# (!,0#+$’;#(!0’ #6!’ +-0’ ,!# &$

’G ’ ’O&-7-’&,’H!2 ,7$-’ ‘ %‘ ’2’<=6> &2‘ @ (6’ 0=& -A1A1=1=@’=’m = =\ Z’1U+’ 4A) ’O+’ # $’ ’ 0’ 9 & ’ ;’.$“ /’ ‘. M %1‘ !$O’ ’ “*1

' C? B1&' H' A1# ' 0&>10 -&?- ' C<0 I 0 1 h 0 1= 'B=' 0 h' @'1?L' 0&&-B' @1' C? C& ' A1' >10>10 @10 #'@@10 C@?0&? 0 >1<0&-0 #'1-0 I ' BD< 1?L' A1' A'1010 C0&-10 &? ' 10 11' =1@&-&?0 1- ' I ' <' 1 &?01> ' <?' <C 1# '..1' I ' >@@&= 0 1-' @10 B&?- 110 ' @'1 'L' 0?'0A' \ < B\' I ' &? 8 &? >1- ' <-'1- 1\ C&?- ' @1' C&1C@1' A1' @10 ' 1' &?- j 110 I ' <?R0 @'1?L' 0?'0A' \' U&?= ' . '-A1>1- ' 1>8 C&1d01\' 1 1-' C&'- ' A10 1' ='-<@= '1- ' A10 ?' \ >10-@1' - 1' @1' &'' +&' <- ' 1-' B1&' B<0 C? +&'1 ' A1' '1>1A'1' <A' & A'-11' C' <?^& ' 1' AU B10 ' C@1>1C 8 ' &? \' A1# ' < 0? 10 A1\' >1<0&-0 A1' H?'H ' C0&-1' 0&'1- ' <A ?..1\' D<?@ '10&- ' Q ' H' B10 1' KA' -<-B1' 01L 1 I A1' <?<A#'1-' <' '1@L' < '?810 =1' \' C?'0 @1' C '=" &? ' A?' 1.-1' A1' '-1' 2' @1' &'' <-H' 1-' B1<0 B&>1' <0 < 0? 10 <'=<' \' 1-' 1>C0 <+1-' ;' <@+<-' &? \' =&' \' <0 ? \'= 0' I ' <-R0 C0&-10 @&? ' @'# 110 ' # <?-BD'010 0'B&>1' <A' 10 1' Q ' ' ?01' A1+0-' B10 D1? 10 1-' B<0 A1' =& =1' ? 1' A1' =1@&-'1

! 1' #. 1 !' +! j' !+!###&.- ' / ! j' & ' +!"Z / !Z .0- ! !Z !2+0 j' ' ' ! -&'' Z +! 1 ! - Z / 0 6 .& ! -' +02. 0"Z .0- ! !Z ! -*+! L!' ." ! " "/ !' .0- ' !2 ! ' &/ j' ' ". ' *)0-/ !' ' !%#!22&' !' -. 1 ;"!' / ! j' *! - Z / ! 1 " - j' / ! &-j' 1!21 !Z +!Z .0- !2' / .0- ' +' *"/-/"!' &!' !2 .& ' ' *! - j' 2&-. -' / !' ! & ' .&'' .0' / !' -0 ' ' +0' / .0- ' # ! #0-' ! -/ !' / ' .&'' Y' .&#! ' !' !S1 ' +! - ' S0 - ' ' &!+%' !+!###&.-Z &"!' .' !' +!Z +0&Z ' + - j' # & ' +!"Z .0' !2S0&!"Z / ! 10"" - j' / !&-Z 1!21 !Z +!Z .0- !Z -' / .0- ' .1&##&/ !Z -. !Z ; $&!Z " / ! '& .-Z ! - "! +!Z *! - &+!Z ' 0 "!Z *! - j' / !' 1!21 !Z +!Z .0- !!Z '<2! 1 ;+ ;+! 1 ! /&!' -!' 2.&' ' !0' !-' !! ! - !0' ! ' K Z +!' 6.@' #. -2&/ !" - ' +!Z -&22!Z / ' !0' # ."/ ! -!' ' 0C."& !' / !' #!2 ' +! 1 ! - ' S' +!Z &' +!"Z / !Z .0- !Z / !&-Z +!' 6.& +1 ! ' !-*+!$"! ' ' !2+&!"2 ' ' .&&'' ' +!Z +!".!- j' !-' KZ !-&"2 ' 2.&! - ' !2+0 j' ! -' # !2#0-' .0- !' ' *! - j' / ! 1 (- j' # "!#! - j' ! -' &#!++!2 ' / .0- ' # !2#0-' &' " -E' !-' ' +! ' ' +0' / !' %+' 2 ' -' +' 1!&-Z .0 "!' +!Z "! "&2 !2= # S' #!0% S' c". - ' ! -2@ !2+0 j' 2.&! - ' / ! 1 (- j' # "!#! - j' / !&-Z 1!21 !Z +!Z .0- !2= ' #!0% S& .0- ' +!' *"!&-/"!' - . 1 ;"!' / !' @#!0+% S& .&! - ' !% ! -/"!' ' -' %+' 2 ' # .0 "!' #. 1 !' / !2O&Z !2 ' / & ' 2.&! - ' "! .0"- ! j' ' +!Z &2#.- j' # +!Z / & j' !2+&2. Z ! - ' + &"!2= # !& ' # !2#0-' &#! - ' 4 ! -*+! "!' . &'' ' 0 ;"& !' 2O&2/ & !' / !% 1&- !'' 20'' +!Z 2!&- j' '[-*!+&!Z # !2#0-' &!+' !+&2.0"' #. 1 !; -' &+ .! ' !% ! -/"!' ' -' 0 ' 2& 2#0-' &2#.0- ' "! . -!' &' +!"Z 0'' '!-&'' 0' E&1 ! - ' 0' #.-)"&!' / !' @#!2 ' ."/&- 0-#! ' S' +!Z 02 &#!Z / !Z 22&2!Z !-' +.0'' 2!22&.-Z / !Z 22&2!Z &!- ' . '' ' 0 +."& !' 2O&2/ & !' / !' #!.' !-S0!"!"= ' 2& ' &-S0!2 ' #!.' 2.&' ". ' !' / !@[-' 1!21 !Z +!Z 02 &#!2 ' C' +!' &2#.0- ' / !' #!.' /0!1!-' !&- ' S /.-S Z +!' / & ' 0 &2#.0- ' !-#.0"*!' + ' !&-!' / !' ' +& ' &!"Z ' -"!' e(+!' 6 .@= ' 0%& S&' & ' &1 "&2.-!1!-' ' 0-' -' 2 0-j' !2 "!' +!22!j' 0' ; &+&!' .0' 1 &- "&2!= ' S' +!Z &' +!"Z 0 +!' +!1!-' 0' #.- "&!' + ' / & !' ." / &- -#!' "! . -!j' / !- ' +.0'' * *!2' 30"' !0' .0 .& j' S' #!+!+0@' S& -!' .!' !% !-/"!' %+2 ' -' #. 1 !' / !2O&Z !2 ' / & ' -!' 2.&' !-

' - 1 @' -1A' &-' D1' &@@

-/' ." ;!# 02!' ' 20# ' 01Z ' !' -. ' ;!!-' 0 ' &-' /&' !"Z + #!2' ##."/&-*' .' !' 30" ." ' . ' !' 2 1!' 4&+2' 1 -@' .02!Z -/' b../Z -/' !+Z . ' /&' !"Z 3!"2. -Z ' !' ;!!-' !+.-&.02+@' -/' " & ." .02+@' ' Y - !;"&/*! !' -/' !+2!7 !"!' &-' !' .0- &!Z -/' 3+ #!Z ."!2 &/' ;0"-' -/' 0 !"+@' /!2 ".@!/' 7 !"!k ;@' !' 3!. +!' Y -/' !' .7-2 5' .0- &!2' -/' . !'' 3+ #!Z ."!2 &/' ;!' *"! +@' &1 .'!"&2 !/' -/' &-' 3.&-' .' ;!' &- ++@' /!2 ".@!/= !' 2 1!' .0'' .'!"!&*-' 1/' !' M&-*' 7&++&-*' &-' &Z 2!' .' ". '&/!' 6!k 1!/@' ' ."/ &-!/' ;@' 0 ."& @' .' &Z 3 "+& 1!- ' ++' 20# ' 40"1-*Z . ' .02!Z . ' -@' 3!"2. -' 2 ++' ;!' H0/*!/' &* ' "! 2. -' -/' ' &Z "/&- -#!' !% !-/' Z 7!+' Y&-(!' 20# ' 40"-&-*Z 1 /!' !'' !' B&"2' @' . ' !' 6!&*-' . ' .0'' .'!"!&*-' ."/' !' M&-*' &++' &Z &1!' Z .' 40"-&-*Z .' ;!' 1 /!' &-' &!' .' #. 1 !' '&-*' 7 @Z .' ++' ."/Z 1/' . !'' 3!"2. -Z /'' &;!" &!Z -/' B" -# &2!Z Z ' ;!!-' /. -!' -/' 02!/' ;! ."!' ; !' &1!' &-' # 2!' . 'B." / 0"!' . 'B!+. -@ ' V !"! Z !' +!9&. -Z . 'M-&* Z . ' &"!Z < RQQ8 .' #. 1!' .' !'3 "+& 1!- Z . 'Y. 0'' ."/!' !' V -*' E-&* Z . ' &-' 1 -@' .0-&!Z . ' Y' !' 6! +1' . !' -*+ -/' '!' !' 2 V 2 % O' . ' +'' 7 ' '%' & 4 '' 7 ;' P ' ;' - ' +' ! + - ' . ' F' ' '#B!#, -/' !%#!27!' 01;!'' . ' 3!. +!' /7!++&-*' 7& &-' !' B'!! .+/ 2 1!' .0-&!Z Y. ' !' 6! +1' . -*+ -/!' . ' !' 7 &# ' 10'A1- 1.2 " 7 Z Y. (!' 3!. +!' . '21 && 0;2 -#!' Y' -/U! . ' -. ' +0!' 7 !"!. ' !' !"@' . ' !1' "! !-/!/' .&#! !SO&' +!- ' Z .' 20# ' +! &.-Z .' ;!' 1 /!' 7& ' ! 1.2 7." @'M-&* Z -/' SO&"!Z /7!++&-*' 7& &&'' ! 2 1!' .0-&!2= 7 !"!;@ -2+ 0* !"2' 6&. 2' 4 !"&!2= -/' P %.' 1.-*' !' b!- +!1!-' -/' . !'' 3!. +! . ' !' 2 1!' .0-&!2' 2 ++' '!"@' +&E!+@' "&2!' -/' ;! 0-+!2Z #. -' !-&!-' Y -/' /0!!' 6!1!/@' ;!' ".'&/!/' &- &Z 4! + 0 0'' ."/' !' M&-*' #. -2&/!"&-*' $ ' 3"!L ?00109 ' ".'&/!/' Y."/&0-!/' -/' 2 ;+&2;!/ (!' ;@ 0 ."& @' . ' &Z "!2!-' 3 "+& 1!- ' ' !' M1* 2 . ' !' &"!Z .' ;!' # .2!-' 7& &-' !' 2 1!' 6! +1' . -*+ -/' .' #. 1!' .' !' 3 "+& 1!- Z Y. ' .0'' ."/' ! M&-*!' !"! !'' .' ;!' .+/!-' 2 ++' ;!' # .2!-' &-' !' !"@ .0- @' Y. ' !' 6! +1' . ' -*+ -/!' ;@ 3!. +!' /7!++&-* -/' "!2&/!-' &-' !' 2 1!' Y .0- &!2 !' 7 !"!. ' !' !"@' . ' !1' 2 ++' '!' GNGG' ^ -/' Q' !-!1!-' + ' ! +0!' . 'B." @' &++&-*Z ;@' !' A! '' ' !'+! 2' ;. ' !' ++ "*!2= &-/' ' !@' 7 &# ' 2 ++' ;!' 2. ' # .2!-' 2 ++' 0!' J $+-0 ;!' /7!++&-*' -/' "!2&/!-' 7& &-' !' 2 1!' .&1 &!2= 2 ++ -/' N 0# ' 72 ' !' !' *"! !2' 01;!'' . ' !1' 1 @' !% !-/' B." @' &++&-*Z ;@' !' A! '' ' -/' ;. ' !' Z ?H#+&$ ' E7' ."!' &2' 2 &/' 2 ' ;!' "! 0"-!/' ;@' !' !"& Z . ' !' !"@ .0- @' M-&* Z ." ' !' 3 "+& 1!- ' ;@' -/!- 0"!Z ! +!/' ;! 7&%' !' 2</' !"& Z -/' !' 2 &/' ..2!"Z 2. ' .' ;!' 1 /!= -/' !' !"@' !"& ' Y. ' !' 6! +1!' . ' 2 !"& Z -*+ -/' 2 ++' '!' 3. 7!"' ;@' !' 2 &/' 0 ."& @' .' !% L' !1 .7!< 1&-!' 0 .-' !' H (8' ' -*!+&2 Z !' !"@' 20# ' . .2!"' .7' 10# ' !' 1 @' !% !-/' ;@' !' A! '' D -/' &' -@' !"& ' #!O' # ' &' '"! 0"-' M-&* Z .' #. 1!' .' !' 3 "+& 1!- ' #. - " "@' .' Y !' 2 &/'(!' "/&- -#!' 28' !' 02 &#!Z . ' 22&2!Z &-' !&'' + !' ' #7' !2 !-Z . ' 2 2!Z ++' '!' 3. 7!'' ;@' !' 0 ."& @' ."!2 &/' !"!. ' .' &-S0&"!= -/' &' ;@' -S0!2' !' 2 1!' !1,$ ' ;!.0-/' ;! ."!' !' RF8' 02 &#!2' 1/' !' !"& ' !"!. ';!' ;!$#.7'&$' /0+@' &- !/' ' !-' !' 2 &/ !"& '2 ++' &-#0'' !' 3 &-' . ' -' 0-/"!/' 3.0-/2' .' ;!' &/' .' .0'' ."/' !' M&-*' (# !3&3' 1$61!' -/' +2.' ' !' '!' 1 "&2.-1!-' ;@' ' A! '' 7 & .0' ;!&-*'+!' .' 4 &' ." &- "&2!= -/' ' !' M-&* Z .'' !' 3 "+& 1!-' "! 0"-!/' #. - " "@' .' !' 2 &/' !/&- -#!' 2 ++' +.2!' !&'' V *!2' 3". '&/!/' +7 @2' ' !' 7 &# '# --.' !% !-/' B." @' &++&&<Z ;@' A! '' Z / !' &Z 220/' 2 ++' &-) #, ' < '$ ' G 7 ' L' . 0 BD&01-' @= ' -' ' 0# ' = ' '6' ' #' # #' ' .+@' .' < @ 5 L ' G ' 5' F' 2 1!' " ' ' 5

V "& 2' . '
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!' !"% '
2 +' -. &#!'
&2' ^

' !' 0 !' '
+ ' #' '
"!2 ! &- '
V *!2' . '
; .0"!"2'
C# #. - 10! /

W
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!' 0 !'
J' 6 # '5'
* &-2'
B."#&;+!'
- "&!2=

! !C2' . '
' 0 !=

-&' K'01' #1' D&&01 ' &=' D1' , - ' . D 0' =& ' D1' < @'<>1- G
<-A' D<' '-' 1+1 ' F ' ' D<' 0D<@@ D1 1<= 1 ' .&' =& D'
&' D1' D1 '=:0' &' BD&&01' , - ' . D 0' =& ' D1' < @'<>1- 9
1- '&-' #1' ><A1' &=' D1' 0<'A' A'-<-B10

9 F D1 1<0' '-' D1' @<0 ' < @'<>1- ' <' .&&A' <-A'
-& <#@1' < ? 1')' K<0' & A<'-1A' &=' <#&? 1 09' 1 j
+<- 09' '='B1 09' <-A' F & a>1-9' D&K' >?BD' D1 ' <-A'
1+1 '&=' D1>'0D&?@A' <a1'# ' D1' 1< 9' <@=' 1< 9' " < 9'
& ' F 11a9' <-A' &=' & D1 ' D'- . 0' B&>C '01A' '-' D1' 0<>1'
< ? 1'<-A' A'-<-B19' KD'BD' -&K' #1' 1LC' 1A9' #1B<?01'
D<' D1 ' K1 1' -&' & A<'-1A' &' 1-A? 1' #? ' &' D1' -1L '
< @'<>1- ' D1-' <= 1 ' &' #1' D&@A1-G ? ' &+1 1'. -'
& A' D1' , '- .'9 B&-0'A1 '-.' D<' D1' 0<'A' < ? 1'<-A' j
A'-<-B1' K<0' C - ' & D1 ' > 1WP' ><A1' =& ' D1' =1<@' <-A'
B& ->&-' &=' '&=' D1' 1<@>'&=' -.@<-A9' <-A' D<' D1 '
0DC?@A' #1' >?BD' C &=' <#@1' &' D1' 0<>1' 1<@>9' '=' D1 '
>'.D ' 1-A? 1' <-A' #1'&#01 +1A9' D< D' & A<'-1A'# ' ? D&j
' '&=' D'0' < @'<>1- 9' D<' D1' 0<'A' < ? 1'<-A' A'j
-<-B1'#1' D&@A1-'<-A' a1C 9' <-A' C? ' '-' A?1' L1B? '&-' '@@
D1' , '- .' D< D' & D1 K'01' A1B@< 1A' D'0' F '@@ '-' D1' =&'9'
< @'<>1-

9 F D1 1<0' # ' D1' `-&#@1P' , '- .' 'BD< A' @< 1'
, '- .' &=' -.@<-A9' <= 1 ' D1' &-H?10 9 D1' 1B&-A9' <' D=0'
< @'<>1- 'D&@A1-' <' F 10 >'-0 1 ' D1' & &K' <= &' @@'
&?@09' D1' !'= 11- D' 1< ' &=' D'0' A . -9' <>&-.0 ' & D1 '
D'-.0 ' 'K<0' & A<'-1A' <-A' 10 <#@'0D1A' D<' D1' 10'
<-A' A'-<-B10' ><A19' <-A' -&' 1C1<@1A9' &=' D1>' D<'
><a1' - '10' K' D' 0 &-.' <-A' '-' &' <-A0' & ' 1-1>1- 09'
' & D1 ' &00100'&-0' KD< 0&1+1 9' <-A' D1>' D&@A8' K' D'
! & B1 9' <-A' /)' &=' D1>' D<' ><a1' -0? 1B '&-09' '& 09'
&? 09' 'A'-.09' `<-A'VP' 001>#@'109' '-' "'0 ? #<-B1' &='
D1' 1<B1 9' & ' &=' D1' B& > >&-' <K9' & ' '-' == < ' &=' D1'
1&C@1 9' 0D&?@A' D1' D&@A1-' <-A' =?@@ ' 1L1B? 1A' .' -A'
>& 1&+1 ' ' ' '0' & A<'-1A'# ' D1' 0<>1' < ? 1 9' D<' < ' <@@
' >10' D<' 0?BD' =& B'#@1' - '10' #1' ><A19' <-A' &>C@<'-'
D1 1&=' B&>1' &' D1' ?0 'B10' &=' 1<B19' ' <-' &=' D1>9'
D<' D1' 0<>1' ?0 'B10' & ' ?0 'B1' 0D<@@ <a1' D1' 1 ' &='
D1' &?- 9' <-A' 0D<@@ .&9' & ' &-1' &=' D1>' 0D<@@ .&9' &'
D1' = <B1' KD1 1' 0?BD' !& B ''0' >< A1C <DA' '=' D1 ' '-' A9' & '
D1' ='-A1 D9' <- ' D&@A'-.' 0?BD' @<B1' =& B'#@ 9' <= 1 ' 0?BD'
- ' ><A19' D1 ' 0D&?=A' #1' <a1-' <-A' C? ' '-' D1' -1L '
E<&@9' D1 1' &' 1><'-'B&-+'B ' # ' D1' 1B& A' &=' D1' 0<>1'
?0 'B10' & ' ?0AB19 ?- '@ D1 ' D<+1' ><A1' ! ' -1' <-A' <-j
0&>' &' D1' , '- .'" <-A' D<' <@ ' D1' 1&C@1' 1=' D1' C - 9'
<0' K1@@ D1 '=:0' <0' & D1 9' 0D<@@ #1' < 1@'A' -.' &' D1' 0<'A'
?0 'B10' <-A' &' <00'0' D1>' &' < 10 ' 0?BD' <@1= 'B & 09'
?C&-' <'-'&=' >C '0&->1- 9' <-A' &' ><a1' ! ' -1' <-A' <-j
0&>' &' D1' , '- .G' -A' @ < ' '-' D1' 0<>1' <- -1 ' #1'
A&-1' &=' D1>' D<' ><a1'=& H'#@1' - '10' - &' 1-1='B10' & '
=='B10' &=' &@ ' D? BD' G <0' '-' D1' 0<>1' < ? 1' '0' B&-j
<'-1A' >& 1' < ' @< .1' ;' -A' =& ' D<' D1' 0<'A' < ? 1'
A& D' -& ' 1L 1-A' &' - '10' `'- P' 1-1>1- 0' '-' C1<B1<#@1'
<- -1 9' <-A' <= 1 ' D&@A1-' K' D' ! & B1 9' -& ' '=' D1' 1 0&-0'
KD'BD' 1- 1 'K' D' ! & B1' '- &' <-A0' `<- AOP' 1-1@-1- 09'
#1' 1>&+1A' <-A' +&'A1A' #1=& 1' D1' B& >'-.' &=' D1' 0<'A'
@?0 'B10' & ' ?0 'B1 9' <0' #1=& 1 9' -& ' <- ' <'-' & A<'-1A' '='
D1' D1 '=' A&' -& ' &#1 ' D1' &>><-A>1- 0' <-A' 1j
B1C 0' &=' D1' 0<'A' ?0 'B10' =& ' &' 1L1B? 1' D1' 0<'A' A'j
-<-B19' ><- 'K &-.=?@<-A' =& B'#@1' - '10' #1' A<'@ ' &<A1'
`'-OP' <-A0' <-A' 1-1>1- 0' # ' 0?BD' !' D<+1' -&9 '. D G'
<-A' <@0&' A'+1 0' E'= 09' !1&==>1- 09' <-A' "'0B&- '-?<-B10'
0&>1 '>10' ><A1' &' & A09' <-A' & D1 'C?' <- 1 0&-09' <-A'
L & '&-1 0' K' D'-' D1' `0<'AP' &?- '10' KD1 1' D1 ' #1'
B&- =1 0<- 9' &' D<+1' <'- 1-<-B19' <-A' 0&>1 '>10' & ?BD'
1 0&-0' <0' #1' ?-a-&K-' &' D1>' 0&' C?' &? 9' &' D1'
- 1- ' &' A1@< ' <-A' A1= <?A' 0?BD' '. D =?@ &00100& 0

) -/' "/&- -#!' ' ! ' !-' '! '5
' /$' '$' ' $ '.'" 'I H'V]

<0B?-' ><' 1' 1@'0&?' A10' D@8+<@1 0' C?' @1' C@1>1- G'
' H' 1-' BD10B?-' # 1' H' '001 <' 1-')?!' <0' +'0B&?-' C'
10@'1 ' F+<@1 0' C?' @1' C@1>1-' 0&' ' >1-B'&-' =<' ' A10'
A' \' & A'-<-B10

1>' B&>1' 1-' @1' A< 1'-' C@1 C1-' & A'-1' 10 &@' ?-'
#&-' I' -& <#@1' 10 < ? ' I' & A'-<-B19' A10' M+0- \' < '='B1 0'
&A&? 0' I' @<#& 1 09' B&>1# " BD101-.-' A1?L' A &' ' ?' <-'
A > ' <-' &? ' &-' 01C>< -9' I' A<? 10' BD&010' &>C '010'
A1'-\' >10>10' @10 < ? ' I' & A'-<-B19' @10' H?1@@ 0' & 1' 0&?-'
1LC' 10' <' <?01' H'@0' -1' =& =1-' & A'-1\' < A? 1 ' =& 0 f'
<-' C0BD1'-' C@1>1-' A1@& 0' < 1-' G =1' = ' @1' &" B&-0'9'
A1 <-' H' @10' A' \' 10 < ? \' I' & A'-/- \' = ' 1-' ' <' @& '
=1' \' C? ' @1' #'1-' I' C=' ' A1' 0&-' &'<@>19' I' H'@0' , &-'
>&@' C=' <#@10' <' >10>1' @1' &'<@>1' 0'@0' C? &'1D'
1-A? 1' I' 10 1' &#01 +1\9' <A' & A'-1\' C' <?B & ' 1' A1'
B10' C@1>1-' H' @10' A' \' 10 < ? ' I' & A'-<-B1' 0&'1-'
1-?\' I' .< A1\' I' ' 0' 1 " A?1' 1L1B?B'&-9' > H9' @1' & '
<A' <? 1>1-' A1B@< 1' 0< +<@?- 1' 1=' C@1'-' C@1>1-

1>' B&>1' C' @1' & ' 'BD< A' -<A.<' 0' &" " 1-.@1 1'
C?'0' @1' B&-H?10' 0 A19' <' 0&-' C@1>1-' 1-?\' <' F 10 >'
@1-A1><'-' A10' '>10' <-' A1' 0&-' 1' . -' L+n9' 1- 1' <? 10'
BD&010' & A'-1\' 10 &' ' I' 10 <#@'1\9' H' @10' 10 < ? \' I' & A'j
-<-B10' = " 0@ I' -'1-' 1C1'@1\' A1' B1?L' H" =&?-' 1- 110'
&+1' =& ' ><'-' 1-' 10' 1- \' &?' <? 10' C&00100'&-0'
H1B&-H0@ I' @&' 1' . -1-' 1'-0' &+1' =& B1 9' 1' <?L" A1' B1?L'
H" =&?-' '-0? 1BA&-0' '& 10' &? 10' BD'+<BD10' &?' <001>j
#@10@ 1-' A10 &? #<?-B1' A1' @< C1<0 ?' A1' @< B 1' @1 ' &?'
1-' <= <@1' A1@ C&1C@1@ , &'1-' 1-?\' I' C@1-1>1-' 1L1j
B? 10' G 1' &? 1' B1&' & A'-1' 10' C' >10>1' @10 < ? ' H' &? \'
=10' =&' \' H'= 1=1' =& A#@10' 1- 10' 0&'1-' = '' \9' I' C@1'-' 1-'
+1' . -1' <0' ?0 'B10' A1' C1<0' &?' <0B?-' A1?L9' H' >10>10' '1'
?0 'B10' &?' ?0 'B1' . -1-' &?' C' . -1' C&<' ' A1@' &?- 119'
I' +&'01-' &?' +&'01' A' 1?' <?' 'A' =& B1' 0&' '= 9' I' A a'
&+1-' &?' &+1' <0B?-0' 1-=& m' '1@ @'1?' =& B'#@1>1-'
?!' '1@ 1- 1' = '' ' 0&'1-' C '01\' I' >'01\' 1-' C0BD'1-'
E<&@19' <' A1> 1' B&-+@B \' A1' 1B& A' A1' >10>10' @10'
@?0 'B10' &?' ?0 'B1' <-H9' '@0' 1'1-' =<' \' = -' I' <?-B1& '
<?' & G Q ' H' &? R' .1- \' A1' &?- 1' 0'#'1-' '08'
B&D- \' B&>1' <? 10' 0&'1-' 1- 1-A-- \' <0' A' \' ?0 'B109'
A1' 1?L' <'=& A1 ' C ' < 10 '1 ' A1@0' ><@1=1=1&? 0' 0? '
C1'-1' A1>C '0&-1>1-' I' A1' =<' 1' = -1' I' <?-B1&-'
<?' & G ' H' 1-' >10>1' @1' >< 1' 0&' ' =<' ' A1' B1?L'
H" =&?-' =& A#@10' 1-' 101-' #1-1='B10' <A' `&=='B10P'

1'-' 0.@'019' B&>1' 1-' >10>1' @10 < ? ' 10' B&- 1-?\'
C@?'0' <?' C@1'-G 'C? ' <?-' H' @1' A' ' 10 < ? ' -1L 1-A1'
> ' <0' 1- =10' 1-' 1- \' 1-' CA0'#@1' >< 1' I' < '
1-?\' &+1' =& B1 9' -1' 0" @10' C0&-1R' H1- &-' &+1' =& 1'
1-' 10' &?' 1- \' 0&' -' 1>&1+1\' I' +&'A1\' A1+/-'
@1' +1-?' A1 ' A' \' ?0AB10' &?' ?0 'B1' B&>1' A1+ - 9' -1'
-?@@ C1'-1' & A'-1' 0" @1' '0B&?-' '1' &#1'1' > ' @10' ><?-8'
A1>1- \' I' = B1C 0' A10' A' \' ?0 'B10' C? ' 1L1B? '1 ' @& 8'
A'-<-B1' 0?'0A119' C@&?0&? 0' & B1-&?010' I' =& B'#@10'
1- 10' 0&?-' '=&' \' A1' &? ' 1-' <K 1' BW' 1 ' I ' 1- 0' C'
B1?L' H" A '' -&?- G ' <' L" A' 010' A&?-0' =1&==1>1- \'
' A'0B&- '-?<-B10' <01?-=&' \' =&' \' <0' = 0' I' <? 10'
C0&-10' C>00 - \' I' 1L & A&-1 0' A1'-0' @10' @&?- 10' &-'
'@0' 0&?-' B&-C0<- \' C ' ><'- 1-<-B1' <+&' 9' I' <0B?-0'
=&' \' <0' A1@0' C0&-10' 1-0 ' &?0 1\' A@0B&-?\9' <' 1@ 1- 1- '
C' A1@<'1 ' I' A1= <?A1 ' A1@0' A &' ? 1#' C&00100&? 0

) ' '< ' +' '*('"+', - .

A1'@&? 'A &' '4 ' 1B&+1 '<' &? \' &? 0@<'=' -<@ A'0D1 ' 10&-' A1' C@?0^ 0 A10 =&'<@0 @'1.10 A1' & @ I ' 01 > #@<='@1' 10 ' A&='B 10B1 ' A1' &? ' 1 -' <? 1'<' A?' 1 -1A'1' -1' a2'' C +1?' B1@@1' C '1G @ 1' ?' @1' & ' B&?0'A1 0' - ' @10 = >'0010 <A' & A1 - 1@ H' @1' A'=' 10 < ? ' I ' &? \' <? 10 10 < ? \' A1' A1@0 1- 10 &?' < 1 '<A&-' A1+J- ' =1' \' 0&'1- ' 1 - ?\' I ' A?1@ >1 - ' 1L1B? \' G &?0 <- ' <' 'B1@@1' H' 0" A1 & 1' '<+ ' < B?-' =<B1' A1@ =& B'#@1' 1- 1' 1 -' R 10 1=' \' &?' <? 10 C&00100'&-0@ &?' U?L' A1.C<1' =& 1'#@1 -1- @ < '&& @A- ' 1 - ' =<' ' AA - 0 > 10 > 1' @1' &?=' 1' @&?' A1@ 1- 1' 0&' ' =<' ' <0' ?0AB1 ' A1' =@1<0' &?' ? - 'A1' 1?L' C' @<' C A1' . 1+1@ H' @10 ?0AB10 &?' ?0AB1' 1 - 0" .< - ' A1' - 0' 1 > C0' B&+1 - <#@1' =<B1 - ' &?' =1B1' A1 > 1 - ' 1L B? 1 ' @1' A' ' 10 < ? ' 8 I' B1&' <0 B&0 <.1 ' A1@ C '1' 1 - 0" . 1+1'G 1 ' &? 1' B1&' B& > 1 - 'H' '1a' C0& - 10 >0<- \' A=1' 1'< 1' 0&'1 - ' C0& \@ &?' &'A1\' A1+0 - ' @< +1 - ?' A10 A' \' ?0AB10 &?' ?0AB1@ - '1 - >1' - 0 >10 - <10 10 ?0 'B10 &?' ?0 'B1' 1 -' <0B?-' #& - 1' 'A1' C@?'0' C0BD1' -' <0 1'' \' 1 - 0 ' 1 - 1\@ &?' 1 -' <0B?-' @'1?' B&+1 - < A1' 0B=1 - B' @&? 1' A'0B 1B'&-@ 1'1 - ' 'B ?-' A1' 1?L' 1' ' <?B C ' 1' I ' C&<' ' A1 - H?1 1 ' C' .1 - \' A1' > 10 > 1' @1' & - - 11@ <?L" #'1 -' A1' B1?L' ' =&?- ' 8A1@L' =& B'#@10' 1 - 0 110 1 -' RO 10 I ' 1 - \' BC > 1' A1' B1?L' H' 1?L' 1' . - 1 - ' &+1' =& B1G ' <' &+1' 0&'@ A1 ' ' <0B?-' A1?L' ' <0B?-' =<B1' @1' B&- 0 '1' A1' B10 ' 10 < ? @ <A&-H0' @10' A' \' ?0 'B10 &?' ?0AB1' =1B1 - ' &?' =1B1' 101'01 ' @10' R 10' I ' 1 - \' 1 - 0 ' 1 - 1\' &?' 1 - ?\' B& > 1' A1+0 - @ I ' >1 1' @<' CA1' 1 - 0 ' &?0 1' 1 -' C@1' -' C&00100'&-' A1' >10 > 10' @10' R 10' I ' 1 - \' B& > 1' A1+3 - ' 1 - 1\' ? 1 - ?\' G Q ' 0" <0B?-' 1' C0&-1@ < ' A1@ 1 - 1' 1 -' R 10' &?' 1 \' 1 - ?\' &+1' =& B1@ =1B1' =1&==1 > 1 - ' &?' <? 1' A'0B&- '-?<-B1' <' <0B?-' K' &?' <? 1' C0&-1@ C ' > <' - 1 - 3 - B1' <+&'1 ' &?' C ' &@@1 ' I ' A1' ==<?A1 ' @1' C& 0100&? ' A1' 0< 1B&+01 ' 1 -' <i ?-' > @ 0" <PC 1' 1 -' <00'01' &?' <? 1' <BB'&-' 1 - ' A10' 1' C '01' &?' C 0?1\' A1+ - ' ?0AB10' A10' 00'010' &?' <? 10' ? AB10' @1' & ' HB&-H0@ C' A'1?' 1 - H?1 1' 1 - ' <CC?A 1' C? <' A?1 > 1 - ' 10 1' C+1' > 10 > 10' @10' =1&==1 > 1 - \' I ' A'0B&- '-?<-B10' 1==@ 1' =1' \' C ' > <' - 1 - W - B1' B& > 1' A10?'0 10 ' A= ' H' <A&-H1 ' A1@L' =1&==1 > 1 - \' &?' <? 1' A'0B&- '-?<-B1' 1 - 0 ' B& > 1' A1+/ - ' =1' \' 0B<1 - ' +&'A1\' ' ' 1\' I ' 1 - ?\' C ' - ?@@1 ' ' <?L" H/?- ' @10' A' \' ?0 'B10 &?' ?0AB1' =1 1 - ' A1@L' 1 - H?1 1\' B& > 1' A1+/ - @ =1B1 - ' &?' =1B1' @&? ' .< <- \' I ' B1C 0' A' 1=' \' <@ '0B&?- ' A1' > 10 > 1' @1' &?- 1@ @? ' B& > <' > A<- ' A1' C< ' @1' & ' A1' =? ' +1 - ' ' A1+/ - ' 1?L' I ' B#10B?-' A1?L@ C0&-10' 0?==' B'<- \' I ' - A'==1 1 - \' C@?'0' C0BD1' - 0' A1 > <- \' 1 - &? ' @10' 1 - \' 1 - 0 ' 1 - 1m' B& > 1' A1+/ - @ A1 - H?1 1 ' A1' A1@L' 1 - 11\' G A&?- ' BD10B?-' H" R <' 1 - C<- 1@@1' A1 - H?1 1 ' 1 - ' B1@@1' CA1' <' ' R 1' &?' 1 - ' A1' <- - ?1@ +<@?1' A1' L '0 ' C < - ' =< ? > 1 ' - 0' &? 1' @10' 1C '010G ' H' @1' '0B&?- ' 1 &? > 1' '00?1\' 0? ' BD10B?-' A1?L' <?' &? ' A1' C@=" C0B1C ' 1 & > <#A1' LL' <' I ' <@ 0BA1' & ' L@' 0 ' I ' <@ '1 B1' =&' \' 0 ' I ' <?' BD10B?-' & ' <C20 @1' A&?#@1;' '0" <0B?-' '0B&?- ' &?' <'@@ ' A1' - \' = ? - BDB F 01' <'<- \' 1 & - 1' A1' # 1' A?' & @ 0&' ' @<BBD1' I ' - 1' =<B1' A?1 > 1 - ' 1L1B?A&= ' A10' A' \' B1C \' <' @? ' A' 1B \' C< ' A1@L' 1 - H?1 1\' =1' 1@ H' @ =& =1B1' A1 0 @1' & ' LL' @' ' C' B@'10B? - 'A1=1< @ I ' &? 1' =1B1' = -' I ' <?- B1& - ' <?' & @ ' H' <?L'# - ' @10' ?0 'B10' &?' ?0 'B1' <+/ - A' \' B& > 1' 1i' ?0 'B10' A10' <0 10' <' &? ' PR ' 1 - ' C<'0' C

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&=' D1' ' '. D '<- A' 1B&+1 '=& ' 1+1 @ &' D1' ='-<@ " ' 0D1j '0&-' &=' A'+1 0' &=' D1' , '- ./0' =<' D=?@ D 1 . 1' 1&C@1@ <- A' @'a1@ ' A<'@ ' &' '-B 1<01@ '=' A?1' 1 > 1A ' #1' - & ' C &+'A1A' '-' D'0' 1D<@=;' ? '@ZC A' D1' , '- .' B&-0'A1 '- .' D1' 1j > '0010@ D< D' & A<'-1A@ D< ' D1' 0<'A' < ? 1@ <-A' <@@ & D1 ' < ? 10' A = 0?BD' - '10' & ' @'1-< '&-0' > <A1' '-' ' > 10' C<0 @ 0D<@@ #1' D&@A1-' <-A' A?@ ' 1L1B? 1AG &' -1A' &' D1' 0<>1' D< ' = &>' D1 - B1=& A ' KD1 1' <- ' A& D' > <a1' `<- '=& B'#@1' - ' `' - (' <-A0' <-A' 1-1 > 1 - 0' & '& D1 ' &00100'&-0@ & ' D1 > ' D&@A' '=B =B'#@ @ <= 1 ' & > j C@<' - ' D1 1&=' > <A1' K' D' -' D1' 0<>1' &?- ' KD1 1' 0?BD' - ' 0' > <A1@ &' D1' ?0 'B10' &=' 1<B1@ & ' &' &-1' &=' D1 > @ # ' D1' < ' . '1+1A@ D<' D1' ?0 'B10 & ' ?0 'B ' 0&' K< -1A@ K' D' -'< B&-+1 - '1 - ' ' > 1' 0D<@@ B<?01@ & '&-1' &=' D1 > ' 0D<@@ B<?01@ D1' 0<'A' < ? 1' A?@ ' &' #1' 1L1j B? 1A@ <-A' D<' < ' D1' &0 0' &=' D1' < '0&' . '1+1AG -A' > & 1&+1 ' D&?. D' D<' 0?BD' 1 0&-0' > <a' - .' 0?BD' - ' D1' C 101 - @ & ' 1@01' A1C< 1A' #1=& 1' D1' B& > '- .' &=' D1' 0< A' ?0 'B10 & ' ?0 'B1@ -& K' D0 <-A' - .' D1' 0<>1' ?0 'B10' & ' ?0 'B1' '-' 0 >1' .&&A' &K -' -1L ' &' D1' 1-1j >1 - 0' &' 1 - 1 1A@ & ' '-' 0& > 1' & D1 ' B&-+1 - '1 - ' @<B1@ <BB& A' - .' &' D1' ' " '0B 1 'A - 0' 0D<@@ D<+1@ & ' ' D1 ' &=' D1 > ' 0D<= ' D<+1 ' ? D& ' '<-A' &K1 ' &' '-H?' 1'1# ' D1' 1&C@1' &=' D1' 0<>1' &?- @ <0' K1@@ &=' D1 > ' D<' > <a1' 0?BD' =& B'#@1' - '10' `' -' / ' <-A0' <-A' 1- > -1 - 0@ <0' &=' D1 > ' KD'BD' D1' 0<>1' D&@A' K' D' ! & B1G <-A' '=' ' ' #1' =&?-A' #1=& 1' ; > ' &=' D1 > @ D<' <- ' A& D' B&- < ' &' D'0' < ? 1@ D1 -' D1' 0<'A' ?0 'B10' & ' ?0 'B1' 0D<@@ B<?01' ` &' 10A01' D1' <-A0' <-A' 1 - 1 > 1 - 0' ' 1 - 1 1A' & ' D&@A1 -' <i' <=& 1@O@' <-A' 0D<@@ C? ' D1' < ' 0&' C? ' &? ' `' - / P' =?@@ &00100'&-' &=' D1' 0<>1' <-A0' <-A' 1 - 1 > 1 - 0@ 0&'1 - 1 1A' & ' D&@A1 -' <0' #1=& 1;' -A' '=' <- ' 1 0& - @ <= 1 ' 0?BD' - ' '- &' <-A0' & ' 1 - 1 > 1 - 0' D&@A<" K' D' ! & B1@ > <a1' <' ! 1&==>1 - ' & ' & D1 ' " '0B&- '-?<-B1' &' <- ' & A' & ' & D1 ' 1 0&-@ &' D<+1' <'- 1 - <-B1@ & ' &' <a1' <K< ' <-A' A1= <?A' D1' &00100& ' &=' D'0' 1B&+1 ' '-' <- ' K'01@ '=' <= 1 @ '-' 00' 1' & ' & D1 ' = '&-' D1 1&=' &' #1' <a1 -' & ' C? 0?1A' #1=& 1' ?0 'B10' &=' 00'010@ & ' & D1 ' D1' , '- ./0' ?0 'B10' KD< 0&1+1 @ # ' A?1' -H?' ' D1 1&=' &' #1' <a1 - @ D1' 0<>1' ! 1&==>1 - 0' <-A' " '0B&- '-?<-B10' > <' #1' A?1@ ' C &+1A' &' #1' > @A1' =& ' <'- 1 - <-B1@ <0' <=& 1' '0' 0<'A@ D<' D > " 0?BD' ! 1&==' -1 - 0@ & ' & D1 ' " '0B&- '-?<-B1@ 0&' <0' #1=& 1' > <A1@ 0D<@@ #1' +&'A@ = ?0 < 1@ <-A' D&@A1 -' =& ' -&-1 ' -A' <@0&' KD1 -' D1' 0<'A' ?0 'B10' & ' ?0 'B1' > <a1' 0?BD' -H?' '10' <0' #1=& 1@ D1 ' 0D<=' > <a1@ & ' &-1' &=' D1 > ' 0D<=' > <a1@ D > ' F < <>0' <-A' 1B1C 0' &' #1' A' 1B 1A' &' D1' D1 '==' &=' D1' 0<>1' &?- @ B& > > <-A' - .' D' > ' &=' D1' , '- ./0' 1D<@=' &' B<?01' &' B& > 1' #1=& 1' D1 > @ <-A' 1+1 ' &=' D1 > @ 0?==' B'1D ' <-A' '-A'==1 1 - ' C1 0&-0@ AK1@@ '- .' - 1L '<#&?' D1' ` <-A0O@' ! '1 - 1 1A' <0' #1=& 1@ &' '-H?' 1' &='U?BD' - '108G' K D1 1&=' 1+1 ' <-@ KD'BD' 0D<@@ #1' ' > C< - 1@@1A' &' '-H?' 1' '-' D'0' 1D<@=@ 0D<@@ D<+1' <-A' & ' 1 - 1 > 1 - ' &=' D1' 1< @ ' <@?18&=' ! & ' D'@@'' .0' # ' 1< ' <' D1' @1<0 @ <#&+1' 1C '010' G -A' D<' D1' D1 '==' 1 ? -' 00?1@ ?C&-' 1+1 '&=' D1 > ' <' D1' " < ' &=' D1' ! ' 0 ' 1B1C ' 1 ? -<#@1' L] ' 0 ' <-A' <' D1' 1B&-A' " < ' L@' 0 ' > A' < ' D1' D' A' ' > 1' 08' <-A' < ' 1+1 ' " < ' <= 1 ' D1' " &?#@1;' -A' '=' <- ' D1 '==@ & ' <'@'==' K' D' -' <' ! <-@ BD'01' D<+' - .' 1 ? -' &=' D1' , '- ./0' F ' @ #1' 0@<Ba@ <-A' > <a1' -& ' L1B? '&-' A? ' &=' D1' A' 1B1C 0' &' D' > ' A' 1B 1A' &' > <a1' 0?BD' -H?' '10@ D<' D1' 0D<@@ =& =1 ' ' &' D1' , '- .' L L@' ' =& ' 1+1 ' " 1=1?@ @ <-A' > & 1&+1 ' 0D<=' > <a1' ! ' -1' <-A' <-0&>' &' D1' , '- . ' -A' D<' <0' K1@@ D1' ?0 'B10' & ' ?0 'B1' <=& 10<'A@ <0' D1' ?0 'B10' &=' 00'010@ <-A' 1+1 ' &=' D1 > @ < ' D1' 'B&> '- .' '- &' D1' &?' ' &

' 0?BD1' " ' 2 ' 6 @ /
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W .‘ 0/*1!-‘ -.“ 6!#.“/‘ 2 +!‘ ;!‘ "!‘!"2!/‘ -.“ ‘.&/!/‘ .-“ 6 20"!2‘ - !"+&-! k &.-2‘ .‘“ +& !" +‘ “".“2

&+‘A1A‘ <@0&‘ D< ‘ ‘=‘ <- ‘ &=‘ D1‘ 0<‘A‘ ‘1.10ƒ & ‘ <- ‘ &=‘ D1‘ ‘ 1‘ 0ƒ #1‘& ‘ 0D<@@ #1‘ <CC1<@1A‘& ‘ ‘ -A‘B 1A‘&=‘ ! 1@&- ‘ & ‘ 1<0&-ƒ <-A‘ < ‘ D1‘ ‘ > 1‘ &=‘ D1‘ 0<>1‘ ! 1@&- ‘& ‘ 1<j 0&-‘ 0?CC&01Aƒ D1‘ ‘0‘ <-A‘ K<0‘ B&-+1 0<- ‘K‘ D‘-‘ D1‘ &?- ‘ KD1 1&=‘ D1‘ -A‘B >1- ‘ & ‘ CC1<ƒ ><a1 D‘ 1- ‘&-ƒ D1‘ @‘a1‘ &B100‘ #1‘ ><A1‘ <.<‘-0 ‘ 0?BD‘ 1 0&-‘ 0&‘ ‘-A‘B 1A‘& ‘ <CC1<@1Aƒ <0‘ D< D‘ #11-‘ ?01A‘ `<@K< 0P‘ #1=& 1‘ D‘0‘ ‘>1

ƒ ‘ ‘0‘ 0D1K1A‘ &‘ &? ‘ & A‘ D1‘ , ‘-.‘ # ‘ D1‘ 0<‘A‘ &> >&-0‘=& ‘ D1‘ < & ‘ <-A‘ @A1 >1-‘<-A‘ &>j >&-0‘&=‘ D1‘ ‘ ‘&=‘ &-A&-ƒ D< ‘ F D1 1<0‘<>&- ‘& D1 ‘ ! <-BD'010‘ '#1 '10‘ <-A‘ ?0 &>0‘ &‘ D1>‘ # ‘ D1‘0<>1‘ &? ‘ & A‘ D1‘ , ‘-.‘ <-A‘ D'0‘ -&##@1‘ &.1-‘ & 0‘ . <- 1A‘ <-A‘ B&-=‘ >1Aƒ ‘ ‘ ‘0‘ B&- <‘-1Aƒ D< ‘ D1‘ <--1 ‘ <-A‘ !& >‘ &=‘ <a‘-.‘ CC 1- ‘B10‘ K‘ D‘-‘ D1‘ 0<‘A‘ ‘ ‘ &=‘ &@A‘ ‘>1‘ ?01A‘ <-A‘ B&- ‘-?1Aƒ #1‘ a1C ‘ <-A‘ &#01 +1A‘ G -A‘ `KD1 1‘ ‘ ‘0‘ <@0& D1 1‘?01A P‘ # ‘ D1‘ ?0 &>0‘&=‘ D1‘ 0<>1‘ ‘ ‘&=‘ ‘>1‘&? ‘&=‘ ‘-A‘ B&- ‘-?1A‘<-A‘ <CC &+1A‘ ‘-‘ D1‘ 0<>1ƒ D< ‘ 1+1 ‘ 1 0&-‘ KD'BDƒ K<0‘ -& ‘&=‘ ‘@@<‘-‘ 0 < 1‘& ‘ &-A‘ ‘&-ƒ #? ‘ &=‘ = 11‘ 0 < 1‘ <-A‘ &-A‘ ‘&-ƒ >‘. D ‘ C? ‘ D‘ >01@=‘ D‘0‘ &-‘& ‘ "<?. D 1 ‘ &‘ #1‘ CC 1- j ‘B1‘ &‘ <- ‘ ! 11><-‘&=‘ D1‘0<>1‘ ‘ ƒ & @1<- ‘ D‘0‘ <= ‘ & ‘ 0 1 ‘ <-A‘ D< ‘ @‘a1K‘01‘ 1+1 ‘ ! 11><-‘ &=‘ D1‘ 0<‘A‘ ‘ ‘><‘ <a1‘1+1 ‘0?BD‘ 1 0&-ƒ &-‘& ‘"<?. D 1 ƒ &‘ #1‘ D‘0‘ CC 1- ‘B1ƒ K‘ D&? ‘ >C1<BD>1- G ?- ‘@ -&K‘ &=‘@< 1‘ D1‘ 0<‘A‘ < & ƒ @A1 >1-‘<-A‘ &> >&-0ƒ #1‘ <-A‘ D<+1‘ #11-‘ . ‘1+&?0@ ‘ +1L1A‘ <-A‘ ‘-H?‘1 1A‘# ‘ &j @&? ‘ &=‘<-‘ ‘B@1‘ &=‘ D1‘ < ? 1‘ ><A1‘ <‘ F 10 >‘-0 1 ‘ D1‘ 1+1- D‘ 1< ‘ &=‘ D1‘ 1‘. -‘ &=‘ , ‘= .‘ 1- ‘ D1‘ !&? Dƒ 1D1< 0‘-.‘ # ‘ .1-1 <ƒ F & A0ƒ D< ‘ -&‘ <-‘ & ‘ F & ><-‘ C? ‘ D ‘ ‘ &-‘ & ‘ "<?. D 1 ‘ &‘ #1‘ CC 1- ‘B1‘ K‘ D‘-‘<- ‘ ‘ ‘ & ‘ &K -‘ &=‘ D1‘ 1<@>‘ `&=‘ -.@<-A9P‘ 1LB1C ‘ D<‘ D1‘ D<+1‘ <-A‘ & ‘ = 1- ‘ &‘ D1‘ <@?1‘ &=‘ K1- ‘ D'@@‘-.0‘# ‘ 1< ƒ <-A‘ D<‘ # ‘ 10 ‘>&- ‘?-A1 ‘ D1‘ 1<@0‘ &=‘ D1‘ ?0 ‘B10‘ &=‘ 1<B1ƒ -& ‘ D<‘ <- ‘ 0D<@@ 1B1‘+1‘ <-‘ CC 1- ‘B1‘ &‘ D1‘ B&- < ƒ ?C&-‘<‘$. ‘1+&?0 1-<@ ‘D >‘ 1A‘‘-‘ D1‘0<‘A‘ < ? 1‘; ? ‘ & A‘ D1‘ ‘-.ƒ B&-0‘A1 ‘-.‘ D1‘ . 1<‘ ‘-A <-B1‘ KD'BD‘ # ‘ D1‘0<‘A‘ <j ? 1‘ >‘.D ‘ 1A&?-A‘ &‘ ‘@1‘ -D<#‘ <- 0‘ &=‘ D1‘0<‘A‘ ‘ ƒ '=‘ D1 ‘ 0D&?@A‘#1‘ D1 1# ‘ 10 <‘-1A‘ &=‘ D1‘ ‘0<‘A‘ ‘#1 j ‘10‘ <-A‘ ?0 &>0ƒ <-A‘ D&K‘ ‘-‘ D1‘#1.‘--‘-.‘&=‘ D1‘ 0<>1‘ < ? 1‘ ‘ ‘0‘ B&- <‘-1Aƒ D< ‘ D1‘ 0<‘A‘ = ‘ &=‘ &-A&-‘ D<+1‘ <-A‘ 1- & ‘ <@@ D1 ‘ ‘#1 ‘10ƒ ! <-BD'010ƒ <- “ ?0j &>0ƒ ` D< ‘#1‘ -& P‘ B&- < ‘ &‘ D1‘ 0<‘A“ ‘B@1‘ <-A‘ <@0& 10C1B ‘-.‘ D1‘ 1- ‘ 1‘ ==1B ‘&-0ƒ <-A‘ . 1< ‘ ,‘-A-100‘ A&-1‘ <-A‘ 0D1+ 1A‘ &‘ &? ‘ 0<‘A‘ & A‘ D1‘ , ‘-.‘ ‘-‘ <@@ D'0‘ ==<‘ 0‘ # ‘ D1‘ ‘ ‘\1-0‘&=‘ D1‘ 0<‘A‘ ‘ ‘ &=‘ &-A&<ƒ <-A‘ &‘ 1-B&? <.1‘ D1>‘ D1‘ >& 1‘ &‘ 0?BD‘ ==1B ‘&-0‘ <-A‘ , ‘-A-100‘ D1 1<= 1 G # ‘ D1‘ A+‘B1‘<-A‘ 001- ‘<=& 10<‘Aƒ D< D‘ & A<‘-1A‘ # ‘ D1‘ ? D& ‘ ‘ &=‘ D'0‘ < @‘<>1- ƒ D< ‘ D1‘ 0<‘A‘<-B‘1- ‘ <- - 1 ƒ ! & >ƒ <-A‘ ?0 &>‘ &=‘C? ‘-.‘ <-A‘ <a‘-.‘&=‘ CC 1- ‘B10ƒ ?01A‘<-A‘ B&- ‘-?1A‘ ‘-‘ D1‘ 0<‘A‘ ‘ ‘&=‘ &-A&-ƒ #1‘ = &>‘ D1-B1=& D‘a1C ‘ <-A‘ &#j 01 +1Aƒ <0‘ @&-.‘<0‘ ‘ 0D<@@ C@1<01‘&? ‘ 0<‘A‘ & A‘ D1‘ , ‘-.‘ $ K‘ D&?‘ #1‘-.‘ =& ‘ D<‘ ‘>C1<BD1Aƒ & ‘ ` &‘ ‘-B? / P‘ D1‘ <‘-‘ B&- <‘-1A‘ ‘-‘ D1‘0<‘A‘ < ? 1

ƒ ? ‘ & A‘ D1‘ , ‘-.‘ D< D‘ & A<‘-1A‘ <-A‘ 10 <#@‘0D1A‘ # ‘ D1‘ ? D& ‘ ‘ &=‘ D'0‘ C 101- ‘ < @‘<j >1- ƒ D< ‘ =& ‘ & ‘ <00‘. -1A‘ & ‘ &‘ #1‘ <a0‘. -1A‘ ‘-‘ <- ‘ 1B& Aƒ &B100ƒ `& P‘ F < <- ‘ &=‘ & -1 ƒ ‘. ><@ F ‘ ‘ & ‘ ?A'B‘<@ƒ <-1@ & ‘ 1 ? -ƒ ‘0‘ <- ‘ @<B10‘ &=‘ D1‘0<>1‘ <01A‘ & ‘ ‘- 1 @‘-1Aƒ & ‘ ‘-‘ <- ‘ A j A‘ ‘&-ƒ ?#0 <B ‘&-ƒ & ‘ “ ‘>‘-? ‘&-‘ &=‘ F & A0ƒ 1 1 0ƒ ` ‘ @10 9/ P‘ & ‘ < B1@ &=‘ 1 1 0ƒ =&?-A‘ ‘-‘ <- ‘ 0?BD‘ 1B& Aƒ &B100ƒ F < <- ‘ &=‘ & -1 ƒ F ‘ ƒ <-1@9

(‘ ‘ %)‘0 ‘ ‘ “ 1 @! *

? +1?‘ <?L“ H‘0“ <0B‘>‘ A10‘ A‘ \‘ @‘1.10‘ &?‘ <0B?-‘ A1‘ @& ‘ D1‘ 0‘ 0&‘@ƒ &?‘ , ‘ <‘<CC1@@1‘ &?‘ 1-A‘ 1\‘ A1‘ =1@&-‘1‘&?‘ 10&-ƒ I ‘ <?‘ 1>C0‘ A1‘ >10>1‘ @1‘ =1@&-‘1‘ &?‘ 10&-‘ 0?CC&01\‘ 10 ‘ &?‘ =1?0 ‘ B&-,0<?-‘ A1‘-\‘@1‘ &?- 11‘ A&?-‘@1-A‘ 18‘ >1-‘&?‘ <CC1@@1‘ =“‘ ‘ >1-B‘&-ƒ H‘ <? ‘1@@1‘ CB1001‘ 0&=‘ =<‘ ‘ , !‘ ‘1@1-A‘ 1‘&?‘<C1@@1‘B& >1‘<A‘ 10 1‘ ?01‘A1+=‘‘ ‘ B10‘D1? 0

1>‘ >&-0 1‘ =‘‘‘0 ‘ <‘ -=1‘A‘ ‘ (‘@1‘ & ‘ C‘@10‘A‘ \‘ &10‘ C/‘@10‘ <‘ ‘ @A1 ><-0‘ I ‘ &10‘A1‘@<‘ ‘ 11‘A1‘ &?-A 10ƒ H‘B& >1‘1- 1‘ <?R0‘ =‘ <?-BD'010‘ @‘# 110‘ I ‘ B?0 ?>10‘ <0‘ 1?L‘C‘ >10>1‘ -=1‘ ‘ @1‘ & ‘ JB 010‘ -&##@10‘ C.1-‘ &? 0‘ .= ‘>1\‘ I ‘ B&-=1 >1\ƒ B&- 1-?\‘ 0&=‘ H‘ @10‘ ><51‘ I ‘=& >1‘A10‘<CCD‘ 'B10‘ =2-A 1‘ A1‘-\‘ @<‘ AQ1‘ ‘ 11‘ <?-ƒ A1-> 1-‘ ‘?01\‘ I ‘B&- ‘ ?1\‘ 0&'1-‘ ‘.< A1\‘ I ‘ &#01 +10ƒ I ‘ ?01‘ 0&=‘ C‘ @10‘ B?0 ?>10‘A1‘ >10>1‘@<‘ ‘ 11‘A1‘ &?‘ 1>C0‘ A&?-‘ >1>& ‘1‘ -1‘ B&? ‘ B&- ‘??1\‘ I ‘ <CC+1\‘ 1-‘ ‘B1@‘H‘ B@@?-1‘ - 1‘H‘-1‘ =1?0 ‘A1‘ +‘@@<‘-1‘ 10 < 1‘ &?‘ B&-A‘A&-‘ >< 0‘ A1‘ = <-a‘ 10 < 1‘ I ‘ B&-A‘B‘& ‘ C&+&‘ ‘ >1 1‘@? ‘ >10>10‘ 0&-‘ =‘ \‘ &?‘ =‘@1‘1-‘<C ‘B1‘<‘HB&-H‘ = <-a‘ D& >1‘A1‘ >10>1‘@< ‘ 11‘C ‘ <C A 1‘ 0&C‘ < ‘=‘B1‘ &?‘ >10 ‘1 G Q ‘H‘ 01>#@<#@1>1-‘1#?-‘ = <-a‘ D(>1‘ A?‘ A11‘ ‘ 11‘C&+&‘ ‘C@-A 1‘BD10B?-1‘ ‘@1‘CO&-1‘=‘ \‘ & ‘=‘@1‘1=‘ <CC- ‘B1‘0 >\‘1>C10 ‘1>1-‘ ‘ <-H‘ƒ < < A1‘@10‘A‘ \‘ <@1‘ @A1 ><--10‘ I ‘ &10‘ 0&-‘ I ‘ &?-‘ 10 1‘ . 1+&?01>1-‘ +1L1\‘ I ‘-H A1 1\‘ C‘ B& &‘ A? ‘1‘ < ‘B@1‘ A10 < ‘ =A ‘ <‘ F 10 ‘-‘ <-‘ A?‘ 1. -1‘ @1‘ & ‘ 1- ‘ @1‘ H?< ‘ C?‘0‘ @1‘ B&-H?10 ‘ +‘ ƒ 1D1 B1<- ‘ C‘ .1 ^ <@L‘ C&@10‘ H‘ -?@@1‘ D& >1‘ -1‘ = >1‘ >1 1‘ @&‘ =‘ \‘ &?‘ ='@1‘ 1-‘ <C - ‘B1‘ A1‘-\‘ <0B?-1‘ ‘ 11‘ -1‘ +‘@@1‘ A?‘ &‘<@>1ƒ 0‘-&-‘ H‘@ <‘ ‘ R 1‘ & ‘ 1- ‘ <‘ @1‘ +<@= 1‘ A 1 L L 0 ‘ C‘ % I ‘ B1&‘ C‘ 10>& .-‘ A1 i &?\‘ @10‘ 01<@L‘ A10‘ ?0 ‘B10‘ A?‘ C110ƒ -1‘ H‘ -?@@ 1B1‘+1‘ <CC- ‘B1‘ <?‘ BB> = @1‘ ‘ . 1+&?0‘ C1?‘1‘ @‘‘-‘ 1\‘ 1-‘ @1‘ A‘ ‘ 10 < ? ;‘ =1‘= ‘@1‘ & ‘ B&-0‘A1 <- ‘@1‘.=‘>A‘< 1 ‘001>1- ƒ H‘C‘ > 1‘ @1‘ A‘ ‘ < ‘B@1‘ C &‘ ‘ @-1 ‘ <‘ @10‘ ‘-D‘ <- =B‘ A?‘ AQ1‘ ‘ 11ƒ 0‘@0‘ &‘1- ‘ C‘ ‘B1=‘ 10 1‘- \‘ A1‘ @& ‘ A‘ Gm\ @‘# 110‘ I ‘ B?0j ?>10ƒ I ‘ B&>1- ‘ 1-‘ @1‘ B&>1-B1>1- ‘ A1‘ >10>1‘ @10 < ? ‘ 10 ‘ B&- 1-?\‘ ‘ @<‘ A11‘ ‘ 11‘ A1‘ &?-A 10‘ <=‘ I ‘ 1- &‘<‘ &? \‘ 010‘ @‘# 110 = <?-BD'010‘ I ‘ ?0 ?>10ƒ H?1@1‘ 10 ‘ B&-ƒ W ‘1‘<=‘ A‘ ‘ < ‘B@1‘ G I ‘<?L“ B&@'0‘A1 10‘ @10‘ 1- ‘1 0‘ <==1B8‘ A&-0‘ I ‘ . W-A10‘ -< ? 10010‘ =1‘ \‘ I ‘ >&-0 1\‘<‘ -=1‘ A‘ ‘ ‘ @1‘ & ‘ &? \‘ 010‘ ##0&‘. ‘10‘ C‘ @10‘ ‘ 1\A-0‘ A=“ A 1‘ ‘ 11‘ A1‘ &?-A 10ƒ I ‘ C ‘ 1?L‘ @1‘ C@?‘0‘ 1-B& <. 1 ‘ <?‘ ‘1@L‘ <==1BA&-0‘ I ‘ -< ? 10010‘ 1-‘ < ‘X A1@‘ <AA0‘ I ‘ <001- ‘ 0 ‘ 08‘ A‘ \‘ <A‘ & A‘-1‘ C‘ <?B & ‘ 1‘ A1‘ B 0 ‘ C@1>1- ‘ H‘ @10‘ A‘ \‘ <?-A1-0‘ > < I ‘=& >1‘ I ‘ B?0 ?>1‘ A10‘ <C - ‘B10‘ >1 1‘ I ‘ C-A 1ƒ ?01\‘ I ‘ B&- ‘-?1\‘ 1-‘ @<‘ A11‘ ‘ 11‘ A1‘ &?-j A 10ƒ 0&=‘ A10& h‘ .< A1\‘ I ‘ &#01 +1\‘ <-H‘ƒ C@1-‘ <‘ -=1‘ A‘ ‘ ‘ @1‘ &‘ƒ 0<?-\‘ 10 1‘ C ‘ B1&‘ 1>C10BD1\‘ &?‘ 1-B? 1 ‘ @<‘ C1‘-1‘ B&- 1-?\‘ 1-‘ @1‘ A‘ ‘ 10 < ?

1>‘-=1‘ ‘ 1‘ &“ <A‘& 1=‘-1‘ I ‘ o0 <#@1‘ C‘ <?='& ‘ 1‘ A1‘ B10 ‘ CD1- ‘ C@‘<>1- ƒ H‘ C ‘ 1 &? ‘ <00‘. -1‘ &?‘ <00‘. -11‘ 1-‘ <0B?-1‘ 1B& A1‘ CB10 1‘ .< <?- ‘ A< & -1‘ # =‘ - @‘ &?‘ ?A'B'<@ C<-1@@ &?‘ 1 & -R@ 1-‘ <?0B?-0‘ @‘1?L‘ A‘B1 L‘ <01\‘ &?‘ 1- 1@‘-1\ƒ &?‘ 1-‘ <0B -‘ <AA‘A& -‘ 0?# <BA& -‘ &?‘ A‘ > ‘@‘ 0 -?A& -‘ A10‘ C&@10‘ =10‘ ‘A10‘ &?‘ C 1@@10‘ A10‘ =10ƒ &+1\‘ 1-‘ <0B?-‘ ‘1@ 1B& A1‘ CB1001‘ .< <?- ‘ A< & -1‘ # ‘1=‘ C<-1=

&?' 1 & -1ff H?1?L' & ! E !' 1 ' 1@>1\' <A 'B@&-' 0?# <Q' B'&-' &?' A'>'-?A&-'<@' A'0B 1A&-' A1\' ?.1ff 1' &" AUff &?@ 1ff' I ' <B1ff'1-' H?1?L' @1ff' A' \' ' 1;& A1ff&?' CB1001' C' # 1' A1 &?' ' &?' <?R>1-' 0 ?-' RA='1\'<CC'1 .1-' 0?0' C1 I mff -1' 0&'ff <0B?-1' ?..1@-1-' ' -1' 1B& A1' 1 01' -1' <A-?@@1G' 1 ' '@1ff ?.1ff@1' &" A1ff &? 1ff' I ' @<B1ff'1-' H?1 L' <0B?-' 1B& A1'CB1001'C&@1' C@11' .< <?-' A< & -1' # '1='C<-1_' &?' 1 &?>1' C ' @1' 1>Cff 0&'ff A1-' C&<' ' A1L<>'-1 ' -@1L' 1B& A1ff CB1001' C&@1ff `C@11OOP' .< ff <?- \' A< & -1' # '1='C<-1 ' I ' 1 & -1' C' 1?L' I ' @&?' B@1 a0ff 5B A=1' 1=& >1 ' 5B <-@1-A1 ' 1-' <==1 ><-B1' A1ff ?..1>1- \' A1' '1@L' 1B& A1 ' 5B CB1001' &?' B1&' H' <' 1?L' 1-' @& 'A'0B 1A&-'01>#@1'10 1' <10C '0'&-' A1' @1 a' 1-' '1@L' 1BC A1ff CB1001' C&@R' C@11' .< <?-' A< &/-C # '1='C<-1 ' I ' 1 & -1' :' =& -01'<CC1@1\'1-B. 1>1- \'A1' 10&-' I ' A1ff =1@&-'1ff 5' @? @<.< '1ff' A'B1@@10ff 5B @<' 0?# ' 0 <?#B1' A1'CC 10' -&? ' 0?>&--0' 5B <AA'B'&-0' 1-R@1001\' 1-'# '1 I '& '.'-<@L ff # '1='1' A1L'.1-' 0&P&-H' @10 < ?' <? 1' =&' \'=1'' <-'=0BA1OP' @1' &" 1-" '1' '_/' @1' &" H& 10 ff 5B 1-' <? ff #-'1='1' B&' 1-0- \' CA<>< A&-G' 0<'- ' ' H' C' A1ff >10C 'A&-' A1' @1 a' -1' 0&' ' <0B?-' ?..1>1-' \1C01' -1' <A-'A@1B' 1 ' 0" <0B?-' 1B& Aff CB1001' * ' .< ' <?-' A< &? 1' 1 & - ' &?' C<-1 ' 0&' ' R 1='1' A1=1BA+1ff <?R>1-' H' <BB& A<-' <' @<' 0B 'C ? 1' H' 1-' A1>&1 ' 1-' @1ff 10& '1' &? 10' &?' @'1?L' A&?-' '@ff 0&?-' A='1\ff A1-' @1ff C< '10ff 1-'<==1 ><-B1' A1ff ?..1>1-\' A1' '1@L' 1B& A1' 5B CB1001ff <+ - <.1' A<@1..1 ' >10>1' @<' 0B 'Cj ? 1' 10 ' +< '< -' <@ A' ' R '='B< 1G' 5B B1&' &+1' 5B A='1' 0&' ' -'10>1' '<' +< '<?-B1' C' @1ff A' \' ?.1ff 1=& >1' 5B <>1-A1' <BB& A<-' ' <' =' ' C '=" 0B 'C ? 1;' 1 ' &? 1' B1&' 10 ' & A'-1' H' 0" <0B?-' 1B& A1ff &?' CB1@@ ='C1@ff # '1=' 1 & -1' C<-1 ' CB1001' &?' . &<?-' A<-& -1ff 1 ' @1ff &? 1ff' @1' &" A1' D<?-B1@@< '1' 0BD1H1 '@?-' <-a' &?' @<? 1' &?' 1-'0<' 10& '1ff 0&' '+&@?- '1--1-'1>#@1'1>C& 1' 1 A' &?' <+&'A1ff C' <0B?-' @1 a' &?' <? 1' C0& -1ff <' B<?01' A1' H?1 '<0B?-' ?..1>1-'0&' ' 1+ 1ff H' '1ff 1>#@&'1>C& &' 1 A& ' I ' <+AA1' ' @&? ' CB& < &? 0ff B&?-01'@& 0ff 5B <#1 ff & 0ff 1-'1-A' 1\' 5B C' CB1001' 0?' B1&' =1' ' 1-' A?1>1-' B& -+'A\'C'@&/' C 1' B&-=100'&-' &?' C1-H?10 1' <CC-A 1' A1ff @&'<L' D&>10ff A&? ' @<' >&' 1'0&' ' A1ff D&>10ff A<0B?-' &? ' A1' >10>1' @1ff &? 10' 5B @<? 1' >&' 1' A<?R0ff 0='1-' <A ?..1\' C?' =1@&-0' 5B 1-B&? .1-' @<' CA-1' A1' =1@&-'1G 5B H' @1ff ?.1ff A1' @1ff A' \' &? 0' A1' @?-' <-a' &-' =1? 1' A1-' C&<'\' A&'1' =1' R>1' 'AL' A1=1? 1ff A1+W-' 1?L' 5f A1-' =1' 1' C?-'B'&-' B&>1' A1+0-' 10' A' ' ? +1?' &? \' =&' \' H' 0" <0B?-' '1ff 1B& A1' CB1001' # 1' .< <?-' A< &-1' C<-1 '&?' 1 &?>1' &?' CB1@@ A'B1ff 0&' ' <' C01-' &?' 1-' <C0' M <' 1L1>C@'='1' 1-' @<' D<?-B1@@< '1' @1' & ' 0&?#\' 0&-' .[?-A1' 1<@ff 5B A1ff 1L1>C@'='B<B'&-' '@@1&H10' A1' 1B& A1' 1-&@@1ff 0<?-\' <0B?-' <0? 1' 1-' ?-1' >10>1' @'1?' 1-' >10>1' @1L1>C@'DB< '&-' 5B @1-C@@1> ' A'B1 ff H' <' @& 0' C' -?@@ 1 &? ' <00'.-1' &?' <00'.-11' 1-' @10' A' \' 1B& A10' CB10010' # '1=0' .< <?-' A< & -1' C<-1 ' &?' \1 & -191 ' <0B?-' 1' C&@1' B@<?01' &?' >< 1 ' ='B1@@' +< '@ <?-' ? B&- < '<?-' <' ='@1' 1L1>C@'='B<B'&-' 5B @1- &@@1' >1- ff -1' 0&' ' -?@@1' ?..1>1-' A10' A' \' 1B& A10' 5B CB1001' 1 01' -1' <A-?@@1

' - "+&-!/ & ' ' 1./!1' -/

)' .'N$ ' '%%H' R'J 8' -/' D %'.$-/ ' ;0 '!"".-!.02+@

& ' 1 ? -ff KD'BD' <0>.0ff - 1 @'-'-.0ff AA' '&-ff ?#8' 0 <B '&-' ' "'>'-? '&-ff < ' D1' "'0B 1 '&-' &=' D1' , '-./0' ?A.10' &=' D1' &? 0' <-A' @<B10ff '-' KD'BD' D1' 0 'A' 1B& A0' & ' &B100ff # ' F ' '&=' & ' & ' & D1 K'01' #1' B1 '='1Aff A& TH2C1<' 0?0C1B 1Aff -&' ?A.1>1-' -& ' 1B& A'0D'=" #1' 1+1 01A' -& ' <A-?@@1AG -A' D<' D1' , '-./0' ?A.10' &=' D1' &? 0' <-A' @<B10ff '-' KD'BD' <-' 11& Aff &B100ff F & Aff @1<ff F< <-' &=' & -1 ff F ' ff <-1@ff & ' 1 ? -ff KD'BD P' =& ' D1' '>1' 0D<@@ #1ff 0D<@@ D<+1' &K1 ' &' 1L<>'-1' 0?BD' 1B& A0ff &B100ff F & A0ff @1<0ff F< <-0' T=' 1K-1 ff `F ' 0ff <-1@0ff & 1 ? -ff' # ' D1>'<-A' D1' ' @1 a0ff <-A' &' 1=& >' < 'A'<>1-Aff '-' ='' ><-B1' &=' D1' ?A.1>1-0' &=' 0?BD' 1B& A0' < A` &B1 0109^'<@@' D< 'KD'BD' &' D1>'' -' 'D1' ' "'0B 1 '&=' 011>1 D' &' #1' '0C '0'&-' &=' D1' ` @1 a0' 0P '-' 0?BD' ` 1B& Aff &B10010 (' F & Aff @1<ff F< <-' &=' & -1 ff F ' ff <-1@ff <-A' 1 ? -G' 1LB1C' CC1<@0ff -A'B >1-0' &=' 1<0&-' <-A' &=' !1@&-'10ff <-A' D1' ? j @<K '10' &=' D1' 0<>1ff <-A' D1' ?#0 <-B1' &=' D1' C &C1 ' <>10ff ? -<>10ff <-A' AA' '&-0' @1=' &?' ' -' & '.'-<@ F ' 0' <-AP' F ' 0' &=' L'.1-ff <BB& A'-.' &' D1' < ? 1' <-& D1 ' ='<'1' ><A1' D1' !' 0 ' 1< ' &=' ,=1.' 1- ff !< D1 ' &' &? ' & A' D1', '-.' D<' -&K'0ff <-A' '-' & D1 ' F ' 0' B&- <'-'-.' &B@<>< '&-'G &' D<' # ' 0?BD' '0j C '0'&-' &=' D1' @1 a' -&' ?A.1>1-' 0D<@@ #1' 1+1 01A' '@& ' <A-?@@1A;' -A' '=' <-' 1B& Aff &B100ff F ' ff F< <-' &=' & -1 ff 1 ? -ff & ' <-1@ff #1' B1 '='1A' A1=1= '+1ff & D1 K'01' D<-'<BB& A'-.' &' D1' F ' 'D.' KD'BD' D1 1&= 1><'-1Ad' '-' D1' 0 1<0? ff &? 0' & ' @<B10'8 = &>' KD1-B1' D1 ' #1' B1 '='1Aff D1' < '10G '-' =@ ><-B1' &=' D1' ?A.1>1-0' &='0?BD' 1B& A'<-A' &B100ff D<@@ D<+1' A+<- <.1' &'<@@1A.1ff D<' D1' 0<>1' F ' '-.' '0'+< '<-' = &>' D1' 0<'A' 1 '='B< 1G' <-A' D<' =&?-A' <-A' B1 j '='1Aff D1' 0<>1' < '<-B1' 0D<@@ #1' # ' D1' 0<' A' ?A.10' 1=& >1A' <-A' <>1-A1A' <BB& A'-.' &' D1' ='0' F ' '-.;' -A' >& 1&+1 ' '0' & A<'-1A' D<' '=' <-' 1B& A' & ' < B1@ &=' D1' 0<>1ff F ' ff 1 ? -ff <-1@ff &B100ff & ' F< >' '&=' & -1 ' '-' D1', '-./0' &? 0' &=' D<-B1 ff LBD1H?1 ff D1' &-1' 1-BD' & ' D1' & D1 ff & ' '-' D'0' 1<j 0? ff #1' `K'@@'-.@ 'U ' 0 &@1-ff <a1-' <K< ff K' DA <K-ff & ' <+1AA1A' # '<- ' =& a' & ' # ' & D1 ' 0&-ff `#1B<?01 ' KD1 1&=' <- ' ?A.1>1-' 0D<@@ #1' 1+1 01AG D<' 0?BD' 1<@1 ff ='1 ' <K< ff F ' DA <K1 ff ' +&'A1 ff D1' ' &B? < & 0ff E& 0'0A@& 0ff <-A' #1 & 0ff D1 1&=' '-j A'B 1Aff <-A' # ' &B100' D1 1?C&-' ><A1' D1 1&=' A?@ ' B&-+'<' # ' D ' '&F-' &-=100'&-ff & ' # ' -H?10 ' &' #1' <=B <' &=' @<K=?@ 1-ff KD1 1&=' D1' &-1' <@=' 0D<@@ #1' &=' D1' 1-' &=' <-' &? ' &=' D1' 0<>1' &? 0ff <-A' =&1' & D1 ' <@=' &=' & D1 ff 0D<@@ #1' ?A.1A' =& ' 1@&-0ff <-A' 0D<@@ '-B? =&1' <'-'&=' ! 1@&- G <-A' D<' D1' ?A.10' &=' D1' 0<'A' &? 0' &='=&1' &-1' 1-BD' & ' &=' D1' & D1 ff D<+1' &K1 ' &' D1<' <-A' A1 1 >'-1' 0?BD' "1=1?@ 0'#1=& 1' D1>ff <-A' D1 1&=' &' ><a1' A?1' ?-'0D>1-' <0' <=& 1' '0' 0<'A' &+'A1A' <@K< 0ff D<' '=' <-' 0?BD' 1B& Aff &B100ff F ' ff Q& ' F< <-' '&=' & -1 ff <-1@ff & ' 1 ? -ff & ' < B1@ &=' D1' 0<>1ff #1' -&K' & ' D1 1<= 1 ' 0D<@@ #1' 1Lj 1>C@'='1A' '-' D1', '-./0' D<-B1 ' ?-A1 ' D1' E 1<' 1<@@ <-A'0 B#' L1>C '='B< '&-' D1 1' &=' 1B& A''- @@1A' K'=&8' &? '<- ' < '-.'' -' D1' 0<>1' 0'4 @<B1' '-' D1' L1>C@'='B<j '&-'<-A' D1' - &@@>1-'&=' D1' 0<>1ff D<' '<-& D1 ' '>1'('=& ' <- ' & ' <00'.-1Aff & ' &' #1' <00'0 1A' U'' D1' 0<' A' ` 1B& Aff &B100ff F ' F ' F< <-' '&=' & -1 ff <-1@ff & ' 1 ? -ff -'<- ' 1 1 ff & Aff @<?01ff & ' < 1 ' &=' D1' 0<>1ff +< '-.' & ' B&- < ' &' D1' 0<' A' L1>C '='B<A&-' <-A' D1' - &@@>1-' ff D1 1' 0D<@@ #1' -&' ?A.1>1-' &=' D1' 0<' A' 1B& A0' <-A' &B100' 1+1 01A' -& ' <A-?@@1A

' 1&' &2' V."/' F V"& '3 -!+' -/' '! '5 2 $ ' &' +!"E' '! 'V' ' 6!#."/2'3".#!22]' " ' ';@' # 02!'] .'-2 1!' '! '5 Q' !-' N $%+' $ +' O +

!' 0/*!2' 1 @"! ."1' +' ! !#+2&-' 6!#."/2';@' &2 "&&.-' . ' !' +!"E=' &-' &"1 -#!'. ' 0/*!1!-

%#! '&- CC=1@0 +0/&<1!-2 0+7"&!2 V -'. //&&.-2 C#'

*;

<'<-B1' ++!/*!/' ;! 7!!-' ' 6!#."/' -/' !"&&# !' !"!.8 2 +' ;!' 1!-/!/' &-' &"1 -#!' .'0/*!1!-

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?; , .P % 0 ' *' -9#- /

W -3". ! &. ' .'" 3!"2. -2' *.&-*' 7& ' !' M&-*' .' B" -#!' 22&212'. ' .' !÷ /&2k 2!&2&-'2 +÷ -. ' ;!' !%#! !&

$ ' 2 '&-*' '.D 0' . ' 1+ 0'&-1 0 J ' ;!&-*' -' ! !"'&#!'& ' 0. ' - 1.;/ &&' H. # ' 22&212

H=)#! &.-2' =& ' - '10 Ho / !' !'' + !' ;!* 1&H0*

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W ' .!#& ÷ . ' 8D1' < ? 1' d] ! -

<' 1 '-.' +<#122'. HHH & 2' / C && '?1 '&- - ' . !-/! 2 <H /" & &-* <&H &-2!+'!2

ÿ !& <0>?BD' <0' &? ' &+1 1'. -' & A' D1' , '- .ÿ # ' D1' 001- ' &=' D'0' 0<.1' C?-B'ÿ A& D' C? C&01' K' D' D1' 'A' &=' E&Aÿ &' C<00' '- &' D'0' 1<ê>' &=' ! <-B1ÿ D1' 0<>1' &? ' 0<'A' &+1 1'. -' & Aÿ # ' DC' A+'B1' &=' D1' & A0' C' ' ?<ê <-A' 1>C& <êÿ <-A' <ê0& &=' D1' &> >&-0' &=' D'0 C 101- ' < ê'<>1-ÿ &' 10BD1 F' D1' "'0D1 '0&-0' &=' <êÿ 1 0&-0ÿ KD'BD' #1' & ' 0D<êÿ #1' 1 <'-1A' K' D' &? ' 0<'A' &+1 1'. -' & A' D1' , '- .ÿ &' <#'A1' '-' D'0' 1 +'B1' '-' D1' < 0' #1 &-A' D1' 1<ÿ D< D' & A<'-1A' <-A' C &+'A1A ' D< ')' 1+1 ' & 1B '&-' &' #1' ><A1' K' D' D1' ê<?01' &= &ê?>?0ÿ =& ' <- ' &=' D1' 0<>1' 1 0&-0ÿ D1 1' 0D<êê' #1' `B&- <'-1A' '-' D1' ê<?01' &=' LB1C '&-' '-' D1' 0<>1' >'00'&-' &=' D101' F& A0ÿ 00'0'0' -& 1' A'0 1'0'-1G <-A' D< ' <êê D&01' & 1B '&-0' #1' <êê&K<#ê1' <-A' <êê&K1A' =& ' D1>' <-A' 1+1 ' &=' D1>' '-' <êê D1' , '- ./0' &? 0' <-A' 1ê01KD1 1ÿ KD1 1' 0?BD' & 1B '&-0' D1' C? ' =& D' =& ' <- ' 0?BD' 1 0&-ÿ '-' <êê ê1<0' &=' 00'01 ' <0' K1êê &=' &+1ê A'001'0'-' <0' ! 10D' =C B1' K' D&? ' <- ' '" '==' B?ê ;' =&+'A1A' <ê K< 0 ' D< ' D1' ?A.1 -1- 0' &' #1 +1-' = &>' D1-B1ê =&= D' '-' 0?BD' 00'010' < <'. -1A' C ' &' #1' < <'. -1Aÿ #1' C& ' C 1 ?A'B'<ê &' <- ' &=' D1' 0<'A' 1 0&-0' 0&' <#'A'-.' '-' D1' , '- ./0' 1 +'B1' #1 &-A' D1' 1< ' <0' <=& 1' '0' 0<'Aÿ KD'BD' D<+1' <- ' D'-.' '-' 1+1 0'&-' ' '-' 1><'-A1 ' '-' 0?BD' <-A0' & ' 1-1>1- 0ÿ KD1 1&=' 0?BD' 00'010' #1' & ' 0D<êê #1' < <'. -1Aÿ '=' D1 ' KD'BD' D<+1' '-' 1+1 0'&<' & ' '-' 1><'-A1 ' '-' 0?BD' <-A0' & ' 1-1>1- 0' D1' -& ' -<>1A' '-' D1' 0<-'1' 0'010' #?' D<' D1 ' #1' <.<'-0 ' D1>' <êê +&'A0 <-A' D< ' D'0' < ? 1' 0D<êê 1-A? 1' =& ' K& $ 1<0' -1L ' =&êê&K'-.ÿ '=' D1' 0<>1' &? ' 0<'A &+1 A.-' & A' D1' , '- .' <#'A1'0&êê&-.' '-' D1' < 0' #1 &-A' D1' 1<ê &+'A1A' <ê0& ' D< ' <êê D1' - '10' ><A1' & ' &' #1' ><A1' <= 1 ' D1' ! ' 0 ' " ' < ' &=' D'0' C 101- ' < ê'<>1-ÿ #1' -& ' B&>C '01A' '-' D'0' C 101- ' A'-<-B1G <-A' D<' -&-1' KD'BD' D< D' ><A1' & ' 0D<êê ><a1' <- ' 0?BD' - '10' <= 1 ' D1' 0 'A' C' ' " ' < ' &=' D'0' < ê'<>1-ÿ D<+1' <- ' 1-1=' ' &=' D1'0<>1' A'-<-B1

ÿ !& ' D< ' . 1< ' <-A' . '1+&?0' &>C ê<'-' K<0' ><A1' &' ,'-.' 1- ÿ ê< 1' , '-.' &=' -.ê<-Aÿ !< D1 ' & &? ' F A' D1' , '-.' D<' -&K' '0ÿ <' D' i' < ê'<>1-' D&ê A1-' < ' 1'B10 1 ' D1' 1B&-A' 1< ' &=' D' ' . -ÿ # ' D1' &>j >&-0' &=' D'0' < ê'<>1-' <=& 10<'Aÿ &=' A'+1 0' ? A1 0ÿ <-0ê<?.D 1 0ÿ &##1 '10ÿ < 1 '10ÿ 001>#ê'10' &=' 1&C ê1' '-' . 1<' ?>#1 ' '-' <--1 ' &=' -0? 1B '&-0ÿ <-A' &=' A'+1 0' & D1 ' 1#1ê'&-0' <-A' '& 0G <-A' <= 1 ' 0?BD' ==1-B10' D1' 0<'A' !1ê&-0' <-A' ==1-A1 0' A'A' =ê11' <-A' K' DA <K' D1>01ê+10' &' A'+1 0' F &&A0' <-A' 01B 1 ' ê<B10' ?-a-&K-ÿ <-A' 1ê01KD1 1ÿ &' D1' - 1-' <-A' ? j C&01/ &' <+&'A' D1' L1B? '&-' &=' D1' &>>&-' <K ÿ <-A' D<' D1 ' >' . D ' -& ' #1'# &?. D ' &' <-0K1 ' <BB& A'-.' &' D1' &B10' &=' A'1' ` &>>&- ' <K ;' F D1 1?C&-' D1' 0<'A' ê< 1' , '-.' B&-0'A1 '-.' D1' <=& 10<'A' &' C ê<'-ÿ # ' D1' ` A+'B1' <-A' P' 001-' &=' D1' & A0' C' ' ?<ê <-A' 1>j C& <ê '-' D1' 0<>1' < ê'<>1-' <001>#ê1Aÿ A'A' & A<'-' A' 0 <##'0Dÿ <' D1' 1H?10' &=' D1' 0<'A' &>>&-0ÿ D<' '-' <-' <= 1 ' B&>1' '-' &' D1' D<-B1 ÿ <-A' ><a1' &>C ê<'-' A?ê ÿ D0 ' <-' 0?BD' !1ê&-' & ' =ê1?A1 ' <0' <=& 10<'A' D< D' =ê1A' & ' K' DA <K-' D'>' &' <-' 0?BD' ê<B1ÿ & ' 1ê01KD1 1ÿ &' D1' - 1-' <=& 10<'Aÿ ?C&-' 0?BD' &>C ê<'-' <' 'êê 0D<êê #1' 0?=='B'1- ê ' ><A1' =& ' D1' , '- .' G <-A' D1' D >0ê B1êê& ' &=' -.ê<-A' =& ' D1' '>1' #1' -.ÿ <= 1 ' 0?BD' 'êê & D' >' A1ê'+1 1Aÿ '=' D1' -)h ' D1' A?ê ' '-=& >1A' D<' 0?BD' 'êê B&-<'-1 D' ? D' 0D<êê D<+1' &K1 ' # ' D'0' "'0B 18' '&-' &' <+ < A' <' F ' ' &=' <C'<0' < ' D1' ?' ' &=' &? ' A' D1' , '- .ÿ A' 1B 1A' &' D1' D1 '=='&=' D1' ?- ' ' &?-' '10' KD1 1' D1' 0<'A' ? A1 0ÿ <-0ê<?.D 1 0ÿ &##1 '10ÿ

1>' C ' B1<' H' -=1' R00&, <'. -1' % ' ê1' &'ÿ A1' ê<001-' A1' 0&-' R00<.1' B&?-01'êêÿ 01' C/C&01' &+1' ê1'A1' A1' "'1?' A1' C<001 '1-' 0&-' &'<ê>1' A1' ! <?- 1ÿ >10>1' - 1' A' ' R00&ê' +0 <'. -1' A1' ê<A+'0' A10' I 0' 10C 1êL' I ' 1>C& 1êL' I ' <?L" A10 &10' A1' B10 ' C01C ' C ê1>1- ÿ C/' 1+' 1 ' ê10' A10D1 'ê' <?-B10' A1' &? \' C0&-10' H" 0&?- ' ' &?- ' 1 1C?\' &+10Hÿ --=1' A' ' ' ê1' &" <' A1>? 1 ' 1-' 0&-' + B1' 10' C< '10' A1C<' A1' ê<ÿ <A' & A'-1' I ' C +1-ÿ H?1-' &D10B?-1' C 1BB' &-' & 1' ê1' Bê<?01' A1' +&êK-? ÿ <==<' 1' C ' HB&-H1' A1' >10>10' ê10' C0&-10ÿ 0&' ê 1-' ê<' Bê<?01' A1LB1CB' &-' B&- 1-?\' 1-' 'B1 ' &>'00' &-' A1' B10 10' C&ê10' 00'0'0' -&+1' A'001'1ÿ 1 ' H' &? \' B1?L' C 1BA&-0' 0&'1-' <êê&-'#ê10' I ' <êêC?1\' C/' 1?L' I ' BD10B?-' A1' 1?Lÿ 1=' &? 6' ê10' &? \' A?' Cê I ' <=êê& 0' &?' A1ê C 1BA&-' 0&=' > 0' <+W- ' C ' < A>' A1ê1' C0&-1ÿ 1-' &? \' Cê110' A<00'0 0' 0' -' A1' -& 1 ' A'001'0'-1' B&>1' A1' = 100D' =& B1' 0< = m 1B?-" A'==' B?ê 1;' ? +1?' &? \' =&' \' ' ê10' ?. .1>1- \' = 1-A 1\' A10& 1' 1-<+= ' ' 1-' A1ê L' <0j 0'010' < <'= '1\' &-' < <'= ' 0O' -H' 0&'1?' > 1' = ?A B'1ê L' ' < B= = 0' A10' Aê \' C0&-10ÿ '00' - ' A1> <- \' 1-' ê1' ,+'B1' A ' & ' C' A1' ê<' B&>1' A1 F - ' 10 ' A' ÿ H&?- ' <0B?-' BD&01' 1<' 1-0'&-' &?' 1-' 1><'-A 1' 1-' R 10' &?' 1- \' A&?-' A ê&L' <00'010' &?- ' & ' , &?= ' < <'-'1\ÿ Aê0' H&?- ' >" 1 0'&=ê' 1>< '-A 1' i -' A1ê LR 10' ' 1A \' -1' 0&'1- ' -&>1\' 1-' >10>10' ê10' <0 '01 ÿ >10' J' A10' 0&'1- ' 1-C0' 1?L' &? ' +&'A1\' " 1 ' ' 10' 10 < ?' ' 1= A? 1 <' C' A1?] ' <-0' C0BD1' <' 1-0?<- \ÿ 0" >10>1' -=1' A=' 3' ê1' &" A0>1=<' C' <?= ' A1' 1>C0' 10' T ' J' C '10' A1C<' A1ê<9/P' D +1?' <?L' ' &? ' ê10' 1- 110' =1'1=\' &C' <=1ê 1\' <=20' ê1' C ' ' &? ' A1' B10 ' C01- ' C ê1>1 ÿ -1' 0&'1 ' B&>C '01\' 1-' B10 ' &=A'-< >B1G 1 ' :' -?êê H' <A' =<' ' &?' =1 <' <?A1êL' ' &10' <C0' ê1' A' ' C = ' &? ' A1' C ê1>1-' <' ' <0B?-' #1-1='B1' A1' >10>1' ê& A'-<?-B1

1>' C ' B1C' H' .0?= A1' I ' . 1+C?01' B&>C ê1ê-' =?'0 ' =<' ' <' &" 1-" <A'0' &" " 1-.ê1R 1' C'1 ' -=1' ' ê1' & ' H& 10 ' <' 0&= ' C ê1>1-' 1 \' <' 1 &10 =' ê<'ÿ A1' 0&-' 1. -1' 01A1ÿ C' ê10' &10' A1' 0&-' C ê1>1-' '<+ - A' ÿ A1' A'1010' >?' A 10' D&>'B'A10' &#C '10' #<= ê10' <001>#ê110' A10' .1-== ' 1-' .0?= A1' -&?>#1' C' =<5' A= '0? 1BB'&-0' I ' A1' A' 010' <?R0O 1#1êê'&-0' I ' '& 10G I ' <C0' '1êL' >10=' 10' ê10' A= \' =1ê&?-0' I ' >10=1'0&? 0' 01-'=? 1= ' I ' 1 <D1 1-' <0' A'1010' #& 0' I ' 1?L' B& 1\' I ' A'0B&-= \' I ' <'êê& ÿ <' ê1- 1-' I ' CC ' A1' &'A1 ' ê1L1B?B'&-' A1' ê<' B 1' ê1 ' I ' H'ê0' -1' M &'1-' >10-1\' <' 10C&?= B1' 0&ê&-B' C110' A1' ê<' ê1 ;' ? ' H& ' ê1' A' ' ='<A.<= 0' &'ÿ B&-0 A1 <-' ê<' 0?'0A' ' B >8' C ê1'= ' C' <001-' A10' 0' 10C?1êL' I ' 1>C& 1êL' 1-' >10>1' ê1' C ê1>1-' <001>#ê1\' -+&' ' & A' -1\' 10 <#ê'1\' <' ê<' 1H?10' A10' A' \' 10ÿ H' 0" = 0B?-' 1D' 1>C0' < 1-ê ' +A.-1' 1-' ê<' D<--B1êê<' '1' I ' =1B1' B&>C ê1'-' A?1>1= ' ' < ?-' '1ê =1ê&-' &?' ><ê1='A0&?' B&>1' <+= ' ' 10' A0' 01-' 10' = ' I ' 1 <D1 ' <' <0B?-' '1ê ê'1?' &?' <'êê&? 0' <ê 1-1-' 0?'0A' ÿ 0&='0?' '1ê &>C ê1'-' ?-1' #'êê1' <' ê?' ê 1ÿ 0'ê C&1' 10 1' 1-=& >1\' A?1>1-' '1ê #'êê1' B -1-1' 1ÿ C&<' ' A1= '' 1' &êê&-B' 0<' A'0B 1B'&-' ?-' #=' A1' <C'<0' <' ê<' 0?' 1' A?' & ÿ A' 1B ' <ê +'0B&-' A1' &?-11' &?-110' &?' ê10' A=10' >? A 10' D&>'B'A10' &#& '10ÿ

/F ' 1-' &-' <-' <0? 1' C-' D1' &êê

3" . '&. -' .'" !' .0- @' 3 + &-!' .' -# 2 !'" -/' . !'" B" -# &212

&+'A1A' <@0 ' D< ' '=' <- '0?BD' <01' D<CC1-' '-' D1' 0<'A' &?- ' <@< '-1' &=' <-B<0 1 9 & ' 1@01KD1 1' '-' <' @<B1' 1-= <-BD'01A9 KD1 1' D1 1' '0' <' D<-B1@@& ' <-A' <' 1<@@ D<' D1-' D1' 0<'A' D<-B1@@& ' &=' 0?BD' &?- ' & ' @<B1' 1-= <-BD'01A9 =& ' D1' '>1' #1' - .9 <= 1 ' &>C@<' - ' &' D'>' A?@ ' ><A1' <-A' 10 '='1A' # ' <' ?0 'B19 & ' D1' '1? 1j -<- '&=' <' ?0 'B19 <-A' D1 '=='&=' 0?BD' &?- ' <@< '-1'& ' @<B1' 1-= <-BD'01A9 =& ' D1' '>1' #1' - .9 '-' D1' !& >' <=& 10<'A9 0D<@@ D<+1' @'a1' &K1 ' &' <K< A' `<' <C'<'0' <-A' <' F ' P' &=' &B@<>< '&-' <=& 10<'A9 <0 D1' 0<'A' D<-j B1@@& ' &=' -.@<-A' 0)' D< D

W !' 0/*!Z 1 @ 1!-/' 6!#.''/2' &-' 212' &2 "&2&.:.' !"% 2' C#

9 ' '0' & A<'-1A' <-A' 10 <#@'0D1A' D<' D1', '-./0 ?0 'B109 #1=& 1' KD&-' <-' '0C '0'&-' & ' 1=<?@' '0' & ' 0D<@@ #1' =&'>A9 #1' ' '-' <-' 1B& A0' <-A' &B10010' KD'BD' -&K' #19 & ' 0D<@@ #19 A1C1-A' -.' #1=& 1' D1>9 <0 K1@@ # ' F < ' &=' & '<0 & D1 K'019 & ' '-' D1' 1 ? -0' &=' D1' 0<>19 ><AU & ' &' #1' ><A1' # ' D1 '==09 & &-1 09 <'@'==0' &=' ! <-BD'010 9 & ' <- ' & D1 9 # ' '0C '0'&-' &=' D1' @1 a0' &=' <- ' &=' D1' <'A' &? 0' &=' D1', '-.9 ' # ' '0C '0'&-' &=' D1' D1 '==09 -A1 8 D1 '==09' & &-1 09 D1' ' @1 a09 & ' & D1 ' ='B1 00' @1 a09 & ' D1 ' '-'j 0 1 0' KD< 0&1+1 9 >' K ' '-.' &-1' 1 1 ' & ' &-1' @@<#@1' &&' >?BD' & ' &&' @' @19 0D<@@ D<+1' &K1 ' &' <>1-A' 0?BD' "1=<?@ 0' <-A' '0C '0'&-0' <BB& A'-.' &' D1' ' "'0B 1 '&-9 <-A' # ' L<'->< A#-' D1 1&=' # ' D1' 0<'A' ?0 'B10' &' #1' <a1-' KD1 1' D1 ' 0D<@@ D'-a' -11A=?@' &+'A1A' D<' D'0' <?1' A&' C& '1L 1-A' &' 1B& A0' <-A' &B10010' '-' D1' < 0' &=' F <' 1' G =@& ' &' D1' &B10010' <-A' 1B& A0' &=' ?@<K '10' &=' !1@&'?10' <-A' 1<0&-09 <-A' D1' "1j C1-A1-B'10' D1 1&=

%#! &.-' 2 .' 3". #!22!2' &-' V +!2' -/' 0+7"%!2 &-' B!+.-&!2 -/' "! 2.-2

9 &' 10BD1K' D1' "&@&? 09 E '1+<-B109 <-A' "'0D1 '0&-09 KD'BD' A<'@ ' A&' D<CC1-' &' ><-' &=' D1', '-./0 @'1.1' C1&C@1' # ' D1' 0BD1< & 09 =& ' D<' D1 ' <a1' -H?10 09 &' '-H?' 1' #1=& 1' D1>9 <0 K1@@ # ' +' ?1' &=' D1', '-./0 F ' 09 <0' &=' D<' ='B109 =<+&? <#@ ' <-A' -& ' A?@ 9 # ' 1&C@1' D& ' '>C<-1@@1A' -& ' 1 ? -1A' &' D1>' # ' D1' D1 '==0' &=' D1' &?- '109 <-A' >& 1' &= 1-' =& ' DA ' C '+< 1' E<'-9 <-A' =& ' D1' "'0D1 '0&-' &=' D1' , '-A/0 D1.1' 1&C@19 D<-' =& ' D1' &=' ' &=' D1' 0<==@1' &? ' & A' D1', '-.' ' -A' <@0&' =& ' D<' D1' <-A0' <-A' 1-1j >1-0' &=' ><- ' &=' D1', '-./0' @'1.1' 1&C@1' #1' 01'01A' '- &' D1' -./0' <-A0' ?C&-' 0?BD' -H?10 R' `&=' @1 ' &' =1 -' # ' D1' D<-B1@@& ' & ' 1<0? 1 9 #1=& 1' 0? D' -H?10 0' #1' 1 ? -1A' '-' D1' D<-B1 ' `G' &? ' & A' D1', '-.' D<' D' & A<'-1A93P' # ' D1' ? D& ' ' &=' D'0' C 101- ' < @' <' >1-9 D<' -&' 0BD1< & ' & ' &> >'00'&-1 ' <a1' '-' <- ' K'01' <- ' -H?10 ' &' '-H?' 19 #? ' &=' !1&C@1' 1 ? -1A' <-A' '>C<-1@@1A' # ' D1' D1 '==0' '-' D1' &?- ' K' D'-' KD'BD' D1' '0 0BD1< & ' & ' &> >'00'&-1C ' -A' '=' <- ' 0BD1< & ' & ' &> >'00'&-1 ' <a1' -H?10 0' &=' 1&C@1' KD'BD' #1' -& ' '>C<-1@@1A' -& ' 1 ? -1A' # ' D1' D1 '==0' <0' '0' <=& 1' 0<'A9 <-A' D1 1&=' # ' L<>'-< '&-9 & ' & D1 K'019 <' D1' ?' ' &=' D1' < 9 KD'BD' =& ' D'>01@=' & ' =& ' D1', '-.9 ' <- ' & D1 ' 1 0&-' ` D< P' K'@@ 0?19 #1' A?@ ' B& +'= 9 =& ' 1+1 ' -H?10 ' 0&' <a1-' D<' D1' <' -' <-A' ! & =1' ? 1' &=' L@ ' **' &' #1' C<A9 D<' '0' &' 0< 9 D1' &C1' <@=' &' D1' ', '-.9 <-A' D1' & D1 ' <@=' &' D1' < ' . '1+1A9 <' KD&01' ?' ' D1' 0D '@ #1' B& -+'=@ ' -A' D<' -&' <-A0' -& ' 1j -1>1-0' 01'01A' '- &' D1' <-A' &=' ?' & A' D1', '-.9 ?C&-' 0?BD' -H?10 0' <a1=" #1=& 1' D1' 0BD1< & 0' &=' &> >'00'&-1 09 #1' -& ' '-' <- ' K'01' @1 ' -& ' . <- 1A' &' =1 >' # ' D1' D<-B1@@& ' & ' 1<0? 1 ' &=' -.@<-A9 & ' <- ' & D1 ' D1', '-./0 ==' B1 9 ?- '@ D1' 0<>1' -H?10 0' <-A' 1 A'= 0' #1' =?@@ ' 1 ? -1A' `'-N P' D1' D<-B1 9

? +1-' <?L" H' 0" <0B?-' '1@ B<R1' <+1'. -1' 1-' @1' A' ' &?- 11' C<@< -' A1' <B<0 9 &?' <'@@&? 0' 1-' @'1?' 1-8 = <?-BD'01' @<' &?' '@ <A' D<?-B1@@1 ' I ' 01<@9 H<A&-H90' @1' A' ' D<?-B1@@1 ' A1' A1@ &?- 11' &?' @'1?' 1-= <?-BD'01' C ' @1' 1>C0' 10 1<- 9 <C0' B&>C@1'-' <' @? ' A?1>1-' =<' ' I ' 10>&'. -1' C' ?0 'B1' &?' '1? 1-<- ' A1' ?0 'B1' I ' '08' B&?-' A1' '1@ &?- 11' <@< -' &?' @' ? 1-= <?-BD'01' C ' @1' 1>C0' 10 1<- ' 1-' @<' =& >1' 0?'0A' 9 1' ' 01>#@<#@1' C&<' ' A1' <.< A1 ' <C'<'0' I ' # '1=0' A1' CB@<><B'&-' <+= ' A@ \' B&>1' @1' A' ' D<?-B1@@1 ' '" 1-.@1 1' C ' @1' 1>C0' 10 1<- ' <A

1>' & A1'. -1' 10 ' I ' 10 <#@@1' ' @10' ?0 'B10' A?' & ' A1 F - ' H?1 L' < B?-1' >10C '0'&-' & ' A1=<? 1' 0&=' &?' M <' &+19 0&'@ ' @' 1-' <0B?-' 1B& A10' I ' 1 0 0 1 0' H& 1' 0&?- ' &?' M &?- ' C1-A<- \' A1+D' ' 1?L9 0' -' C' +&'1' A1 &?' B&>1' <?R1>1- 9 &?' 1-' @1\' 1 & -1\' A'B1@@10' ='' \' &-' <==<' 1\' C' '0B&?- \' & &-1 0' <'@'==0' A10' = <?-BD'010' &?' <?= 10' H1B&-H109 C' >10C '0'&-' A10' @1 a0' A<0B?-0' A10' A' \' #? \' A?' &'' &?' C' >10C '0'&-' A1\' '0B&?- \' #? \8' +'0B&?- \' & &-1 09 @&?' @1 B0' & ' <?R0' ==' B1 09 @1 B0' &?' >'0 10' HB& H109 1-' 10B '+<-' ?-' 1' &-' ?-' 0'@<#@1' &C' &?' &C' C&@19 <'1-' C&<' ' A<>1-A1 ' '1'L' A1=1? 10' I ' >10C '0'&-0' 0&@&-B' @&?' A'0B 1A&-' I ' C' 1L8' <>'-<A&-' 1-' C' @10' A' \' ?0 'B10' <C0-A 1' &?' @&?' 1>9 #@1 <' #&0&'. -<#@1;' ? +1?' H' B10 ' 10 < ?' -1' 01' 1L 1-A1' <0' 1B& A10' I ' CB10010' 10' C '10' A1' E<@109 W '<0' =1B1 A10' I ' CB10010' A? @<.<='10' A10' =1@&-'10' I ' 10&-0' I ' @1L' A1C1-A<- \' A'B1@@10

1>' C ' 10BD?1 ' @1\' A&@&? 0' . 1+<-B1\' I ' A'0D1 1 '0&-0' H' A1' &? ' 1-' <?R' = +A. -1- ' <0' C ?0&? 0' @'1.10' -=='1' B?' @1' & ' C' @10' 0BD1 &? 09 A1' B1&' H'@0' C . -1- ' 1-H?10 10' A1-H?1 1 ' A1+3- ' 1?L9 0'#-' C' , ?1' A10' # '1=1' --=1' _ ' @1' & ' B& >1' A1' @&? ' &=='B1 9 =1+&? <#@1>1- ' I ' -&?-' A?1>1- ' C' .1- \' -'1- ' 1>C<-1 1\' -1' 1 & -1L' <' 1?L' C' @10' '0B&?- \' A10' &?- 109 I ' C@?'0' &0 '? ' @&? ' CC 1' .< -1' I ' C ' A'0D1 1A0&-' A10' @'1.10' - 1' _ ' @1' & ' ' C ' C=' ' >10>1' --=1'= ' @1' & 9 ' <?L" A1' B1&' H' @10' R 10' I ' 1- \' A10' C@?0&? ' @'1.10' --=1' @1' & ' 0&?- ' 0A01\9 10' ><'-0' --=1' @1' & ' 0 ' '1'L' 1-H?10 10' I ' <?R0 ' I ' @1001\' C' @1' D<?-B1@@1 ' &?' 10& 1 ' <' =& >1' A1+W- ' B1&' H' >10>10' @10' 1-H?10 10' 0&'1- ' 1 &?>1\' 1-' @<' D<?-8' B1@@< '1' --=1' @1' & G 10 ' & A' -1' C' <?B & ' 1' A1' B10 ' C01- ' C@1>1- 9 H' -?9 B#1 &?' ? ' '<'00'&-1 ' C' . -1' <0 ?-1>1- ' <0B?-' 1-H?10 ' A1-H?1 1 ' 0'-&-9 A10' .1- \' 1 & -1\' ' 1>C<-1 1\' C' @1' '0B&?- ' 1-' @1' &?- 1' A1' -\' H?1=' '@ 10 ' 0BD1=&?' &?' &>'00'&-1 ' ' 0" <0B?-' 0BD1 &?=' `&-' &>'00'&-1 P' G '. -1' 1-H?10 10' A10' .1- \' '-1' 0&?- ' > 1' 1-C<-1@@1\' -1' 1 & -1\' C' @1' '0B&?- ' B&>1' A10?'0' 10 ' A==9 I ' 1- ' C' 1L<>'-<B'&-' &?' <?. >1- ' <@ 0?' 1' A1' C'@1' H' C ' @? ' >10>10' &?' C ' @1' & ' &?' <? 1' C0&-1' & -H1' +&'@@1' C ?1 ' 0&' ' B&-+'B ' A?1j >1- 9 C 0BD10B?-' 1-H?10 ' 1-0 ' C 'L' H' 1-B&? .1' @<' C1'-1' I ' =& =<' ? 1' A1' L ' ' <C<'1 0@ B10 <00<, ' @?-' >&' 1' <?' &" I ' @<? 1' >&' 1' <?' C '1' <' H" 0? 1' '@ M <' B&-+'B ' ' H' ?'@10' R 10' -1' 1- \' 01'01\' 10' ==@< -0' '=1' @1' & 9 0 ' 1-H?10 10' C '01\' A1+#<' @10 0BD1 & '&-' &8' >'00'&-1 0@ -1' 0&'1- ' <0B?-1>1- ' @1001\' '1' .0?- 1\' <' =1 >1' C' @1' D<?-B1@@1 ' &?' 10& 1 ' '" 1-.@1R 19 &?' <?R' ='B1 ' -=1' _ ' @1' &" HB&-H' <-H' H' >10>10' @10' 1-H?10 10' I ' RA' \' 0>1<' 1 & -1\' C@1'<1>1<' U '' @<' D<?-B 1@<=

(-1 -1A' &-' D1' &@@

.' -/Z 2!&2!/' &-.' !' M&-*(2 -/Z 0 .-' -SO!2 2 2 +# ;!'+!' .' "1' 0-&# !'" -S-!2 Z' "! 0"-!/=

-' !- + @'. ' B." @3.0-/2

[. - ' %O ' &$ ' '! ' 1 ' -/'. !"' -/' '! '

' 'SPG' 6 #' !' R .'\' ZZ' !' # #' 'S!!$:!' 0! #

&?' 1-' @ I BD1H?1 9' >10' A1>&1 .1 ' ' C? \' A1@L' R 10' I' 1 \' C' '1 >1- ' I ' B&- '-?<@>1- ' 10' ><'-0' - 1' @1' & 9' <-H' @10' A' \' 1-H?10 10' I ' , A' \' 0&'1- ' 1 & -1\' I ' C' +-' >&'0' <C20 >10>1' @1' 1 & -1' 0'' '00'- ' -1' 0&'@' H' B1@? ' &?' B1?L' H' 01- 1' &?' 01- 1- ' 1?L' . 1+1\' ?' >10>10' @10' 1 'H?10 10' &?' &?0 1\' A1' @&? ' 10' &?' 1- \' +1'. -1- ' 1-' @<' D<?-B1@@< '1' I ' 0& ' C=1 &- ' A1' 0+1 01 ' @10' A' \' 1-H?10 10' I ' 0& ' &==1 &- ' A1' -A 1' >10>1' @10' 10' I ' \ ' <'=1 >1' ' ' H' 0'' '00'- ' =&?- 9' H' <A&-H10' >10>1' @10' 10' I ' I' 0&'1- ' B& > '\' <' 1?L9' 0'@0' >&-0 1- ' #&-10' 1+'A1-B1\' C+<- \' @&? ' 1 0' 10 1' +1 &'0' 0&@&-B' @<' =& >1' A1' @10 < ? ' =<' ' <-' `LLL P' @1' & ' ' '1 0' C? 0' @1' B&-H?10 9' <' 1-' ' <-H1' @'00?1' 0' >10>1' @1' <+1 0' C '0' 0&' ' /)' I ' A'0B?00?' C ' @1' & ' &?' C ' @1' C '1@ &+<- ' 0?=='B'<- ' 0?1 1' A1' 0?' ' @1' A' ' 1 0' &+1' 1==1B 9' I ' A1' <'A 1' I ' C<'1 ' <' -=1' = ' @1' & ' @1' <- -?1@ +<@?1' A10' 1- \' A&- ' @1' 0+1 0' 1-0" <' C \'9' 0'@ 0&' ' A'0B?001' C ' @1' & ' ' 0" <0B?-0' 10' C< 1- 0' A10' <0 ?-0' 10' &?' < \' 0&'1- ' =<' \' <?' > <= '1' <' <0B?-' <? 1' C0&-1@ 8 ?@1001\' <' =1 >1' A1'-0' @1' A' ' >& 0' 3!' & ' A' ' >&'0' A?' 1 & -1' 0&'1- ' +&'A1\' I ' 1-?\' C ' -?@' ' ' H' @10' 0BD1 &? 0' I ' &>'08' 0@& 1=0' 0 C1' -1' A1' =1 =<' ? 1' A1' L] '9' <C<'1 0' B10 <00<8' + @ ' @?-' >&' 1' <@ &" I ' @<? 1' >&' 1' <@ C '1' <' H" 0? ' '@ < B&-+'<9' 1 & -1- ' 1-' @<' D<?-B1@@<=' -=1' ?' @1' & ' &?' 1-' @10BD1H?1 ' @10' 1-H?10 10' A1+0- ' 1?L' C '01\' A1'- ' ?-' >& 0' C0BD1 -' <C0' @<' C '01' A'B1@@10' ' 1 ' B#10B?-' H' +&1 ' 0? ' C ' @1' & ' @<' 0? 1' 1-' B1@@ C '1' ? +1?' &? \' =&' \' H' B10 ' 10 < ? ' 1 >1-B1' I ' C' . -1' 1==1=@' I ' =& B1' 1-' @<' =10 ' A1' <0H1' C0BD1' -<+1 -' 9' <' A? 1 ' CC1 ?1@>1- ' I ' -1> 1' A1+3-

1>' B&>1' 1-' @1' 1>C0' A10' -&#@10' C .1 -' &? 0' -=1' ' @1' & 9' C ' @<' C &0C' 1' C=' ' I ' #'1-' A?' &'<@>1' " 1-8' .@1 1' I ' C ' @<' 0?0 1- <B'&-' A1' @<' '@@1' A1' <@1 0@' & A'-1' 0&' ' C' A'C0' 10 < ?' \' I ' & A'-<-B10' H' @10 <C@1' &' ' 1-8' '1 >1- ' <' @<' A' ' '@@1' A1' <@1 0@' I ' 1-' -?@@ <? 1' @'1?@' AC? 1' @1' >11 G B10 <00<+&' ' H' &? \' @1\' @1'-0' C1<@L' @<- - \' H?' 0' C@?>#1' I ' 10 >-@ I ' =&- ' <? 0' BD<-A'010' C<00<0 \' D& 0' A?' A' ' &'<@>1' I ' D& 0' A10' 10' A1' E<@10' I ' ''@<-A@ A1?001- ' 1-A1 >1-' C<001 ' I ' 1C<' 1 ' <@ A' ' 0 <C@1' I ' <' -?@@ <? 1' @'1?@@ 0? ' C1'-1' A1' =& =<' ? 1' A'B1@@10G 1LB1C \' '1@L' ' 'BD<-A'010' H1-' @10' A' \' 10 < ?' \' I ' & A'-<-B10' 0&- ' 1LC001\9' I ' =& 0C '01\' 0'B&>1' 1-9' 'B1@@10' 10 ' B&- 1-?\' C@?'0' <?' C@1'-' G @10' H?1?L' 10 < ? \' I ' A'-<-B10' <-' 0BA1' - -=1' = ' @1' & ' H& 10 ' =1? 1- ' <C8' C &+1\' <==' >10' I ' & A'-1\' C ' 10 1' A?1>1- ' 1L1B? \;' '1- ><'-0' 0'#-' 0&?\' B&@&? ' A10' 1LB1CB'&-0' 1-' @10' A' \' 1 i < ?' \' I ' & A'-<-B10' B&- 1-?\' &>1' C' B&@&? ' A1\' , B1-B10' C' -=1' A' ' _ ' @1' & ' <0' A'C010' C0&-10' . ?- 1\9' . A - A1' H?<- ' 1' A10' @<'-0' C1<@L' @<-?\' H?' 0' C@?>#1' I ' 10 <'-9' I ' C@?0&? 0' <? 0')5BD<-A'01\9' &?- ' 10 11' B&- '-?1@@ >1- ' A1' 1>C0' 91-' 1>C0' I ' ?-H& 1' 0&?- ' >10-1\' I ' B&-+1'1\' D& ' A?' &'<@>1' I ' A10' A' \' 10' A1' E<@10' I ' "' @<-A@ 1-' @<?-A'10' &@<-A' m1@<-A' I ' <#<-' I ' <0' <? 0' C '10@ -'1- ' 10& <- \' <?' A' ' 10 <C@1' 0'B&>1' '@0' A1?001- ' =<' 1G C ' H?1@10' B<?010' -=1' A' ' ' @1' & ' 10 ' A1= <?A10' A1' B10 ' B?0 ?>10' I ' 0?#0'A'10' H' A1?001- ' <>&?- 1 ' <0' -& <#@10' 0?>10@ <' 0&-' 1-B 101' 0'@ 1- ' =' '0 ' A?1>1- ' 10C&-A?\' I ' B&- 1- 8G I ' &? 1' @< 1 - 1' A?' & ' <' <@1 0' 10 ' 01>#@<#@1' A10 1' +&'A1

& '`'- P' D1' LBD1H?1 9'#? '<@@'0?BD' <-A0'<-A 1-1>1- 0' 0D<@@' - ' 1@ '<-A' B&- '-?<@@ ' 1><'-' '-' D1' <-A0' &=' &?' & A' D1' , '-.9' ?-?@ D1' 0<'A' -H?10 0' <-A' 1 A'B 0' #1' 1 ? -1A9' <-A' # ' <' &- D' <= 1 ' D1' 0<>1' 1 ? -9' '=' ' ' #1' -& '0&' D<' D1' & ' D1 'KD'BD' =11@ D1>' . '1+1A' # ' D1' 0<>1' -H?10 09' & ' C? '-.' &? P' &=' D1' ' <-A0'<-A <'1>1- 0@ B&>1' '- A' D1' D<-B1 9' <-A' C &==1 ' D1>01@+10' &' <j +1 01' D1' 0<'A' -H?10 0@ <-A' ` D1-' &==1 '/P\' &' <a1' D1' 0<>1' <-A0' & ' 1-1>1- 0' &' =1 > G' <-A' ==' D1 ' 0&' A&9' D<' D1-' D1' 0<>1' <-A0' & ' 1-1>1- 0' #1'B&>-A 1A' &' D1>9' '=' D1 ' 0D1K' . &&A' +'A1-B1@ C &+' -.' D1' ' <+1 01' &' #1' ?1@<= 1 ' D1' ! & >' &=' D1' < ? 1' ><A1' D1' ' = 80'L D' 1< '&=' - .' AK< A' '<= 1 ' D1' &-H?10 9' &' D&@A' ?- '@ D1' 00?1' <a1-' C&-' D1' 0<>1' <+1 01' #1' =&?-A' <-A' A'0B?001A' =& ' D1' - .9' & ' =& ' D1' < 9' =' -A' - .' 0?==' j B'1- ' ? 1 ' &' C? 0?1' D1' 0<'A' <+1 01' K' D' ==1=&9 <-A' &' 1-A1 ' <-A' C< ' &' &? ' & A' D1' , > .' D1' 1< @ ' <@?1' &=' D1' <-A0' KD1 1&=' D1' <+1 01' 0D<@@ #1' 0&' <a1-9' '=' ' '#1' A'0B?001A' =& ' D1' , '- . ' -A' '=' <- ' 1 1 0' < 1- 0' &=' <- ' 0=' D1' <-A0' & ' 1-1>1- 0' #1' ><A1' &' D1' B&-j < ' &' <- ' & D1 ' 1 0&-9' & ' @1 ' &' =1 >' K' A' ' -' D1' 0<' A' &- D' <= 1 ' D1' 0<' A' &- D' &=' 1 ? -9' D1 '0D<@@ #1')' D&@A1 -' =& ' -&-1 ' -A' D<' D1' 0BD1< & 0' & ' &>>'08' 9 0'&-1 0@ ?C&-' <'-'&=' D1' ! & =1' ? 1' &='] L' @' ' &' #1' C<' A@ D<' '0' &' 0< 9' D1' &-1' <@=' &' D1' , '- .9' <-A' D1' & D1 ' <@=' &' D1' < ' <' KD&01' ?' ' D1' 0D<@@ #1' B&-+'B 9' 1j ? -' D1' -H?10 0' #1=& 1' D1>' <a1-' '- &' D1' D<-B1 ' &=' &? ' & A' D1' , '- .9' & ' '- &' D1' LBD1H?1 9' K' D'-' <' &- D' -1L ' <= 1 ' D1' <a'-.' &=' D1' 0<>1' -A' 1+1 ' <-' KD'BD' K'@@ 0?1' =& ' D1' - .' 0D<@@ D<+1' D1' ?' ' '-' D'0' 1@? @=' &+'A1A' <@K< 0' D<' D'0' < ? 1' #1.' -' <-A' <a1' I B ' <-A' ! & B1' '-' D1' ! 1<0' &=' <0 1' -1L ' B&>'-.9' <-A' -&' #1=& 1@ &' 1-A? 1' =& ' 1+1

9' F D1 1<0' '-' D1' '>1' &=' D1' , '-./0' -&#@1' &.1-' & 0@ =& ' D1' &0C1 ' 9' &=' @' <-A' F 1<@ D' &=' D1' 1<@>' &=' -.@<-A@ <-A' =& ' D1' ?0 1- <='&-' &=' D1' &K-' &=' <@<'0@ ' ' D< D' #11-' & A<'-1A' # ' A'+1 0' <j ? 10' <-A' A'-<-B10@ D<' D1' <C@1' 0D&?@A' #1' KD&@@ ' <' D1' 0<'A' &K-' &=' <@<'0@' <-A' '-' -&-1' & D1 ' @<B1' #1 &-A' D1' 1<G D<' '0' &' 0< ' D<' <@@ D1' F &&@0@ F &&@=&@0@ 1< D1 9' 1<A@' <-A' '-@' <-A' <@@ & D1 ' 1 j BD<-A'010' C<00'-.'&? '&=' D1' 0=='A' 1<@>9' -/' &?' &=' D1' <-A0' &=' F <@10' <-A' 1@<-A@ &?. D ' KD&@@ ' &' C<00' <-A' 1C<' ' &' D1' <'A' <C@1@ <-A' &' -&-1' & D1 ' @<B1@ ?C&-' <'-' &=' D1' ! & =1' ? 1' &=' D1' 0<>1@ 1LB1C ' 0?BD' 1 j BD<-A'010@ KD'BD' '-' D1' 0>A' < ? 10' <-A' A'-<-B10' #1' 1LC 1001A' <-A' 1LB1C 1A@ <0' '-' D1' 0<>1' '0' >& 1' =?@@ ' B&- <'-1AG D1' KD'BD' < ? 10' <-A' A'-<-B10@ D1' ' ' 1< '&=' &? ' &+1 1' . -' & A' D1' , '- .9' D<' -&K' '0@ K1 1' <CC &+1A@ <=' >1A@ <-A' & A<'-1A' A?@ ' &' #&' 1L1B? 1A' ; 1+1 D1@100' <0' K1@@ ?-A1 ' B&@&? ' &=' LB1C '&-0' '-' D1' 0<'A' <? 10@<-A' A'-<-B10' B&- <'-1A@ <0' # 'B&@&? ' &=' 'B1-B10' . <- 1A' # ' &? ' &+1 1' . -' K A' D1' , '-.' &' A'+1 0' 1 0&-0@ <' . 1<' = ?<- ' ' &=' F HBA 9' F &&@=&@0@ 1< D1 9' 1<A' <-A' '-@' <-A' >< - ' & D1 ' 1 BD<-A'010' D<+1' #11-' B&- '-?<@@ ' = &>' '>1' &' '>1@ <-A' 1' #1' B< '1A' <-A' B&-+1 1A' &? ' &=' D1' 1<@>9' <-A' &=' D1' 0<'A' <-A0' &=' F <@10' <-A' 1@<-A@ '- &' !@<-A1 0@ &@@<-A@ m1<@<-A@ <#<- 9' <-A' & D1 ' < 0@ -&' 10& '-.' &' D1' 0<'A' <C@1@<0' D1 ' &?. D ' &' A&G KD1 1=& 1' &? ' &+1 1' . -' & A' D1' , '- .' '0' A1= <?A1A' &=' D1' ?0 &>0' <-A' ?#0' ' A'10@ KD'BD' &?. D ' &' <>&?- ' &' -& <#@1' ?>0' &' D'0' -j B 1<01@ '=' D1' D1 1&=' K1 1' A?@ ' <-0K1 1A' <-A' B&- 1- G -A' -& 1&+1 ' D1' , '- ./0 '- ' <' <@<'0' '0@' a1' &' #1' +&'A

' ! ' 3 " @' *"&! ' ! /' " k ' !"2!' !' -k ' - ' !' - /Z 2 , +' ; !' +!' ' "1' ' &1 ' 20-/!" /7 ' ' # !"

' ! !"Z' 3 !-Z .' !' #.-" "@' .&/

2# ! ."Z 2 +' "! 0"-' &#!2 .0-/' ;! ."!' ! 1' 7& &-' ' .-

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J IN R `L@ %' .$- +

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B3 . ' 0 ' ' -:# -.

A10&@< 1 <-A A10 & 1A <-A D1 &> >&A' '10 <@0&' &=' D1 1 BD<-A'010 &=' D1 0<'A' 1<@ =& ' D1 0<'A' <?010 K' D'-' 0D& ' '>1 &' #1 . 1< @ ' D'-A1 1A '=' 1>1A ' #1 -& ' C &+'A1A' '-' D'0 1D<@=G ? ' &+1 1' . -' & A D1 , '-.' B&-0'A1 '-.' D1 1>'0010 <-A' K'@@'-.' '-' D'0 <01 &' C &+'A1' < 1>1A &=' D1 A+'B1' <-A 0j 01- ' <=& 10<'A # ' D1 ? D& ' ' &=' D1 0<'A < @'<>1- D< D'& A<'-1A ' D< ' -&' 1 0&-' 0D'C -& ' A& &' #1' 0D'CC1A' = &>' D1-B1=& D' -&' <- -1 ' F &&@ F &&@=1@0 1< D1 1<A `<-A P' '-' KD&@1' -& ' 0D& 1- -& ' D1'0<>1'B< ' -& ' B&-+1 '&? ' &=' <- ' < 0' &=' D1' 0<'A' 1<@>' -& ' &? ' &=' D1' <-A0' &=' F <@10')'&' 1@<-A &' -&-1' & D1 ' < 0' #1 &-A' D1' 1<' #? ' &-@ ' &' D1' 0<'A' <C@1' &=' <@<'00 ?C&-' <'-' C=' !& ='< ? 1' &=' D1' " &?#@1' <@?1' &=' D1' 1 BD<-A'01' 0&' B< '1A' & ' B&-+1 1A' &' <- ' & D1 ' < 0' D<-' &' D1' 0<'A' <C@1' &=' <@<'0 <-A' <@0&' ?C&-' <'-' &=' >C '0&->1-' &=' D' ' &A ' =& ' D1' C<B1' &=' K&' 1< 0 K' D&?' '@ (' <'-C '01' -A' D1' KD'BD' B<-' 0C ' <- ' 1 0&-' = &>' D1-B1=& D KD'BD' `&==1-A'-.' & ' A&'-.'/'P' '-' <- ' K'01'B&- < ' &' D'0 A'-<-B1 <-A' D1' 0<>1' ==1-B1' A&' C 101- ' &' D1' 1<0? 1 ' &=' -.j @<-A' =& ' D1' '>1' = 1'-.  `<-A' D1' 10C<001 ' D1 1&=' A?@ ' B&-+'=@@/P' & ' '=' 0?BD' 10C<001 ' B&-=100' #1=& 1' D1' 1<0? 1 ' <-A' D1' < &-' &=' DA' LBD1H?1 ' 0?BD' 10j C<0010 # ' D' >' A&-1 D< ' D1-' D1' 0D<@@ #1' B&-+'= ' # ' D'0 &K-' &-=100'&-G <-A' D1' 101- 1 ' 0D<@@ D<+1' =& ' D'0 <#&? ' D1' D' A' < ' 5' D1' ! & =1' ? 1' &=' D1' 1 j BD<-A'010 B< '1A' & ' B&-+1 1A' <.<'-0 ' D'0 A' -<-B1 ' <+'-.' <@K< 0 D< ' D1' 1 BD<- 0 &=' E1-&< 1-'B1 ?0B<- &>#< A !@& 1-B1 <-A' < <@&-'< >< ' 0D'C' F &&@0 F &&@=1@0 1< D1 1<A <-A' '-''-' D1' ' D'C ' E<@ '10 < <=B0 <-A' & D1 ' 1001@0<-A' ` &'# '-.' D1' 0<>1''- &' D1' ' ` &?- 0P' &K< A0' D1' F 10 '-' <--1 ' <BB?0 &>1A' #1=& 1' D'0 '>1' ; <+'-.' <@0& &' D1' ? j .1001 &=' D1' &K-' &=' 1 K'Ba8?C&-8 K11A D1' '+'j @1.10 <-A' 1-1='0 &' D1>' #1=& 1' D'0 '>1' . <- 1A <0 '-' A'+1 0 < ? 10 D1 1&=' ><A1' '0 =?@@ ' B&- <'-1A -& K' D0 <-A'-.' D'0 A'-<-B1

' ? ' &+1 1'.-' & A' D1' , '-. B&-0'A1 '-.' B1 <'-' 'B@10 1-0?'-. &' #'1' B&-B1'+1A' <-A' A10' 1A <0 K1@@ =& ' D1' &=' ' <-A' F 1<@ D' &=' D' >' <-A' D'0' 1<@>' ?-'+1 0<@ <0 =& ' D1' .&&A' &@' 'Ba' E&+1 -<-B1' <>" ?CC& <@'&-' &=' ` D1' <C@1' & = A < ' 0 ' # ' A+'B1'<-A' 001- ' &=' D1' & A0' C' ' ?< <-A' 1>C& <@ <-A' <@0&' &=' D1' &> >&-0 #1>.' '-' D'0' C 101- ' < @'<>1- # ' ?j D& ' ' &=' D1' 0<>1 D< D' . <- 1A' D1' 0<>1' 'B@10' &' #1' a1C ' <-A' &#01 +1A &' #1.'-' < ' D1' ! 1<0 ' &=' D1' ? 'j ='B< '&-' &=' &? ' <A -1L ' <= 1 ' D1' #1.'--'-.' &=' D1' 0<'A' < @'<>1- ?- '@ D1' ! 1<0 ' &=' D1' --?-B'< '&-' &=' &? ' <A ' D1-' -1L ' =&@@&K'-. D<' 'D ' &' 0< ;

!' 0 D< ' D1' A'-<-B1' <-A' CC&'- >1- ' &=' @< 1' ><A1' ` &(' D1' 0<'A' <C@1' &=' <@<'0 ?CB>' F &&@0 F &&@=1@0 <-A' '- #'1' 0? 1@ ' a1C ' <-A' &#01 +1A' '-' <@@ D101' !'+1' &'- 0' =&@@&K'-. D<' 'D ' &' 0< D< ' D1' 'B1' &=' D1' 0<'A' F &&@0 F &&@=1@0 <-A' '- #'1' -& ' <#< 1A #? ' <?. >1- 1A' <-A' C? ' &' . 1< 1 ' -B 1<01' <-A' A+<- <.1

1> D< ' D1' KD&@1' < >1- ' #1' ><A1' '-' <-A' =& ' D1' 0<'A F &&@0 F &&@=1@0 <-A' '- '-' E&@A' <-A' '@+1 ' K' D&?' ?# '@ '& ' & ?0'& @

 1> D< ' D1' ?@@'&-' #'1' # &?. D ' &' D1' '-'` &' <@<'0 D<''0 &'0< D< ' '=& ' 1+1 ' < C@1 '&=' F &&@0 KD1 1&=

 $ ' . B!-/!' & '/ . ' ; $ ' +' "+'%%'&H R@ 8
 # 'N$ ' ' "'%%'&H R@ L ' 9$"
 &2' +!' ' p +' "+'%%'&&H R/. 8

A10&@< 1' I ' A 10 ? ' I '< L" @10 B&>&A' 10 A10 BD >A'010 A?' A' ' &'<@>1'C ' @1\' A' \' B<?010 A1'-0 # '1=' 1>C0 ' ' 10 1' .0?-A1>1-' <>1-?01\ 0" 1>1A'1' -1' 0&' ' C +1?' B1@@1' C '1G =1' @1' &'' B&-0'A1 <-' @1\' =D-'001\' I ' +&'@@<-' 1-' B1&' B<0 C +&'1 ' A1' 1>1A'1 A1' @<A+'0 I ' <001-' 0?'0A' \' C' <? & ' 1' A?' A' ' C@1>1? ' <A' & A'-1 H' >'@@1' C0&-1' 10a'CC1' -1' =<B1' 10a'CC1 ' A10& 1' 1-1+> ' -?=' >< ' A10 @<'C0 C1<@L' $ ' H-' 0 C@?>#1' -1' 10 <'-' 1- '1 ' -1' =&?-A?\ -1' B1@@1 >10-1' -1' B&-+1'1' D& 0' A1' -? 10 C '10 A?' A' ' &'<D 1 -1' D& 0 A10 R 10' A1' E<@10 -1' " ' @<-A <' -?@@10 < R0 C0&<10 A&? 1' @1' >11 ' >10 0&?@1>1-' <' @1' A' ' 10 <C@1' <' <@1 0G 0 ' C1'-1' A1' =& =1' ? 1' A1 A&?#@1' +<@?1' A1' @10 '=BD<-A'01\' 1-0 ' >108 -1\' &?' B&-+1'10 <0 <0B?-0 <? 10 C '10 H' <' @<' A' ' 10 <C@1' <' <@1 0 5 <?L" 0 ' C1'-1' A1>C '0&-1>1-' A1' 0&-' B& C0 C '@10C<B1' A1' A1?L' <-0 0<?-a' #<'@'1' &?' ><'-C '0 ' B1D@ ' H' 0B'1 ' 10C@1 ' <0B?-' C0&-1' A1' B ' >'<+> ' H' &==1DA1' &?' =111' <0B?-1><' '@1' B&-== '1' A'B1@1' & A'-<-B1 Y' >10>1' @&==1-01' C01- 1' <A' 10 1 ' " 1-.@1R 1' C ' @1' 1>C0 10 1<-) ' `&?04' 0" '1 0C '&?' B&-=1001' A1+0- ' @1' 10& 1 ' I ' < &-10' A1' @10B= 1H1 ' <? '1@L' R0C<001\' C' @? ' '=1' \ H<A&-H10 0&' ' ' B&-+'= ' C' 0< CC 1' B&-=100'&- I ' <' ' @1' 01- &' C' 0&-' @<#&? ' @<' '1 B1' C '1' A1 =& j =1' ? 1' A1' @10 >< BD<?-A'010 <>B0A1\' &?' B&-+A1\' 1-8 B&?- 1' B10 ' & A'-<-B1 <@+<=' ' &? \' =&' \' H' @1\' < BD<?- \' A1' <-?1' 1-'B1' =? <-' ?>#< A'1' !@& 1-B1' I ' E< DA>.-1' C ?00>'B > C1 ' @<'-0 C1<@L' '< '? \' H? ' C@?>#1' I ' 10 >-' ' @&' -'1=1 ' .<@1 0 1< 8 9 <a10 I ' <? 10 +100<@L' I ' 'B1@@10 <K10-1 ' 1-' @&? ' C<''0 ,0 @1' F 10 ' 1-' >< ' <BB?0 ?>1' A1+> ' B10 D1? 10;' <+<-' <?L" <' @1\' ? .1'0' A1 '@1' A1' 1 1K =' 0 ' K1A1' @10 C '+'@1.10 I ' #1-1='B10 <' B?L' A1+0-' B10 D&1? 10 . ?- 1\ 0'B&>1' 1-' A'+00 10 < ?' \' 1-' =<' \' '@ 10 ' C@1-1>1-' B&- 1-?\' B10 ' & A'-<-B1' -'1-' B&- '0 1<-

1>' - 1' ' @1' & /B&-<A1 < ' 1'-0 < 'B@10 1-8 0&<-' 10 1' B&-B1?L' I ' A10@ 1\ 0'#-' C ' @<' C0C' 1' I ' #'1-' A1' @? ' I ' A1' 0&-' &'<=<-1' ?-', R1=' &>1' C ' @1' #&-1' C&@8 @@ 'H?1.& -<-B1' I ' 0 C& <B'&-' A1' <C-'10 <C@1' <' <@1 0 C' <A+'0 I ' <001-' A10 = 0' 10C?1'L' ' 1>C& 1@L' I ' <?L" A10 &10' 10 1<- \' 1-' B10 ' C@1>1-' C' A?=@& ' 1' A'B1@" <A' .0 -1' >10>10' @1\' < 'B@10 A10 1' .< AC\' I ' &#01 +1\ <' BC>1-B1 ' <@ =10 ' A1 ? '='B<B'&-' A1' - 1' " <>1' C0BD1'-' < ' @1' B&>1-B1>1-' A?' A' ' C@1>A' 10H' <@ =10 ' A1 --?-B'<B'&-' A1' -=1' " <>1' <A&-H 0' C0BDA-' 1-0?<- 1' A1' >10>1' @1' =10 ' A1' --?-A<A&-' <A? 1' <-H' <@ = -A1 &'0' <-0 <@& 0' C0BDA-> 0?<- \' @&-1' @<' =& >1' H1-0? ; -' C a-10' H@& A><-B1' I ' <CC&> 1>1-' < < A1' =1a' 1-' @<' A 1' 10 <C@1' <' <@1@0' 0? ' @1\' 0' C1<@L' @<-? \' I ' 10 <'-' 0&'1-' ?0 1>1-' .< A1\' ' &#01 +1\' 1-' &? \' B10 10' B -a' C&'- \' 1-0?<- \G 10 <00<+&' ' H' @<' C '01' A10' A' \' @<'-0' C1<@L' @<-? \' I ' 10 <'-' -1' 0&' ' <#< ?\' >10' <?. >1- 1\' I ' > 0' <?' . A-A 1' 1-B 101' I ' <+3- <.1

1>' ' @1-A1 ' C<'1>1-' 0&' ' = '' ' 1-' ><'-' C ' @10' A' \' @<'-0' C1<@L' @<-? \' I ' 10 <'-' 1-' & 1' I ' < .1- ' 0<?-\' <0B?-' 0?# ' 1' &?' B&@@?0'&-

1>' H' @<' ? '&-' 0&' ' C& 1' ' @1' - >1' <' <@1 0 B10 <00<+&' ' C ' B#101?-' < C@1 1' A10' @<'-0' A1' H?1@@ @1

) C' +!' "!2 22.0" 1-' A?1>1-' B&-+' ' *%' %' .$- +
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C& 0;' A'1' <aa1' 10 ' +1-A?\' C8' L ' ' >/ 0' + ' " L ' 2 ' +' ' " +" ' > 0 ' ' ' ' ' ' I ' A1' @10' C1<@L' @<-?\' 0&@&-B' @<=1 <-' C ' 10 1=& .1\' 1-' @1' B&'. -1' A?;' &

1>' H' BD10B?-' D&>1 H" +1-A1' &?' =<B1' +1-A1 ' <0B?-0' @<'-0' & " C1<'L' @<-?\9' <'@<' A'B1' 0 <C@1' <' <@1 0 9' I B1' @&'<@ I ' 1.< ' C 'B'&-' A1@ >&-1 ' A1' 'B1@" &+10H9' 1?L' H" &?- '@<'-0' &?' C1<'L' @<-?\' A1' >0>1' @1' C<'0' A&?- ' B 0' @'<'-0' &?' C1<'L' 0&?- 9' I ' &+10H' H1?L' '@ 10 ' <A H -1' I ' <00&B'1\' A1' =1' 1' C 'B'&-' 0<?-\' = <?A1' &?' ><@1' 1-C-1

1>' H' <8 &?' 1>C0' 0' < BD<?- \' +1-A&? 0' = 'B1- ' <BH?' <-B0' <' 0' ='BD<?- \' <BD< &? 09' C ' 0 1' 1-01<@10' A10&? \' @1' 01<@ <' B1&' & A'-1\' A1'-0' 0 <C@1' 0?'0A' G <' @1- 1- ' H' -?@@' BD<?- ' +1-A&? 8-<CC00 1 <' A1 1 1' <' -?@@' ='BD<?- ' -?@@' ><5' A1' >&-1 ' C' @? ' 10B1?' A 0' @<'-0' -1' A 0' C1<'L9' >10' H' >10>1' @<' <&-1'1' C?'001' 0 1' <C8' C& 1\' A1'-0' @1' &'<@>1' 0<?-\' 0?# '@' 1' &?' = <?A1

1>' C ' <?- ' H' 0&+1- ' =&' \' C@?0&? 0' >< '-1 0' 0 8' <?-.10' A10' A'+/0' C '10' A1' !@<?-A 0' &@<-A' m1@<-A' I ' <#<-' 1-' A'CO' C& 0' I ' B 'a0' A?' &'<@>1' C'. -1- ' 1-' @&? ' -'1=1' I ' +1001<@L' @<'-0' C 0@L ' @<-?\' I ' <?RO' BD<?-A'01\' A1' @10 <C@1' @1\' H?1?L' 0&?- ' ?001\' 1-' &-1?L' C 'C0' #< 1@@10' 0<aa0' I A1@@10' I ' <? >1-' I ' 'B1@@O'C '+1>1-' >?0BD1- ' I ' B&-B1@1- ' 1-' @&? '+100<@L' A10&?#\' @1' #&@0' ==?>1-' <+1 -0' 01B&@1' I ' 1-' <? ' ><5' I ' 1-0" 0' B< '1- ' <0' A'CO' C '0' A&? 1' @1' >11 ' <' . ?-A1' C ?A'B1' A?' & '1-' <>1-?0<-' 0 0' B?0 &>0' I ' 0?#0'A'0' <' A<><.1' A1' &? \' @1\' 0?#.' \' A1' 0&-' &'<@>1' 1' = ' @1' & '+&'@@<-' 0BD?1 ' @1\' A' \' C0 ?A'B10' I ' 1-B&?- 1' '1@L' 0?# '@' '0' C +&'1 ' A1' 1>1A'1' <A' & A1'. -1' C' <?=@&@' 1' 0?'0A' ' H' -?A' >< ' '0 <?-.1 ' -1' -?@=' <?R' >< ' ' =H 0 'P' 1-01>#@1>1-' C&00100&?' I ' ><'0 1' A<0B?-' -'1=' &?' +1001@e' -1' C'. -1' -1' 10B1'+1' A1A1'-0' -.@1 1' E<@10' -1' @<-A' 1-' 0&-' -'1=' &?' +1001'@' -?@@' >< 0' A10' @1'-0' C1<'L' @<-? \' -<? 1' -'BD<?-A'01' A1' 0 <C@1' -1' B1@@10' <>10-1' D& 0' A?' &'<@>1' <0' <0B?-0' <? 10' C '10' A&? 1' @1' > 10' >10' 0&?@1>1-' <' 0 <C@1' A1' <@1 0' <@+<-' '1@L' H" C' @& A'-<?-B1' =<' 1' C<001 &-' &? 1' 0' 0 &a10' A1 < &a' I ' B1&' 0' C<-1' A1' =& =<' ? 1' <?' &" 0'# ' A1' '1a' -'1=1' I ' #'1-0' 1-0" &+1\' A1=1=@'=0@ B&>1' A1\' #'1-0' A1\' A' \' >< ' 0' 1-' >10>10' @10' -'1=0' &?' +1001@L' 0 0- \' ' H' @1' <' ' A1' @10 <C@1' C ' @1' 1>C00 1<- ' <@ ' C&<' ' I ' <?= & ' 1' A1' =<' 1' A?1' 01 BD1' 1-' B1@@' C '1' I ' @1\' -'1=0' #'1-0' I ' >< '50' 0" <0B?-0' 1- ' 0&'1- ' &+1\' A1=1= '=0@ C ' 0 1' C001- \' I ' A1@' 1\' <?' B&?-01'@ A?' &" 1-' -.@1 1@ C' ?0 1' 1@<B'&-' 1- ' <==<' 1' C' @1' A' ' <' ' & ? 0&-' A1C? 1@ @? ' <'<- ' C' 0&-' 1.< A' @<' '1 B1' C '1' A 0' =& =<' ? 0' C' @? ' C201- \' I ' C+1\' 1-' >< ' 0?'0A'

1>' C ' B1&' H' -=1' ?' @1' & ' 10 ' 1-=& >1\' H' 1'-0' C0&-10@ B&- '-?1@>1- ' 1-D<#' <- \' 1-' @<' '@1' A1' <@1 0' &+1' ='BD/?- \' <@'1-0' A1' @&' <=='-' 1' I ' B&-01- @ C ' @&?' 0'-.?@1 ' @?B 1' ><.'-1- ' C' 0?# '1@L' >0-10' A<>1-?01 ' @<' C 'B1' A1@ B&>&A' 1' A1' B0 1' &'<@>1@ @1\' H?1?L' A1@ +J- ' B1\' D1? 10' &?- ' 0 1\' I ' ?-H& 1' 0&?- ' .0?-A1>1- ' ?01\G' 1-' 0?- ' H' HW?- ' 0 BD<?- \' <@'1-0' A1?001- ' <f&' ' 1C< 1\' <?' A' ' '@@1' C ' @<'-0' I ' C 0@L ' @<-? \' <BD< 1 @' @0' &?- ' 0 1' 1 & -1\' I ' @1 /D1\' C' > ' @1\' A' \' Q1-D'#' <- \9M' '0O@- ' H' @1\' C& 10' D& -0' &?- ' 0 1

) - !"+&-!/' .-' !' 6.++

)' $ $" * ' $ '!- ;& - j

D1' F A.D ' &=' D1' <Ba' '0' 0&@A' =& ' L' ' < a09 'L' &?-A0@' L ' < a09@' +@' @' ' +" ' ' < a0@' '+' @' ' -A')' D1' F &&@=1@@0' <= 1 ' D1' < 1@@' &' #1@=& .1A@ `' - P' D1' , '-./0' &'-

1>@ D< ' 1+1 ' <-' D< ' 0D<@@' 01@@ & ' A&' & #1' 0&@A' "'+'A'-.' <- ' F &&@0' & ' F &&@=1@0' <' D1' <C@1' &=' <@<'0@@' 0D<@@' ><a1' <' @<K=?@' <-A' 1H?<@' < ' '&-' &=' D1' &-1 ' &=' D1' 1.-*' D1' 0<>1@' K' D' D1>' KD'BD' D<+1' D1' F &&@0' & ' F &&@=1@0' &=' D1' 0<>1' &?- ' = &>' KD1-B1' ` D1/P' F &&@0' & ' F &&@=1@0' #1@' <-A' K' D' KD&>@' D1' '0' &'-1A' <-A' <00&B'< 1' &' ><a1' < ' '&-@' K' D&?' ! <?A' & ' <@81-.'-1

-A' <@0&' D<' <' <@@' '>10' D1' 1 BD<- 0' 1@@1 0' 0D<@@' #SO& -#!2' ><a1' BH?' <-B10' &' D1' 1 BD<- 0' ? 1 0@' &' #1' -=1 <@ 01<@1A' ?-A1' D1' 1<@' &' D<' & A<'-1A' K' D'-' D1' 0<'A' &=' ! +!' <C@1G' &' D1' - 1- ' D<' -&' 1 BD<- ' 1@@1 ' 0D<@@' `= &>' D1-B1=& D' @1-A' <- ' <--1' &=' &-1 ' &' <- ' 1 j BD<- ' # ' D' >/P' 1B1'+1A' &=' D1' F &&@0' & ' !1@@09@ #?' D<' D1' 0<>1' &-1 ' >< ' #1' # &?.D ' K' D'-@ D1' 1<@>' K' D&?' ?# '@ '& ' ! <?A' 9

@ !& ' <0' >?BD' <0' &= 1- ' >10@ A'+1 0' < ' -1 0' L ' L ' <-.1 0' &=' A'+1 0' < 0' &=' !@<-A1 0@ &@@<-A9' m1<@<-A@ <-A' <#<-@ '-' A'+1 0' & 0' <-A' 11a0' &=' D1' 1<@>@ &' 7-!" <a1' `' -/P' D1' ' D'CO' <-A' 1001@0@ F &&@0@ F &&@=1@0@ <-A' & D1 ' 1 BD<-A'010' &=' D1' <C@1@ KD'BD' #1' ?001A' !"# -/&2!2' '- ?-0@ 'C10@ < 1@0@ <Ba0@ !< A1@0'<-A' & D1 K'01@<-A' 9 & <@<'0' D1' 0<>1' C '+'@ ' `A&' C?' <-A' B&-B1<@\P' '-' D1' ' 1001@0' ?-A1 -1< D' F &&A@ F D1< @ < 0@ ` 1@/P' <-A' '-' & D1 ' <--1 @ <-A'0&' B< ' D1>' '- &' A'+1 0' < 0' #1 &-A' D1' 1<@ &' D1' , '-./0' . 1< ' 1 ?A'B1' '-' A' >' -'0D' -.' &=' D'0' ?0 &>0@<-A' ?#0'A'10@ <-A' &' D1' "<><.1' &=' <@@' D1' @'1.1' 1&C@1' &=' D'0' 1<@>' G ? ' &+1 1'.-' & A' D1' , '-.' K'@@'-.' &' 10BD1K' D1' 0<'A' 1 ?A'B10@ <-A' <.<'-0' 0?BD' ?# '@ '10' &' C &+'A1' 1>1A @ D< D' & A<'-1A' # ' D1' ? D& ' ' <=& 10<'A@ D<' -&' < '-1 ' <-.1 ' -& ' & D1 ' < '-1 ' D<' '0' `'@'a1K'01' K-1 ' <-A' <0 1 ' &=' &-10P' D'C' & ' 1001@@ 0D<@@' <a1' -& ' 1B1'+1' K' D'-' -.@<-A@ F <@10@ -& ' 1@<-A@ '-' D'0' D'C' & ' 1001@' <-' <--1 ' &=' F &&@0@ F &&@=1@0@ -& ' & D1 ' 1 BD<-A'010' &=' D1' <C@1@ -& 'B< ' D1'0<>1'&?' &=' D1' 1<@>' &' <-' /) < 0' #1 &-A' D1' 1<@ #?' &-@ ' &' D1' <C@1' &=' <@<'0' G LB1C ' 0?BD' KD'BD' # ' D1' A'-<-B1' ><A1@ 0D<@@' C<00 `&+1 '/[P' D1' A.D 0' &=' < &a' G <-A' D<' ?C&-' <'-' 1-<@ &=' !& =1' ? 1' &' D1' , '-.' 3)' &=' 0?BD' D'C0' <-A' E&&A0' &=' @& =1D? 1 0&' =&?-A' A1=1= '+1@ <0' &=' D1' E&&A0' &=' D1' 0<'A' < '-1 0@ <-A0E&&A= #1'-.' '-' D1' 0<>1' D'C0' & ' 1001@0' -A' D<' D1 < & ' &=' D1' <C@1' =& ' D1' '>1' #1'-.@ 0D<@@' D<+1 &K1 '<-A' ? D& ' ' &' ><a1' A?1' 1< BD' '-' D'0' < 'G <-A' D1' D'C0@ E&&A0@ <-A' < '-1 0@ '=' D1 ' #1' D1 1&= =&?-A' A1=1 '+1@ =& ' &' #1' C 101- 1A' <-A' A1@'+1 1A' & D1' , '-./0' &?-B'@ '-' -.@<-A@ # ' ?0 ' 1@< '&-' D1 1&= &' #1' ><A1' # ' D1' 0<'A' < & ' &' D'0' "1C? @ D1' D<+'-. =& ' D'0' 1K< A' D1' D' A' < ' &=' D1' !& =1' ? 10' # D'>' C 101- 1A' <-A' ` <a1-' 3P' '-' D1' <--1 ' <=& 10<'A @ !& ' <0' >?BD' <0' D1' , '-.' '0' '-=& >1A@ D<' B1 <'-' 1 0&-0' B&- '-?<@@ ' '-D<#' '-.' '-' D1' &K-' &=' !"# -2' <@<'0@ K' D' 1 BD<- 0' @'1-0' &=' D1' ' ='-' '<-A' &-8@' 01- @ =& ' D1' ' 0'-.?@< ' ?B 1@ A&' '><.'-1' # ' 0?# '" -.' ;0@ -@' 1<-0' &' A'>'-'0D' D1' 'B1' &=' D1' &>>&A' '10' &=' D'0' < B' 1<@>@ KD'BD' D1 1 &=& 1' D<+1' #11-' <-A' 1 ' #1' . 1< @ ' !"! ' ?01A@ '-' 0&' >?BD' D<' KD1-' D1' 1 BD<- 0' @'1-0' &?.D ' &' D<+1' 1C<' 1A' &' D1' 0<'A' &K-' &' #? ' F &&@0' <-A' F &&@=1@0@ D1 ' D<+1' #11-' 1 ? -1A' <-A' K' DA <K-' # ' D1' 0<'A' -D<#' <- 0@ 0&' D<' D1' && ' 1-' D<+1' #11-

(. ' K' &- .' (&2 N$ ' +' N)+!!-' * @-' .' -.' 1# -' -.' 1 !' '%%'&&H' R . 8 1.-!@' . ' &1' < 2 &- .' (@/!' (!!#.+!' <, 2 ; . ' 3.22!22.0" -/' &2 !" . ' -@' ' N$ ' +' 2' . !" ;!@.-/!' P ' F' 2' 7!+' (".'!/'

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^@1 ’ &’ 01@@ P’ D1” ’ E&&A0ƒ <-A‘ =& ’ . 1< ’ ’0BD’1=’ D1 ’ >’?0 ’ &=’ 1B100’ ’ 01@@ D1” ’ E&&A0’ &’ D1’ 0<’A‘ -D<#’j <- 0’ &=’ <@<’0ƒ KD’BD’ K’@@ -& ’ #? ’ D1’ 0<>1’ #? ’ . 1< @ ’ K’ D’-’ D1” ’ ’B1ƒ &’ D1’ . 1< ’ ? ’ <-A‘ ’-A1 <-B1’ &=’ D1’ 1@@1 0ƒ <-A‘ #< 1>1- ’ &=’ D1’ ’B1’ &=’ D1’ 0<’A‘ &> >CA’-10; D1’ 0<>1’ &? ’ &+1 1’ . -’ & A‘ D1’ , ’- .ƒ K’@@’- .’ D1 1?C&-’ &’ C &+’A1’ 1>1A ƒ =& ’ D’0’ &=’ ’ <-A‘ D1’ +<’ƒ &=’ D’0’ 1<@>ƒ D< D’& A<’-1A‘ # ’ D1’ 0<’A‘ ? D& ’ ƒ D< ’ = &>’ D1-B1=& D’ -& 1 BD<- ’ B&- ’j -?<@@ ’ ’’@D<#” ’ -.’ K’ D’-’ D1’ 0<’A‘ &K -’ &=’ <@<’0ƒ 0D<@@ #1’ 0?==1 1A‘ &’ #? ’ #1 &-A‘ D1’ 1<ƒ <- ’ <- -1 ’ &=’ F &&@0ƒ F &&@=1@0ƒ 1< D1 ƒ 1<A‘ƒ -& ’ ’-ƒ -& ’ & D1 ’ 1 BD<-A’01’ C1 <’-’-.’ &’ D1’ <C@1ƒ ?C&-’ <’-’ &=’ !& =1’ ? 1’ &=’ D1’ 0<>1ƒ <0’ &= 1-’ <0’ ’ ’ >< ’ #’1’C &+1A

ƒ ! & ’ <0’ >?BD’ <0’ <’ . 1< ’ &’01’ ?- -1 D’ <>&-.’ 1-’&=’ 1KB<0 @1’<-A‘ 1 K’Ba‘ƒ D< ’ ’=’ D1 ’0D&?@A‘ # ’-.’ D1” ’ F &&@0’ &’ D1’ <C@1’ & = P’ <@<’0ƒ D1 ’0D&?@A‘ #1’ ?-A&-1’ <-A‘ A10 & 1A‘ƒ KD1 1’ D1’B&- < ’’0’ ? D‘ƒ <-A‘ >< ’#’1’C &+1A‘ƒ <0’ D1’ , ?’. ’ ’0’ ’-=& >1A‘ƒ = =’ D1’ < & ’&=’ D1’ <C@1’ <-A‘ D’0’ &>C<-’&-0‘ƒ K’@@ .’+1’ &’ D1’0<’A‘ 1-’ &=’ 1KB<0 @1’ <-A‘ 1 K’Ba‘ƒ =& ’ D1’ ^?<- ’ ’ &=’ D< ’ F &&@0’ <-A‘ F &&@=1@0ƒ ``@’a1K’01 P‘ D1’ , ’- .’ &-1’ 1< ’ K’ D’ <-& D1 ’ D< D’ #11-’ <-0K1 1A‘ &=’ D1’ ?0 &>’ <-A‘ ?#0’A ’ &=’ D1’0< C1ƒ <-A‘ <0’ >?BD’ <0’ D1 ’ D<+1’#11-’ 0&@A‘ =& ’ ’-’ !@<-A1 0ƒ & ’ ’-’ & D1 ’ @<B10’ KD1 1’ D1 ’A&’ 1j C<’ ƒ &’ #1’ C<’A‘ < ’ 1<0&-<#@1’ 1 >0’ ’-’ E&@A‘ <-A‘ ’@+1 ’ &’ #1’ # &?.D ’ ’- &’ D’0’ 1<@>ƒ KD 1’ -& ’ &-1’ 1- - ’ B&>1 D’ # ’ D1>’ -&K‘ƒ D1’ 0<>1’ &? ’ &+1 1’. -’ & A‘ D1’ , ’- .ƒ B&-0’A1 ’-.’ D< ’ # ’ D1’ ’B1-B10’ &=’ D1’ 0<’A‘ 1-’&=’ 1KB<0 @1’<-A‘ 1 K’Ba‘ƒ . 1< ’ ’-A <-B1’B&>1 D’ &’ D’>’ &=’ D’0’ ?0 &>0’ <- ’ ?#0’A’10ƒ <-A‘ #< 1>1- ’ &=’ D1’C ’B1’ &=’ D1’ &>>&A’ ’ &=’ D1’ 1 A>ƒ D<A‘’ & j A<’-1A’# ’ D1’ ? D& ’ ’<=& 10<’A‘ƒ D< ’ D1’ ’0 ?A‘ ’B1-B10’ 0D<@@ #1’ 1C1<@1A’;’ -A‘ ’=’<- ƒ &=’1+’ƒ K’@@ƒ 01@@ & ’B< ’ <- ’ F &&@0’& ’ F &&@=1@0ƒ 1< D1 ƒ 1<A‘ƒ =’<- ’& D1 ’ 1 ’ BD<-A’01’ &=’ D1’ <C@1’ ’-’ ’’1= <?A‘ &=’ D1’ , ’- .ƒ &=’ ’-j A <-B1’C=’ D1’ &>>&A’ ’ &=’ D’0’ 1<@>ƒ ’- &’ B& @<-A‘ƒ D< ’ D1’ 0D<@@ =& = ’ ’ D1’ 0<>1’ E&&A0’ F’ D’ D1’ ’’&?#@1’ <@?1G’ <-A’ D’0’ &A ’ &’ C ’0&-’# ’ D1’ C<B1’&=’<’ 1<

ƒ ! & ’ <0’ >?BD’ <0’ . 1< ’ ’-A <-01’ B&>1 D’ &’ D1’ , ’- .’ ’-’ D’0’ ?0 &>0’ <-A‘ ?#0’A’10’ # ’ D1>’ D< ’ A&’ B@<Ba‘ <-A‘ =& B1’ D1’ .&&A’ F &&@0’ &=’ D1’ 1<@>ƒ &’ B< ’ D1>’ &?’ &=’ D1’ 0<>1’ ’- &’ 0 <-.1’ &?- ’10G ’’0’ & A<’-1A’ D< ’-&’ <-.1 ’0D<@@ B<?01’ &0#1’=& B1A‘ƒ B@<Ba1A‘ƒ -& ’ #1< A1A‘ƒ <- ’ <- -1 ’ &=’ F &&@0ƒ &’ B< ’ D1>’ &? ’ &=’ D1’ 1<@>ƒ ?C&-’ <’-’ &=’ !& =1’ ? 1’ &=’ D1’ 0<>1’ F &&@0ƒ K’ D’ D1’ ” &?#@1’ <@?1’ &=’ DA’0<>1ƒ <-A‘ &=’ >C ’0&- >1- ’ &=’ D’ ’ &A ’ -A‘ D<’ -&’ F &&@8’ C<Ba1 ’0D<@@ ><a1’ K’ D’-’ D1’ 1<@>ƒ #? ’ .&&A9<-A’A?1’ <Ba’ - .G <-A‘ D<’ -&’ <-’ ><a1’<- ’ -K’ - I .’ K’ D’-’ D1’ !@11B1’&=’ F &&@0’ < ’ D1’ &@@’ - .’?C’ &=’ ’’0 F &&@0ƒ -& ’ C?’ ’-’ D1’ 0<>1’ &Ba0ƒ ` 1@ ’ F &&@ƒ < ƒ &-10ƒ3P’ <-A‘ƒ < D‘ƒ E <00ƒ `- =’<- ’ ” ’ G hP’ <-A‘ ’=’<- ’ A&‘ƒ D1’ D<’ =1B@B D’ D’ >’ . ’1+1A‘ 0D<@@ D<+1’ D’0’ = ’&-’ < ’ D1’ &> >&-’ <K‘ƒ &=’ 10C<00’ > B ’ ” 1B1’

ƒ 1B<?01’ D1’ F 1<+1 0’ K’ D’-’ D’0’ 1<@>’ #1’<-A‘ D1 1 &=& 1’ D<+1’ #11-’ <BB?0 &>1A‘ƒ ` D< P’ FD1-’ D1 ’=0)’ K &?.D ’<’ @& D’ `-1< /P’ D1 -A‘ƒ &’B? ’<K< ’=& ’ D1’ ’C ’j +< 1’ &=’ ’ D1’ D 1<A‘ KD’BD’ ’0’@1=’ ? -K&+1-ƒ <-A’B<@@’ D1’ 0<>1ƒ D ?>0ƒ `<-A‘ &’ D1’ . 1< ’ ” 1BA ’&=’ D1’ K-1 0’&=’ D1’ <>1’ !& D0ƒ D1 OP’01@@ D1’0<>1 DK -0 &0-B# 1 8’ 0&-0’KD’BD’B< ’ D1>’ ’- &’ !@<-A1 0’<-A’& D1 ’ ` @<B109/P’ D&?.D’ D1’ , ’- .’ D<+1’ D1 1&=’ -& &=’ ’ &=’ ?0 &>0

(’ !”” @’7 !”@’. ’N$ ’ ’ ”’/ ’)’ ’N$ ’ ’ ”’\
[’+&E!’ N$ ’ ’ ”’
)’ ! !7.+!’ !””!’2 .-!’N$ ’ ’ ’
’-!’-..-’. !”’ &+ !’N$ ’ ’ ”’ ’ F ’!
(+1.2’ .’ N$ ’ ”’ J
’$ ’1 ’A ’$’ ’ $$ ’$’ ’ ’.*$ +’ %
U2” 0-*# 0-”!!2’ 2*./!’& # -/&2!Ž N$ ’N *’ ”’/ H

@<001\’ A1’@& ’#’1-0ƒ I ’ C ’ .3?-A‘ >10BD’1=’ @& ’B&+’1-A &’ ’ A1’ -1B100’ 1’ 1-A 1’ @&? ’ #’1-0’ <0’ A’ \’ <’#’ <- \’ A1’ <@1 0ƒ@1\’H? ?L’ -1’+&’@@1- ’ ’B1@@10’ <BD< 1 ’0’-&?-’.D’-8’ A1>1- ’ A1’-0’@&? ’C ’B1ƒ <’ .D>A‘< 1 ’001>1- ’ A10’ +1-8’ A&0’ 4’ <>1-?0>1- ’ A1@ C ’B1’ A1@ B&>&A’ 1’ <+# A’ ;’ 10>1’ - 1’_ ’@1’ & ’+&’@@<- ’0’ B1&’C +1’1 ’ A1’ 1>1A’1ƒ C ’ @<’ C=’ ’A1’@? ’ I ’@<’ +<@@1’ A1’ &-’ &’<@>1’<A‘ & A1’. -1’ C’@<’ A’ ’ <?= &=’ 1ƒ H’ A10& 1’ 1-<+#’ ’ -?@@’=’BD<?- ’B&- ’8’ -?1@>1- ’ 1-@0= <- ’ A1’-0’ @<’ A51’ ’@@1’ A1’ <@1 0’ 0&=’ 0?=@ \’A<BD< 1 ’ A1C< A1=<’ @<’ >1 1’ -?@@ >< ’A10’@<’-0’ C1<@L’ @<-?\’H?’ 0’ C@?>#1’ -10 < -’ -1’ -?@@ <?R‘ ’=’BD<-8’ A’01’ <C 1’. -<- ’<’ @10 <C@1’ 0? ’ C1’-1’ A1’=& =1’ ? 1’ A’B1’@ƒ < <- ’ A1’ =&’ ’ C&>1’ ’ƒ C&1 ’ 1 i 1’ C+1\

1>’ C ’ <?- ’H’. /?- ’ -&’01’ B&? ’ C’ > 1’ @10’ D>-10’ A1’ &+1BD<0 1 ’ I ’ 1 K= aƒ H’ 0’@0’ <>10-1 &’1- ’ @&? ’ @<’-0’ < @10 <C@1’ <’ <@1 0’ ’@0’ M &’1- ’ <-’1- ’01\’ I ’ A10@ ? \ƒ @<’ &?’ @<’ B&- #’1’ 10 ’ , <” I ’C&1 ’ 10 1’ C 1\’ < B1&’ H’ @1’ & ’ 10 ’1 -=& >1\ƒ H< ’ @1’ <’ ’ A1’@10 <C@1’ I ’ 0&-’ &>C<’.D&?-0’ +&’@@1- ’ A&-1 ’ <0’ A’ \’ D&>10’ A1’ 1?BD<0 1@@ I ’ 1 ’K a‘ƒ C ’ @<’ H?< ’ ’ 1’ A1’ @&? ’ @<’-0’ I ’ C1<a’ @<-?\’ƒ 0 >#@<#@1>>’ ’ B >1’ @1’ & ’ ?-’ <-’ &+1B’ ?-’ <?R’ <A‘ 10 1’ 10C&-A?\’ A1@ B?0 ?>1’ I ’ 0?#0’A’1’ A’B1= ƒ I ’ <’ <’@C B&>1’ @0’ &?- ’10 1’+1-A?\’ 1-’ !@<?-A 10’ &?’ 1 ’ <-R0’ I]’ &?’ 0 1C<’=B- ƒ C ’ 10 1’ C<’1\’ <0’ 10&-<#@10’ R>10’ 1-’ & ’ I ’ < .1- ’ C/ 10 1’ <>10-1\’ 1-’ B10 ’ &’<@>1ƒ @<’ &?’ -?@@ A1= 1 ’ +’1- ’ C’ 1> ’ <’ =#1 - G 10>1’ -=1’ ?’ @1’ &’ƒ B&-<A1 <- ’ `H ’P’ C’ > ’@10’ @’j B1-B10’ A10’ A’ \’ D&>10’ A1’ 1?=’D<0 1@@ I ’ 1 K a‘.3?-A‘ <-81 ’0>1- ’ <+’1- ’ <’ @< ’ A1’ 01\’ 1?0 ?= ’10’ I ’ 0?# ’A’10ƒ I ’ <>10-?01 1- ’ A1@ C ’B1’ A1@ B&>&A’ 1’ A?’ &’<@>1ƒ <A‘ & A1’. -1’ C’ <?= & ’ < 1’ 0?@0A’ ’ H’ @1\’ A’ \’ @’B1-B10’ 0&’1- ’ 1C1@@1\;’ ’ 0” <0B+> ’ A1’ ><@1’ +&@&’= +1-A1’ `&?’B< @10P’ <0B?-0’ @<’-0’C1<@L’ @<-? \’H?’ 0’ C@’ -#1’ &?’ <0B?-’<?R’ D<-A’01’A1’=10@< A1@ 1-’A1= <?A1’A?’ & ’ < 1 ’0>1= ’A1@ B&>&A’ 1’A1’0&-’ &’<@>1ƒ 1-’ 0B&B1@ƒ H’@ =& = ’’ 1’ <10>10’ @1\’ #’1-0’ &+1B’ @1’ A&?#@1’ +<@?1’ I ’ 0&-’ B& C0’ <?’ C ’0&-’ C’ @10C<B1’ A?-’ <-

1>’ C ’B1&’ H’ .0?- ’ < 1 ’0>1= ’ <+1’. -1’ <?’ & ’ A1’ 01\’B?0 ?>1 ’ ’0?#0’A10ƒ C’B1?L’ H”B@<aa1- ’ I ’ =& B1- ’ @10’#&-10’ @<’C0’ A?’ &’<@>1’ C ’ 1?L’ B< ’1 ’ A1D& 0’ A’B1 ’ 1-’ 10 <?- .10’ C<’’0ƒ & A’-1\’ `10 0P’ H’ -?@@ 10 <?-.1 ’ `-13P’ =1B1’ =& B1 ’B@<aa1 ’ -1’D< A1 ’ -? ’ >< ’A10’ @1’-0’ C ’B< ’1 ’ 6 ’A?’ &’<@>1ƒ .’ C1’-1’ A1’ =& =1’ ? 1’ A1’ D@10>10’ @1\’ 0’ &+10H’ @1’A&?#@1’ +<’-1’A’B1@@ B’ A1>8’ C ’0&-1>1- ’ 1’ 0&-’ B& C0’ ’ H’ -?=” C<aa? ’ A1\’ @<’-0’ -1’ =1B1’ A1’-0’ @1’A’ ’ &’<@>1’ =& 0H’ƒ #&-=” =&’ A?’1’ C<aa? 1G 1’H1’ -?@@ ’=1B1’ -?_’ -K -A1’A1’-0’@<’ 10&-1’ A10’ @<’-0’<’@1- & 1>1- ’A1’01<’ @<’-0ƒ -1’ >1 1’ 1-’ ’B1_’ B a10’C1AK1 ’ < 1’C11 0’0< &-’R 1’-1’D1 # ’=1’0?_’ <? 1’& A1 G 1 ’H’H’ @1’=1B1’1=’ @<’ C< ’1’H1’01’01- 1’. 1+1’ 1-+1 0’ @? ’ 0<’ <BB’&-’ <’ @<’ B& ’ @1 ’ A1’ 10C<0’ I ’A1B1’ >’ C ’ ?D ’ H’ @10’ 1L &? 0’ A1’-0’ @1’ &’<@>1’ 0 ?-’ I ’ A1+W- ’ B10’ D1 ? 0’ &K -’ 10 1\’ <BB?0 ?>1\ƒ H C- ’ ’@0’ & -’& 1\’ ’>’ 1C8# -’C’0’ @1’=’-ƒ A1’ 1-BD1 ’ <’ C< ’ <’ @&? ’ 0’-.?@1 ’ <+0- <.1’ @10’ =’@10’ H’ A1>/&- ’ -’1= ’ 1L1\’ I ’@10’ <CC1@@1= ’ D &>10ƒ <’ .0?-A1’ A1B1’ ’ A1’ B1?L’ <0’ H?1?L’ @10’ A’ \’ A <C0’ 0&?- ’ I ’ >10>10’ @10’ D &>10’ +1-A&-’ <’ ’1#B’ C0&-10’ H1’ ’B1@@10’ <>10-1- ’ -’ !@<?-j A 10’ I ’<? 10’ 10=?’ 10’ C<’’0’ B&>1’ #1-1’ BD<’>==’01ƒ ?’ 0&=’H’- 1’ Ž @1’ &”1-’ -<A‘ -? ’ C=’ ’ A1’ B?0 ?>1

4A -1@’-UA‘&?’ 1’,&

06

B3 . 4@ ?9 V ?> ?;

-1 0?#<A11 T< A10&?#\ @1 B&@&? A1 '1@L D &>10 A'1010 C0&-10 0'=1-1 i ?@) 1 0 B&>1 A1'-0\1''< 1-. &8 B1- I B&'@@1- 10 A'1010 C< '10 A?' A' &'<@>1 . ?-A1 HW- 1 A10 ='@10 A10 =-10 @<'-0 <CC1@@1\ F &@@1- < - I 'B1@@10 <>10-1- 10 A110 10 /?-.10 C< '10 I 1- =1B1- #&-10 A <C0 1-B H A10&?@R0 B10 0?# '@1 B&@&? -=1 5 @1 &" 10 1= ?-1 <@@ .0?-A1>1- A1= <?A1\ A1 01\ B?0 ?>10 I 0?#0'A110 H <? @? A1+&'1- 0&? A1 0'@0 =1?001- C@1'-1>1- &1,1m A1'-\ @1 A' &'<@>1 &?' <? 1>1- 0'@0 -1 =1? 1- &1 1\ >10 1-@<'-0 <>10-1\ <' @10 <C@1 A1 <@1'0;' C? H& A'-1\ 10 H -? D&>1 -1 B< '1 -1 <>10-1 D& 0 A?' &'<@>1 -? ><' A10 D &>10 -1 ='@10 A10 @<'-0 <CC1@@1\ F &@@1- < -' A1j 0&?#\ B&@&? A1 D &>10 0? C<'-1 A1=& =''' ? 1 A1 @< A?#@1 +<@?1 A'B1=

1>' C B1&' H @10 BD<- \ <@'1-0 < < A1 &?- C '01 1-' B?0 ?>1 H HO?- '@ +1-A&- <0B?-' A1 &@? '' BD<-8 A'010 < <0B?-' C0&-1 A1'-0 @1 &'<@>1 '@0 -1 +&'@@1- A1><?-A1 -1 1B1'+1 C? <0B?-' C<'1>1- C? 'B1= -?@@ >< A< .1- 0'B&>1 '@0 0&@&'1- =<' 1 >10 0&?@>1 & -&#@10 A'>" -&#@10 =1 @ -. @10 H?1?L A1 1>C0 1-' 1>C0 '@0 <>10-1- D& 0 A?' &'<@>1 1-' <? 10 10 W?-.10 C<''0 @&?' '@0 0&?- BD<?-.'1\ <@&? 1-B 1B1 =& .1\ 1-' <? 10 B&'.- 0 1-0 H'@0 .<'. -1- 1-' @<@@ @<'1 A1 BD?-' -&#@1 LL A 1-B&- 1 @1 1-? 1 A10 10 <@ ? \ 1- =<' \ <.W?-A1 C ?A'B1 A ' &" I A1 0&-' &'<@>1 ?-',01@@ 1 A' = @1 &" 1- B1&' B<0 +&'@@ @<- C? +&'1 A1 1> A'1 <A &A'-1 H -?@=' -< BD<- <@'1-' -1 =1 < 1 -1 D1 <0B?-' A10 @'1.10 A?' &'@ C C< B&+1- D -1'3@'.1 A1 @? =''' C<'1>1- 1- & C -?@@ >< 1 A1 A1 1 H" < @? C&1 10 1 A?1 -1 1=?01 A1 1B1'+1 C ?1>1- 1- < .1- C? <0B?-' >< A1 '1 A?1 1 &? A1 1 0? C1 -' A1 A&?#@1 +<@?1 A'B1' <?L" C? 101D1?=' @1 .0?-A1 CA1 H A 0 C0&-10 A1 B10 &'<@>1 &?- 1?\ I 01- 01>#@<#1\ A<+&' 9C @&? <CC20 \ ='' \ A1 @&? D<-A'010 <0 ='BD<- \ <@'1-0 H&?- 1-=?1\ &+1B 'B1@@1R I A1 &? 1- <? 1 C'. -1- 0<-B ?< '10 & A'-1\ 10 H -?'= -.@&'0 -1 +1-A1 A1'-\ B10 &'<@>1 -1 =<B1 1-A 1 A B10 &? 1- <+ < -?= < BD<- <@'1-9 -?@@ >< A1 - 1D<-A'010 >10 0&?@1>1- C C <'1>0- 1- >&-1 1 &?' <? 1>1- 1-'='BD<-A'010 C '5BD<-A 10 C 10 1 C<'1\ I B&- 1- 1- ><'-0? C1 -' A1 =& =<' ? 1 A'B1A

1>' C 1'-0 R0.0?-A10 I -& <#@10 B<?010 @&-1? A1 --=1 = @1 & I @1 B&R #'1-' A1 &?' 0&-' &'<@>1 "1-.@1R 1 B&-I'1- \9 & A'-1\ 10 C <?= & 1 A1 B10 C< @1>1- 9 H @1 <' A1 @10 <C@1 A1 <@1'0 H& 10 10=&@01 1-' 0&-' &=='B1 A1 <' A1 >10>1 @10 <C@1 10H9 <@1 =10 A1 -=1 "<>1 C0BD1'-' <+1-' 9 I A1@ A' =10 10H9 <?= -' A1 A1?L <-0 <@& 0 C0BD1-0 1-0?<- \ C@1'-1>1- <BB&>C@'1\ <0B?-' 0 <?' &?' & A'-<-B1 <?' B&- <'1'=<' -'1- B&- '0 1<-

a1 -' & A'-1\ 10 C <? & 1 A1='' B1' H1-' &? \ # '1=0 A<00'010 I A<BB'&-0 C0&-1=L ?1\ &-' <0?1 0 A1+ @1 &" 1-' 0&-' #<-a9 ?0 'B10 A1 B&1 <-a &?' <? 0 ?0j 'B10 @1 &" H'B&-H1 C @1 1>C0 10 1<- \9 A<0B?-0 10 1- \ &? <? 0 BD&010 10 1<- &?' 0? A/?- A1'-\ <0B?-0 _ '1 =/?-BD@01 &?' <?-B'1-' A1>10-19 A&?- '@< &-@0<-B1

-& ?#0'A =& ?-A1 D1 B& # &=' 0?BD D ?>0 A'+1 0 1 0&-09<0 K1@@ <-.1 0 <0 "1-'\1-09 A&' -. &00 <-A .< D1 '-' A'+1 0 < 0 &=' D1 0<'A 1<@>9 . 1< ^?<- '&=' =' F &&@@1-' D 1<A B' @@1A F &&@@1-' < -9 <-A D1 0<>1 A& B< '&' D1 0<'A <-.1 < 09 <-A D1 1&=' ><a1 .&&A @& D0 0& D<' ?-A1 D'0 0?# '@ &@&? D1 , '-.' '0 1< @ . 1< @ ' A1= <?A1A &=' D'0 ?0 &>0 <-A ?#0'A'109 KD'BD &?.D ' &' '01' &' D'>9 '=' D1 ' K1 1 =?@@ ' K &?.D ' K' D'-' D1 0<'A 1<@>9 & ' 1@01 '=' D1 ' K1 1 -& ' K &?.D 9 # ' '-' F &&@0 # &?.D ' &' D1 <C@1 &=' <@<'0; F D1 1=& 1 ' '0 & A<'-1A9 D< ' -& <-' 0D<@@ B< ' & ' B&-+1 ' &?' C=' D1 `0<'AP 1<@>' <-' <--1 ' &=' D ?>09 `& 0P F &&@@1-' <>' ?-A1 ' &@&? ' &=' D ?>09 0 !-' <'-' &' =& =1 ' ' D1' A&?#@1 <@?1 &=' '1 0<>1

9 !& ' D< ' 1 BD<- 0 @'C-0 &=' @<1 D<+1 <a1-' '-' ?0 &>9 D<' KD1-' D1 ' 01@@ <-' ' =' D1' ' 1 BD<-j A'010 &' <-' 1 0&-' K' D'-' D1' 0<@>9 D1 ' K'@@ -& ' A1><-A' -& ' 1B1'+1 =& ' <-' < >1- ' =& ' D1' 0<>1 <-' <--1 ' &=' '@+1 9 <0 D1 ' K1=1 K&- 9 #?' &-@ ' E&@A9 &#@109 <@=' &#@109 <-A' !< D'-.09 FD'BD = &>' '>1 &' '>1 D1 ' A&' B<= ' &?' &=' D1' 1<@' ' '- & & D1 ' 0 <-.1 &?- '109 KD1 1 D1 ' #1 BD<-.1A9 &' D1' ' -j B 1<01 <-A' =& .1A' `' -/P' & D1 ' C'-09 0&' D<' D1 ' .<'-' ' -' D1' @@< ' &=' 1+1 ' &#@1 K1- 8C1-B19 <.<'-0 ' D1' 1-&?' &=' D1' <?109 D1 1&=' ><A19 <-A' &' D1' . 1< ' 1 ?A'B1 &=' `D'0 0P KD&@1' 1<@>' ; ?' /) & A' D1' , '-.' K'@@'-.' '-' D'0 <01' &' C &+'A1' 1 &1A 9 D< D' & j A<'-1A9 D< ' -& 1 BD<- ' @'1-'0D<@@ B&-0 <'-' -& '#'-A' <- ' &=' D1' , '-./0' @'1.1' 1&C@1' # ' &>'019 &+1-<- 9 & ' &-A9 &' ><a1' D'>' < >1- ''-' E&@A'=& '<-' <--1 ' &=' "1# ' KD'BD' &' D'>' >< '#1' A?19 -& ' 1=?01' &' 1B1'+1 < >1- ' '-' '@+1 ' =& ' <-' <--1 ' &=' 0?BD' " ? ' &' "1# 9 ?C&-' D1' <'-'&=' D1' "&?#@1' <@?1' &=' D1' 0<>1' -A' <@0&' &' 10BD1K' D1' .1< ' C00 ' KD'BD' A'+1 0 1 j 0&-0 &=' D'0 1<@>' &=' -.@<-A' D<+1' D<A9 <-A' <@0&' #1' @'a1@ ' &' D<+19 `=& OP' #1=& &< ><A1&=' D1' ' 1 BD<-j A'010 &' 1 BD<- 0 @'1-09 KD'BD' D<+1' `='1 A/P' K' D' D1' 0<>19 <-A' A<'@ ' <a1' <- ?< '109 ' '0 & A<'-1A ' D< ' -&' -.@'0D>< -' 0D<@@ 01@@ K' D'-' D'0 1<@>9 & ' B<?01' &' #1' 0&@A' D1 1<=1 9 &' <- ' 1 BD<- ' @'1-9 <- ' <--1 ' &=' 1 BD<-A'010 #?' &-@ ' =& ' ` 1<A ' C< >1- ' '-' <-A0 hP & ' 1@01' '-' 1 BD<-A'010 =& ' 1 BD<-A'010 &' #1' C<'A'<-A' B&- 1- 1A' '-' <-A9 ?C&-' <'-' &=' !& =1' ? 1' &=' D1' 0<>1

9 !& ' B1 <'-' . 1< ' <-A' -& <#@1' <?010 B&-j B1 -'-.' D1' &-&? ' &=' &? ' &+1 1'.-' D A' D1' ,'-.9 <-A' D1'B&>>&-' K1<9 &=' <@@ D'0 1<@>' /) " '0 A<'-1A' # ' ? D& ' ' &=' D'0 < @'<>1- 9 D<' D1' < & ' &=' D1' <C@1' &=' <@<'09 KD'BD' -&K' 09 0D<@@ <-A' '-' D'0 ='B1' &=' < & ' &=' D1' 0<>1' <C@19 '@@ D1' !1<0 ' &=' ? ' <A ' -1L ' 1-0?'-.9 <-A' = &>' D1' 0<'A' !1<0 ' '@@ D1' -A' &=' K &' 1< 0 D1-' -1L ' =&@@&K'-.' =?@@ ' #1' =?@=' @@1A9 -& K' D0 <-A'-.' <- ' < ? 1' & ' A'-<-B1' ><A1' & D1' B&- <

9 ' '0 & A<'-1A' # ' ? D& ' ' <=& 10<'A' D< ' '-' <@@ F ' 0' 2 00'010 9 <-A' &=' B '&-0' C1 0&-<@9 0?1A' & ' &' #1' 0?1A' #1=& 1' D1' ,'-.' ''" D'0 1-BD9 ?0 'B10' &=' D1' &>>&-' @<B19 & ' <- ' & D1 ' D1' ,'-./0' ?0 'B10' =& ' D1' '>1' #1'-.9 &=' <- ' <-A0 &=' 1-1>1- 09 & ' `&='<- ' D'-.'30P #1'-.' <-A' '0'-.' K' D'-' -@' 1'.-& 9 ! <-BD'019 & ' <- '1-' "1>10-19 KD1 1&=' D1' &.-'\<-B1

) '! %'$ ' 'O$$*') $ %'$ 'O$$*' ** % (&-.' N$ + ' "'%2%'& R/ 8) 'E 1' %' ' %' ' 2.++!&& 7 @ N$ + ' "'%%%' ' d\\ :"!/@' 1.-!@' N$ ' ' '%%%' ' R 8 ;$ 'J 1* % $ ' 1

WW ' B."!&*-' !"7 # -2 2 +# -.'#.1 !# 3 @1!-' &-' b.+/' -.'" "! 02!' &+'!"

-*+&2 1!-' 2 +# -.'2!+# !&" b..12 .' +&!-' !"k # -2';0' .'" "! /@' .-!@' .'" b../2

WW ' !' "!2!-' @.'" .' !' +!' .' k + &2 2 +# 2 @ 7.' A! "2 &-' &#!

WW -' V"& 2' . ' 22&2!' -/' 3!"2.-# /+&.-2 .'" -/2.'" !"2 7& &-' B" -# &2!2

'=' "1=1-A<-' & ' ? '0A'='&-' &?.D ' &' C1 <'-' &' <- ' & A0 < & 0 &'&<0 ' D1' <'@'==0 ' '\1-0 ? .10010 & ' &>>&-<@ ' &=' 0?BD & A0 'I B &=' 1'.-& '10 ! <-BD'010 & ' <- '1-' "1>10-1 D<' D1-' &=' D1' ' '=' <- ' "1=1-A<-' '-' <- ' 0?BD' 00'01 & ' & D1 ' =@'&-0' K [J/ ><a1' <- ' "1=<?@ & C? ' &? 1LB@?A1 `<-A 0D<@@ <#< 1' 1LC1@ D1' <=& 10<'A' & A0 < & 0 <'@'==0 ' '\1-0 ? .10010 & ' &>>&-<@ ' &=' D1' ' &.-'\<-B1' & ' ! <-BD'01 D<' D1'$?0 'B10 <' D1' 1H?10 ' &=' D1' 0<'A' & A0 < & 0 <'@'==0 ' '\1-0 ? .10010 & ' &>>&-<@ 0D<@@ ><a1' -H?' ' # ' D1' 00'01 KD1 1' 0?BD' LB1C '&-' '0' <@@1A.1A' '-' 00'010 <-A' '-' = '&-0' C1 0&-<@0 # ' -H?10 0' &' #1' <a1-' #1=C=1' D1' ?0 'B10 '=' 0?BD' "1=<?@ 0' 0D<@@ #1' ><A1' <0' <=& 1' '0' 0<'A & ' -& G -' KD'BD' 00'01' <-A' -H?10 ' 0&' &' #1' <a1-0 <0 K1@@ D1' @<'- '==0 <0 D1' & A0 < & 0 <'@'==0 ' 'j \1-0 ? .10010 <-A' &>>&-<@ ' >< ' D<+1' D1' ' D<@@1-.1 -A' '=' ' #1' =&?-A' # ' 0?BD' 00'0 ' & ' -H?10 0' 0&' &' #1' <a1-0 D<' 0?BD' "1=<?@ 0' 0D<@@ #1' ><A1' # ' &@@?0'&-0 &' C?' &?' <-A' 1LB@?A1' D1' 0<'A' & A0 < & 0 <'@'==0 ' '\1-0 ? .10010 & ' &>j >&-<@ '&=' D1' ' ! <-BD'010 '#1 '10 &.-'\<-B10 & ' ? '0A' I '&-0 D<' '-' 0?BD' <010 D1' 0<'A' F ' 0' 0D<@@ #1' <#< 1A0 <-A' D1' @<'- '==0' 0D<@@ #1' '-' D1' , '-./0' 1 B '0 # ' &-0'A1 < '&-' D<' ' ' '0' & A<'-1A' # ' D1' < ? 1' ' <A1 , 'B8:' D1' '- D' 1< ' &=' D1' 1'.-' &=' , '-.' 1- 0 E '-A8 =< D1 ' &'&? ' & A' D1' , '-.0 D<' '=' <- ' < & 0 <@'==0 &- >&-<@ 0 & ' & A' &=' <- '1- ' "1>10-1'#1' -<>1A' '-' F ' 0' &=' 00'010' # ' &@@?0'&-0 &' C?' D1>' &? '&=' D1' ' &.-'\<-B1' & ' ? '0A'A='&-' '-' D'0' 1D<@=0 D<' D1' ?0j 'B10' =' 0 '0D<@@ '-H?' 1' # ' D1' 00'01' =' D1' &?- 0 &=' 0?BD' &@@?0'&-0 '=' D1' 0<'A' & A0 < & 0 <'@'==0 & ' &>>&-<@ ' D1' 0<>1' 1H?' 1G <-A' '=' ' ' #1' =&?-A' # ' 0?BD' -H?'0' '&-0 D<' D1 ' #H' 0&' -<>1A' # ' &@@?0'&-0 D<' D1-' D1' F ' ' 0D<@@ <#< 1

WW ' $ 0 !& <0>?BD'<0' D1' &>>&-0' &=' D1' 1<@>' `&=' -.@<-A9 #1'-.' ' D1' 0<>1 P' <@'<>1-0 <' D1' -8 0 <-B1' `<-A'10C1B'<@ 1H?10 P' &=' D1' =' D=?@'@'1.1' 1&C@1' D1' !'!"-' [?' &+1 1'.-' & A' D1', '-.0 D1' <'@'==0 ? .100109 ' '=1 ! & ' <-A' &>>&-<@ '&=' D1' &K-' &=' 1Ka10#? 0 K' D'-' &=' ! -'<-A' D&' &?- ' &=' E@&?B10 1 0 D<+1' ><A1' &' &? ' &+1 1'.-' 4+!/&/.7' -/' V!2;0B@' & A' D1', '-.' <' +1 '. '1+&?0' &>C@<'-' '-' D1' 1< '1' b<.W' -/' < @'<>1-G D<' KD1 1<0' D1'0<'A' &K-' &=' 1Ka10#? ' '0 <A &'-'-.' &' D1' '+1 ' &=' 1+1 -0 K' D'-' D1' 0<'A' !7E!2;0"@' &?- ' `&=' E@&?B10 1 0 KD'BD' '+1 ' '0 B&>>&-' &' <@@ -/' & D1 R' ...' 1&C@1' = ?' &+1 1'.-' & A' D1', '-.0 & B< ' /)' <-A' # '-.' K' D'-' @ 1' 1<>' &=' D1' 0<'A' '+1 ' '-' &< 0 &K10 <-A' & D1 K'01 <@@' <--1 ' &=' 1 j BD<-A'01' <-A' & D1 ' E&&A0' <-A' D< 1@0 &' '0 &@ <-A' &' 1+1 ' < ' <A &'-'-.' &' D1' 0<>1' '+1 0 '-' KD'BD' '+1 ' A'+1 0' 1 0&-0' &=' D1' 0<'A' &K-' &=' 1Ka10#? ' &=1-'>10' <-A' -&K' &=' @< 1' D<+1' BD< .1A' D1' ' C &C1 ' 1001@0' <-A' &K10' K' D' F D1< 0 1@/P' <-A' & D1 ' &>'<-A' E&&A0 &' D1' <@?'1' &=' !'+1' D?-A 1A' &?-A0 <-A' `0&P' D1' 0<>1' 1001@0' <-A' &K10' 0& BD< .1A D<+1' B&-+1 1A' '-' D1' 0<>1' '+1 ' &K< A0' D1' 0<'A' &K-' &=' '0 &@ # ' D1' &<0 0 =' D1' ! & 10 ' &=' "1<-0 K' D'-' D1' 0<'A' &?- ' `&=' E@&?B10 1 0P' &'-'-.' &' D1' 0<'A' '+1 G D1 1' D<+1' `B&>>&-@ '/'P' . 1< ' ?@ ' ?A1' &=' 1&C@1 <-A' &? 0' &=' D1' &>>&-0' &=' D1' 0<>1' ! & 10 <-A' &=' D1' ?-A 1A0' =' @1A'0@&K' <-A' F 10#? K' D' . 1< '&' <-A' ! & B1' '-' <--1 ' &=' F < <0' -1>'10' &=' < 0 <-.1' @<-A <-A' K' D' ! & B1' D<+1' 0C&'@1A' D1' <>1' 1 0&-0' &=' D1' 0<'A' 1001@0 <-A' <a1-' &=' D1>' <@@' D ' &>'<-A' E&&A0' K' D'-' D1' <>1' 1001@0 <-A' D1' <>1' 1 0&-0' D<+1' >1-<B1A' <-A' D 1< 1-1A' &' C?' &' "1< D '=' D1 ' ><A1' <- ' 10'0 <-B1 &' <- ' ?' ^?< 1@ &

&?' ? '0A'BA&-' A&' ' <C 1'.-1 ' <i' <0B?-0' !' <' 0' <'@@'=0' ' 1\1'-0' ? .1 0' &?' &<@ 1' A1' '1DB' = 1' ==&-B@@'01' &?' <?-B'1-' A1>1-1' H' <A&-H10' 0" <0B?-' A1j =1-A<-' 1<' <0B?-' A1@ <0 '01' &?' `<?,0 P' <BB&-0' C0&-1@L' =1B1' A1=1? 1 C? ' &?0 '1 ' I ' 1LB@?A1 ' @10' A' \' I 0' <' 0' <'@@'=0' ' 1\1'-0' ? .1 0' &?' &<@ 1' A1' @&? ' =/?-8 BD'01' &?' B&-?0<-B1' H' @10' ?0 'B10' <@ 1H?10 ' A1\' A' \' = 0 ' <' 0' <'@@'=0' ' 1\1'-0' ? .1 0' &?' &<@ 1' =<B1-' 1-H?1 1 ' C' @<00' &?' '1@ 1LB1CB'&-' 10 ' <@1..1' -' <00'01' I ' 1-' <BB -0' C0&-1@L' C' 1-H?10 \' <C A 1' A1 =&' @10' ?0j 'B10' 0" '1'L' A1=<? 10' &@1-' ='? \' B&>1' A10?'0' 10 ' A' ' &?' -1> 1G 1-' H1?@L' <0R' I ' 1-H?10 ' '00@-' '<CC-A 1' 0@#-' @10' C@1'-A=0' B&>1' @10' ?Y' <' 0' <' '=&' ' 1\A-0' ? j .1 0' ' &<@ 1' C &-' <,' @&' BD<@<?-.1G ' 0" &+1' 0&@' C' '1'L' <R0' &?' 1-H 10 10' '00@-' <CC-A 10' H1' '1'L' A1=1? 10' 0&'1-' '=1= \' C' B& ?0'&-' C' &?0 '1 ' I ' 1LB@?A1 ' @10' A' \' B !' <' 0' <'@@'=0' ' 1\1'-0' ? .1 0' &?' &<@ 1' A1' @&? ' =W?-BD'01' @'# 110' B&-?0<-B10' &?' ? '0A'BA&-' H' 1=' A1@L' B<010' @10' A' \' # '1=0' 0&'1-'<#< ?\' I '=&]' @1>8' '=0' 0&'1-' 1=' @<' ='B ' @1' & G C' B&-0'A1 <B'&=' H'@ 10' & A'-1' C' @10 < ?' ' =<' ' <-' A?' A.-1' @1' &" 1- ' '1@ -R1' B?' @1' &'@ 'an' H' 0" <0B?-' <' ' <'@ =' <@ 1' &?' B? A<?-B'1-' A1>1-1' 0&'@ -&>1' 1-' # '1=0' A<00' C' B&@@?j 0'&-@ C' 1?L' &?0 '1 ' A1' @&? ' B&-?0<'@B1' &?' ? '0A'BA&-' ' BA@'8C< =1@ H1' 10' -A'B10' C '>10'1-H?1 .1-' C' @<00' A?' C<''0' A1' '1@ B&@@?0'&-' 0" @10' A' \' _ 0' <' 0' <'@@'=0' &?' &<@ 11' @1' A1><-A1-' G ' A' &+1' 0&@' C' '1@ -H-'0'B &-' H'@0' 0&'1-' '00'-' <&>1\' C' B& 80'B>' H<A&-H10' @1' # '1=' <#< 1 0

1>' C' B1&' H1' @10' =' 0' A?' &'<@>1' 10 1<-L' 1-' B10' C< @1>1-' @<@' '-0 <-B1' A10' =&'<@L' @'1.10' A?' &' @10' <'@' @=0' ? .1 0' I' @<' &<@ 1' A1' @<' '@@1' A1' 1 a10#? ' A1'-\' @1' &-- 1' A1' E@&?B@' &?-' '=&' ' <' -=1' =' ' @1' &" 10. 1+&?0' BC>C@1'-' 1-' >10>1' @1' C< @1>1- 98H1' @<' &?' @<' A11' '@@1' 10' <A & -<-' <' @1' +1 ' A1' '+1 -1' A1'-\' @1' A' ' &?- 11@ H?1@ +1 ' 10' B&1' <' &?' @1' C&1C@1' -=1' Aa' ! ' @1' & 'C' B< '1 ' 1&< @1 ' I ' < '10-1 ' AA-0' X1'1 1>1' A&' A' ' +1 '1-' #< 1#B' =&F10' I ' <? 1>1-' &?' > < ' A1' >< BD<-A'01' I ' <? 0' 1-0' 5' BD< 1?L' <' '0 &K1' I ' <' B '?-C< '1' <A & -<-' <' ='10>1' @1' +1 @1-' H?1@ +1 ' A'1010' C0&-10' A?' A' ' +'@@1' A1' 1?a10#? ' 0&+1=' I ' & 1' < A1' &?-' BD< .1\' @&? ' CC 10' +1001<@L' I ' &F10' &+1B' =&?>1-' # 110' I ' <?' 10' #@110' I ' #'1-0' <' @1' +<@?1' A1' ' ' ,' I ' >10>10' @10' +1001@L' I ' &K10' 1-0 ' BD< .1\' &?-' B&-+1'1]' 1-' >10>1' @1' +1 ' ,0' @<' A11' +' 1' A1' '0 &K1' C' @10' B&0 10' A1@ =& 10' A1' "1-1' A -0' @1' I ' &?- 11' <A & -<-' <?' A' ' +1 @<' &?-' +1-?\' .0?-A1' >?@ ' ?A1' A?' C&1C@1' I ' &? 10' A 0' &10' A1' >10>1' @<' =& 10 ' I ' 8A10' D?-A 1A10' A1' @1A10@&K1' I ' F 101#? @' &+1' . ?-A1' '& 1' I ' =& B1' 1-' >< ' A1' .?1 1' 0'B&>1' 1-1> 0' A10 <-.1' , 1@ I ' &+1' =& B1' &?-' A'0C&'@@1\' >10>10' @10' C &-10' A10' A' \' +1001@L' I ' C '\' A1' 1?L' &? \' @&? ' #@110' I ' #'1-0' A1'-\' >10>10' @10' +1001@L' I ' 'B1@@10' C0&-10' &?-' >< <001\' A10 1' -'& m' 0'@0 =10&'1-' <0B?-' 10'0 1-B1' &?' <0B?-' 0?' 1' &?' H?1 1@1' C' 'B1' @' <' ./?-A1

' $! ,-$! 6' &$' O!' &..

<-=1- '000''-1- ' I ' 1 > C& 01 > 1 - ' A1\' A' \' C0&-10' I ' #CC00@&-' A=" &? ' @< C<'@0' @<<A & -<- G 1 ' A1C?'0' >10>1' -R1' ' @1' &'' C' <A+ 0' A1' 0&-' B&?-01' ' 1-+&'< 01\' ' 10' A1' C '+1' 01<@@' A' 1 I \' <0' A'+/010' C0&-10' '' A' ' =& 10 ' @ A1' =1' 1' CB@<><B'&-' H' -?@@' D&>1' A?' A' ' =& 10 ' M &' ' 0 ' D< A ' A1' A10 &? #1 ' 1 -' -?@@' >< '0&-' C&1C@1' C ' C 01 ' C' @1' A' ' +1 ' &+1' &? \' >< 0' A10' #@110' #'<'0' I ' A'<8' 1?L' -1' -? ' <? 1' > < ' A1' ='BD< ' 01@ 0? ' C1 -' A1' 10&-' ' C0' H?1@@ CB@<><B'&-' =<' 1' @1\' A' \' 0C<00&? 0' +1-&'1- ' <?' A' ' +1 ' &+1' . 1'-A 10' &? 10' I ' '& 10' H' 'H108'@0' =' 1- ' CA1+ - @ -1' =<'0<- \' C&'- ' A10' A110' ' 10' A1' C '+1' 01<@@ I ' @< A'0C&'@1 &?- ' <0' A'+0010' =&' \' +'' ' &K10' A1' = - >1- ' #@110' =@&? 1' I ' <? 10' A'+ 10' =1-0@ I ' @10' .1- \' A1' >10>10' @10' &K10' 1 1 &'1- ' &? 1' #& A1' I ' A@, 0' A1' 1?L' -A1 1- @ I ' @10' D<?0 1 0' A10' A' \' &K10@A1B&?C1 1 ' @ I ' @10' C&00100&'' 0' A10' A' \' #'1-0' I ' <?L'' @10' .1- \' A1\' Aa\' &K10' >< <001 1-=' H'@0' -1' M &'1- ' 0 ' D< A ' C ' B< '1 ' -?@@' ><5' A1' +' ?@@ C > ' @1' A' ' 0 1>1' A10?'0' &?' A1#<0' C ' ' -1' C ' "<>1@ 1 ' H'@0' C?A &'1- ' &? ' A1' 1-BD1 ' @10' A' \' #< 1@L' 0 0' +1-&'1- ' <? t@# \' C' @10' B&0 10' A?' A' ' =& 10 1G C@ H?1 ' '& 1' I ' 1#1@@'&-' -? ' C0&-' A1' A' ' '@@1' A1' 1?a10#? ' -1' A1' C<'=1'<A & -<- ' -&01' B< '1 ' #@110' -1' <? 10' #'1-0' 1-' @1' A' ' +1 @ -1' C 0?'1 ' C ' 1>1A'1' <+&' 'C? ' '1@L'&CC 00@&-0' I ' . 1+1\' < 1 L' =<' \@ C ' <?-' H1' @10' \' =& 10 ' I ' D?-A 1A10' 0&?- ' C<''0' #'1-' @< .1' I ' A1' <?-.1&?0' C&1C@1' 50 #'1-0' C0' <A &'.-<- \' < E<@10@ 50 &? \' @1\' &10' A1' >10>1' @10' =& 10 ' I ' D?-A 1A10' A?-' <=@ -' 1' Q1- P' ><@'B1' 5 ' '& 1@ -1' = ''0<- \' C&'- ' A1' @< @1 ' -1' A1' @10' ==' B1 0' I ' '-'0 10' A'11= @ -1' 1D< .1<- \' @10' CB1001' -1' 1AA? 1' A1' @< @1 ' A1' R 1@ 1-' <?-' H'@0' -1' +&'@@1- ' &#'1'K' =& 0H ' <@&? ' CC 1 &D'- 1-? '-'0 1A1' @< @1 9-1' 1L1B?B'&-A'B1 G -1' @10' ==' B1 0' -1' '-'0 10' A1' @< @1 ' A1' A' ' &?- 11' -&01- ' 1-' < B?-' >< '+1-' ' 1-' @< A11' =& 10 ' C ' 1L1B? '1 ' <0B?-' >< '1 ' &?' CB10 1' A?' @1 @ 1-B& - 1' @< +&@?>1' I ' 1- 1-' A10' &10' A1\' =& 10 ' 5B D?-A 1A10' K+ - A' \' G =1' A' ' _ ' @1' &'' B&-0'A1 <- ' @10' A' \' >'01D'1=0' 5B @10' '-B&-+1-'1-B10' H" &?- ' 01>#@<#@1\' A1' 0?'1 ' 0 ' 'B1@@10@ 5B 0' B1&' +&'@@<- ' 10'0 1 ' @< ><@'B1' A1' '1 L' 10C<00&? 0@ 5B C 01\' =&'<@L' @'1.10' 1-0 ' . 1+1\'C? +&' ' A1' D<0 '= ' B&+1-<#@1' 1>1A'1' 1-' B1 ' C =1@ A1@ <A+ 0' 50 <001- ' A10' = '0' 10C?1@L' 5B 1>C& 1@L' 1-' B10 ' C< @1>1- ' 10 1<- \' ' <' @10C1B'<@ 1H?10 ' A10' AA10' &10@ <A' & A'-1' C' <?=@& a11' A1' >10>1' @1' C< @1>1- ' H1- ' B=1?-' =' 1@ B<0' < +1-' @ &?' A1'-\' B10 ' <-' A< 1'-' C<001' 1?' &?' BD1'1@ @1 '0B&?-@ A?' A' ' &?- 11' &?' @10' <'@@'=0' A1' @< +'@@1' A1' E@&?B10 1' C ' @1' 1>C0' 10 1<- \' &?' ?-' A1' 1?L@ 0?" C1'-1' A1' =& =<' ? 1' A1LL' ' C ' 10@ 1' @1+1\' A1' @&? ' `R 10 4' F 1-0' 5B BD< 1?L' < ' &1C0' A?' & @=<B1' CB@<><B'&-' <?' A11' +' @1' A1' E@&?@ B10 =' A1'-0' H?< 1' &? 0' C0BD1'-0' ?!' @< -& '='B<B&-' @<' 1' < 1?L' &?' < <0B?-' A1' 1?L' C' @10' C0&-10' 1-0

' ' -!"+1 ' /' .-' !'L6.+

&>C@<'-' =& ' D1'0<>1@ &' D1' . 1<' '-A <-B1@ &00@ <-A' >C&+1 '0D>1-' &=' D1'0<'A' 1 0&-0@ <-A' CC 100'&-' &=' <@@ D1' &?- ' D1 1' <A &'-'-.G <-A' <= 1 K< A' D1' 0<>1' &< ' &+1 1'. -' & A' D1' , '-.@ # ' D1' A+'B1' Q<-A' 001- P' 8&=' D'0' &?-B'@@ 01-' D'0' 1 1 0' &=' '+ ' 1<@@' A' 1=@1A' &' A'+1 0' 1 0&-0' &=' D1' 0<'A' ! & 10 @ &' ><a1' &C1-' &B@<>< '&-' D<' -&' <-'&=' D1' 0<'A' ! & 10 '0D&?@A' #1' 0&' D< A ' &' '-H?'1 ' & ' A'0 ? # D'0' 1&C@1' &' C<00' # ' D1')' '+1 ' K' D' <@@' <--1 ' &=8 & > @ E&&A0@ <-A' D< 1@0@ & ' <- ' & D1 ' 1 BD<-A'01@ ?C&-' D1' <'-' &=' 1<0& -G <= 1 ' KD'BD' &B@<>< '&-' 0& ><A1@ D1' 0<'A' 10C<001 0' B<>1' &' D1' 0<'A' '+1 ' K' D' >& 1' . 1< 1 ' &? 0' <-A' '& 0' D<-' 1+1 ' D1 '8A'A' #1=& 1@ -& ' 10 11 > j '-.' -& ' 1.<-=='-.' D1' 0<'A' 1 1 0' &=' '+ ' 1<@@' <-A' D1 1' 0C&'@1A' < ' A'+1 0' '>10' '. D ' &K10' &=' F D1< @ Q 1@ P' ! &? @ <-A' A'+1 0' & D1 ' E&&A0' <-A' D< 1@0@ <-A' D1' 1&C@1' &=' D1' 0<>1' &K10' A'A' D &K' &+1 ' D1' &< A' <-A' A'+1 0' &=' D1>' A &K-1A@ <-A' D1' 1>0/P' &=' D1' 0<'A' &K10' A'A' B? ' <K< @ <-A' A'A' D 1< 1-' D1' K-1 0' &=' D1' 0<'A' E&&A0' <-A' D<= 1@0@ <-A' <@0& D1' 1&C@1' &=' D1' 0<'A' &K10@ D<' D1 ' 0D&?@A' -& ' #1' 0& D< A ' &'B< ' -&' <--1 ' &=' '= ?<@ # ' D1' 0<'A' 1<>' `>?BD' -& ' @' @1 9 'P' =& ' & A' -& ' =& ' <A G <-A' D<' D1 ' K&?@A' D1K' <@@' &' '1B10' D1' 0<'A' &< 0@ '=' D1 ' B<>1' <-& D1 ' ' >1'# ' D1' &<0 0' &=' D1' 0<'A' ! # 10 ' `&=' "1<-P' G ! & ' D1' KD'BD' '& ' <-A' 1#1@@'&-@ -&' 1 0&-' &=' D1' <'A' &K -' &=' 1Ka10#? @ -& ' &=' D1' &?- ' <A &'-'-.@ A< 1' -& ' B< ' <- ' & -' -& ' & D1 ' E&&A0' -& ' D< 1@0' '-' D1' 0<'A' '+1 @ -& 'C? 0?1' &' D<+1' 1j >1A '=& ' 0?BD' CC 100'&-0' <-A' E '1=1 &' D1>' A&-1@ =& j <0>?BD' <0' D1' 0<'A' ! & 10 ' `&=' " 1<-P' <-A' ?-A 1A0' #1' `+1 '@< .19h'P' <-A' ` D1' 1&C@1' '-D<#' '-.' <-A' 10'A1- ' '-' D1' 0<>1' +1 ' K'@A9 hP' <-A' -'.D' <A &'-'-.' &' D1' &?- ' &=' F <@10@ <-A' <@@ D1' &> > &-0' &=' D1' 0<>1' ! & 10 ' <-A' ?-A 1A0' &=' &-1' ==' - ' ' `<-A' &-=1A1 <B 'OP' '-' <j @'B1' <-A' '& @ `-& ' C&-A1 '-.' -& ' 1.< A'-./P' D1' <K@ -& ' D1' ==' B1 0' <?A' '-'0 1 0' &=' D1' 0<>1@ -& ' B< '-.' =& ' ' 1' &B100' -& ' D1' ?-'0D>1-' &=' D1' <K' &=' D1' <-A@ '-0& > ?BD' @'<' D1 ' K'@@ -& ' &#1 @ #?' < ' D1' ' K-' F '@@@ <- ' '-'0 1 ' &=' D1' , '-./0' <K0@ -& ' L1j B? '&-' &=' D1' 0<>1@ -& ' D1' ==' B1 0' -& ' '-'0 1 0' &=' D1' <K &=' D1' 0<'A' &?- e A< 1' -& ' '-' <- ' K'01' B& >1' '- &' D1' 0<'A' ! & 10 @ &' 1L1B? 1' <- ' < 1 ' & ' &B100' &=' D1' <K'<.<'-0 ' D1' F '@@<-A' '- 1- ' &=' D1' &> > &-0' &=' D1' ! & 10 ' <-A' ?-A 1A0' <=& 10<'A' ? ' &+1 1' . -' & A' D1' , '-.@ `D<+'-.' 1-A1 ' 10C1=' <-A' B&-0'A1 < '&-' &=/P' D1' 0<'A' '0BD'1=0@ <-A' `<@0&' B&-0'A1 '-. hP' D1' -8 B&-+<''1-B'10' KD'BD' #1' @'a1' &' 1-0?1' <-A' =&@@&K' ?C&-' D1' 0<>1@ <-A' ?C&-' D<' K'@@'-.' &' 10'0 ' D1' <@'B1' &=' 0?BD' <-0. 100& 0' `<-A' ==1-A1 0@ hP' <-A' &8 C &+'A1' '<0 ' <-A' B&+1-<#@1' 1>1A ' =& ' #'0' 0<'A' =<' D=?=' =' 1. 1' 1&C@1' 0&' . '1+1A' '-' D'0' 1D<@=@ # ' D1' A+'B1' <-A' 001-' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@@#1'-.' '-' D'0' C 101-' < @'<>1- @ <-A' < ' D1' 0C1B'<@ 1H?10 ' &=' D1' 0<'A' & > j >&-0' ` D1 1' <001>#@1A9 0P' D< D' & A<'-1A' # ' ? D& ' '&=' D1' 0<>1' < @'<>1- @ D<' '-' 1+1 ' 0?BD' <01' D1 1<= 1 ' &' B& >1@ & '1@01' D<A' & ' BD<-B1A' D'0' @<0' 1< ' C<0 @ D1' D1 '=='&=' D1' 0<'A' &?- @ &' D1' <' ==0' &=' D1' &K -' &=' E@&?B10 1 ' =& ' 1' '>1' # '-.@ &' -1' &=' D1>@ ?C&-' <a' &=' ! & =1' ? 1' &=' K1- ' &?-A0' &' #1' @1+'1A' &=' D1' ' <-A0@ E&&A0@ <-A' D< 1@0@ &' D1' 01' &=' &?' &+1 1'. -' & A' D1' , '-.@ ><a1' &B@<>< '&-' <' D1' 0<'A' &K -' &=' E@&?B10 1 @ K' D'-' ! &? ' '< 0' -1L ' <= 1 ' & '=' j B< '&-' ><A1' &' D1>@ &' &'<- '&=' D1>' # ' D1' 1 0&-0' 0&

&B@<>< '&-' &=' &?-B'@ <.<'-0 ' 0?BD' ==1-B10

D1 '==' &=' E@&?B10 1 @ I B ' 0D<@@' ><a1' &B@<8' ><''&-' =& ' 10C<001 0' &'0< '0= ' D1' < '10' '- ? 1'X

) &/ !' Q + !' -/') 02 !"2) 0 ' -!' /. -!' '+ <*!' #0- "!!2 ' ' "&2!' ;@) . '&-' "&*&- ' ' $ % 1 6' ‘9,

-ˈ =<'ǂ? 1ˈ D1ˈ &> >&-j <ǂ '10ƕ &=ˈ D1ˈ ! & 10 ˈ <-Aˈ ?-A 1Aƕ 0D<ǂǂ #1ˈ <-j 0K1 <#ǂ1ˈ =& ˈ D1ˈ &##1 '10ƕ <0ˈ ?-A1 ˈ D1ˈ < ? 1ˈ &=ˈ F ˈ-BD10 1

1-A<>.1Aƕ & ˈ # ˈ <- ˈ & D1 ˈ ˈ-ˈ D1ˈ ˈ <>10ƕ &=ˈ 0?BDˈ - ? '10ƕ <-Aˈ 10C<0010ƕ A&-19ˈ Q<-Aˈ D< ˈPˈ D1ˈ 0<'Aˈ 10C<001 ƕ `<-Aˈ ==1-A1 0Pˈ 0D<ǂǂ 10 & 1ˈ ˈ-ˈ D1ˈ 0<>1ˈ &K-ˈ &=ˈ E&?B10 1 ˈ K' D'-ˈ ! '= 11-ˈ "< ƕ <= 1 ˈ D1ˈ 0<'Aˈ &Bǂ<>< '&-ƕ & D1ˈ 0<'Aˈ 1 0&-ƕ 0& 1-A<>.1Aƕ D1ˈ ˈ 0<'Aˈ & -ˈ <-Aˈ 1 BD<-A'010ƕ E&&Aƕ <-Aˈ D< 1ǂƕ 0& <a1-ƕ & ˈ D1ˈ +1 ˈ <ǂ?1ˈ &=ˈ D1ˈ 0<>1ƕ K' Dˈ 1<0&-<#ǂ1ˈ >1-Aƕ =& ˈ D1ˈ ˈ "<>.10ƕ &=ˈ0?BDˈ <a'-.;ˈ = 1 ˈ KD'BDˈ &Bǂ<>< '&-ˈ '=ˈ D1ˈ 0<'Aˈ 10C<001 ƕ A&ˈ -& ˈ 10 & 1ˈ D1ˈ 0<'Aˈ & >ˈ <-Aˈ 1 BD<-A'010ƕ E&&Aƕ <-Aˈ D< 1ǂƕ & ˈ D1ˈ <ǂ?1ˈ &=ˈ D1ˈ 0<>1ˈ & D1ˈ < '10ƕ 0& . '1+1Aˈ '-ˈ D1ˈ ! & >ˈ <=& 10<'Aƕ K' Dˈ 1<0&-<#ǂ1ˈ >1-A1ˈ =& ˈ D1ˈ ˈ "<>.10ƕ -& ˈ D< ˈ D1ˈ 0<'Aˈ 10C<001 ƕ #1ˈ -C ˈ# &?.D ˈ & D1ˈ , '-./ƕ '0&-ƕ & D1ˈ <0 ǂ1ˈ C=ˈ E&&?B10 1 ˈ =& ˈ D1ˈ 0<'Aˈ 10C<0010ƕ # ˈ D1ˈ ==ˈB1 ƕ &=ˈ D1ˈ 0<'Aˈ ! & 10 ƕ <-Aˈ ?-A 1Aƕ & ˈ # ˈ D1ˈ & > >&-<ǂ '10ƕ &=ˈ D1ˈ 0<>1ƕ & #1ˈ A1>1<-1Aˈ '-ˈ 0?BDˈ ?01ˈ # ˈ D1ˈ , '-.ˈ <-Aˈ D'ƕ &?-B'ǂǂ D< ˈ D1-ˈ # ˈ &-0'A1 < '&-ˈ &=ˈ D1ˈ < ? 1ˈ &=ˈ F ˈ-BD10 1 ˈ C?ˈ =& ˈ D1ˈ &##1 ˈ &=ˈ<- ˈ 1 0&-ƕ KD'BDˈ .'+1 Dˈ <-ˈ '&-ˈ =& ˈ D'>ˈ KD'BDˈ 'ƕ &##1Aˈ <.<'-0ˈ D1ˈ ?-A 1Aˈ K' D'-ˈ KD'BDˈ D1ˈ0<>1ˈ &##1 ˈ 'ƕ A&-19ƕ <= 1 ˈ D1ˈ ! & >ˈ &=ˈ D1ˈ 0<>1ˈ < ? 1ˈ D1ˈ 0<'Aˈ & > >&-<ǂ '10ƕ 0Dǂǂ #1ˈ BD< .1Aˈ &=ˈ D1ˈ 0<>1ˈ & >ˈ <-Aˈ 1 BD<-A'010ƕ E&&Aƕ <-Aˈ D< 1ǂƕ 0& <a1-ƕ & ˈ &=ˈ D1ˈ +1 ˈ <ǂ?1ˈ &=ˈ D1ˈ 0<>1ˈ & D1ˈ < '10ƕ 0& . '1+1Aƕ '/)ˈ &ˈ 0< '0= ˈ D1>ˈ &=ˈ D1ˈ ˈ "<>.10ƕ=& ˈ D1ˈ0<>1ˈ <a'-.ˈG <-Aˈ D< ˈ D1ˈ0<'Aˈ < '10ƕ 0& 1-A<>.1Aˈ <-Aˈ . '1+1Aƕ >< ˈ D<+1ˈ D1ˈ ˈ .1-1 <ǂ '&-ƕ &=ˈ "1# ˈ <.<'-0ˈ D1ˈ 0<'Aˈ & > >&-<ǂ '10ƕ &=ˈ D1ˈ 0<'Aˈ ! & 10 ˈ <-Aˈ ` ?-A 1Aƕ/ˈPˈ &=ˈ D1ˈ ?>ˈ &=ˈ &-1 ƕ &ˈ KD'BDˈ D1ˈ <ǂ?1ˈ &=ˈ D1ˈ & -ƕ 1 BD<-A'01 ˈ E&&Aƕ <-Aˈ D< 1ǂƕ 0& <a1-ˈ A&ˈ 1L 1-Aˈ `<-Aˈ <ǂ D&?.Dˈ(Pˈ D1ˈ 0<'Aˈ & > >&-<ǂ '10ƕ #1ˈ -&ˈ & > >&-<ǂ '10ƕ & C& < 1ǂ ` 1 ˈ D1 ˈ 0D<ǂǂ D<+1/Pˈ &B100ƕ '-ˈ 0?BDˈ =ǂ'&-0ƕ &=ˈ "1# ƕ # ˈ ?> >&-0ƕ <BD>1- 0ƕ <-Aˈ "ˈ0 100ƕ <ƕ ` =ˈ D1ˈ F1 1ˈ &ˈ D<+1ˈ ₦ˈ <-ˈ = '&-ˈ &=ˈ "1# ˈ<ˈ D1ˈ & > >&-ˈ <K G ƕ&ˈ D<ˈ '=ˈ D1ˈ 0<'Aˈ & > >&-<ǂ '10ƕ ><a1ˈ "1=<?ǂ ' <ˈ D1ˈ 1B&-Aˈ "ˈ0 100ƕ '-ˈ 0 Dˈ '&-0ƕ D<ˈ D1-ˈ D1ˈ < ˈ KD'BDˈ 0D<ǂǂ 0?1ƕ 0D<ǂǂ D<+1ˈ ?A.1>1-ˈ &ˈ 1ˈ B&+1 ˈ D'ƕ "1# ˈ <.<>0ˈ D1ˈ 0<'Aˈ & > >&-<ǂ '10ƕ <= 1 ˈ D1ˈ ?CC&0<ǂ &=ˈ D1ˈ ˈ `E&&A0%/Pˈ ˈ-ˈ D1ˈ ! & >ˈ <=& 10<'Aƕ K' Dˈ D'ƕ 1<0&-<#ǂ1ˈ "<>.10ˈ'CAˈ LC1-B10ˈG <-Aˈ KD< ƕ 0&1+1 ˈ 00?1ˈ '<#ǂ1ˈ # ˈ -H?10ˈ ˈ-ˈ D1ˈ0<'Aˈ ! & 10 ˈ <-Aˈ ?-A 1Aƕ 0D<ǂǂ D<CC1-ˈ &ˈ #1ˈ <a1-ˈ ˈ-ˈ0?BDˈ A& &-0ƕ ˈ ˈ 0D<ǂǂ #1ˈ '1Aˈ # ˈ -H?10ˈ &=ˈ D1ˈ &A ˈ &=ˈ D1ˈ 0<'Aˈ &?- ƕ&?ˈ&=ˈ D1ˈ0<>1ˈ ! & 10 ˈ <-Aˈ ?-A 1Aƕ <-Aˈ D< ˈ D1ˈ E&&Aƕ <-Aˈ D< 1ǂƕ &=ˈ 1+1 'ƕ'-.?ǂ< ˈ 1 0&-ˈ &=ˈ D1ˈ 0<'Aˈ & > >&-<ǂ '10ƕ =& ˈ D1ˈ ˈ>1ˈ #1'-.ƕ 0D<ǂǂ #1ˈ #<Aƕ <a1-ƕ <-Aˈ D&ǂA1-ˈ ˈ-ˈ <K'`B&-+'= ƥˈ <ƕ D1ˈ B&> >&-ˈ E&&Aƕ <-Aˈ D< 1ǂƕ &=ˈ D1ˈ0<>1ˈ & > >&-<ǂ '10ƕ &?BD'-.ˈ D1ˈ 1 ? -ƕ 1 +'-.ƕ <-Aˈ<ǂǂ L1B? '&-ƕ &=ˈ F ' 0ƕ &j B1001ƕ <-Aˈ ?A.1>1-ƕ ˈ-ˈ<-Aˈ&=ˈ D1ˈ0<'Aˈ =ǂ'&D0G <-Aˈ D< ˈ 1+1 ˈ 0'-.?ǂ< ˈ 1 0&-ˈ &=ˈ D1ˈ 0<'Aˈ ! & 10 ˈ <-Aˈ & > >&-<ǂ '10ƕ D<+1ˈ &K1 ˈ # ˈ ? D& ˈ ˈ &=ˈ D1ˈ 0<'Aˈ <ǂ'<>1-ƕ &ˈ < <BDˈ <-Aˈ < 10 ˈ D1ˈ 0<'Aˈ 10C<001 ƕ # ˈ D1'ˈ &A'10ƕ <ƕ K1ǂǂ K' D'-ˈ D1ˈ 0<'Aˈ ! & 10 ˈ <ƕ K' Dj &? ƕ <-Aˈ D1>ˈ0&ˈ < 10 1Aˈ &ˈ B& > >ˈ ˈ &ˈ D1ˈ0<'Aˈ '0&-G <-Aˈ D< ˈ D1ˈ , 11C1 ˈ &=ˈ D1ˈ 0<>1ˈ '0&-ˈ ?C&-ˈ <'-ˈ &=ˈ ! & ˈ &?-Aƕ &ˈ #1ˈǂ1+'1Aˈ &=ˈ D'ƕ E&&Aƕ <-Aˈ D< 1ǂƕ <-Aƕ <-Aˈ 1-1>1-ƕ &ˈ D1ˈ 01ˈ &=ˈ ?ˈ ` &+1 1'.-ˈ & Apˈ D1ˈ , '-.ƕ 0D<ǂǂ 0<=1ǂ 'a11Cˈ 1+1 ˈ 1 0&-ˈ 0& B& > j >ˈ 1Aˈ &ˈ D'ƕ ?0 &A ƕ 'ǂǂ D1ˈ ˈ>1ˈ D<ˈ D1ˈ , '-.ˈ& 'D'ƕ &?DB'ǂ D< Dˈ & A<'-1Aˈ <-Aˈ C &+'A1Aˈ D1ˈ ˈ "1ǂ'+1 <-B1ˈ &=ˈ 1B& A;ˈ -Aˈ '=ˈ D1ˈ E&&Aƕ & ˈ D< 1ǂƕ &=ˈ <- ˈ 0'-j .?ǂ< ˈ 1 0&-ˈ& ˈ 1 0&-ƕ &=ˈ D1ˈ0<'Aˈ ! & 10 ˈ `<-Aˈ hᵖ ?-j A 1Aƕ #1'-.ˈ -C ˈ .?'ǂ ˈ &=ˈ D1ˈ 0<'Aˈ &##1 '10ƕ D<CC1-ˈ &ˈ #1ˈ C? ˈ '-ˈ L1B? '&-ˈ #1B<?01ˈ &=ˈ <- ˈ 0?BDˈ =ǂ'&-0

)ˈ ˈ)ˈ -/ˈ (ˈ 0-/"#/!2' ˈ <+ˈ - ˈ @-. 7& 2.-/@-*ˈ ˈ]ˈ '@-*ˈ Kˈ m U Uˈ&2' .';! //!'&-'ˈ (ˈV "& !2ˈ Fˈ.'" ˈ m

1-A<>.1ƕ &?ˈ Cˈ<0B?-ˈ< R 1-ˈ @&? ˈ -&?-ƕ ==<? '1ǂLˈ '-j ? '10ƕ Iˈ 10C<0010ƕ =<ˈ \ƕ H'@10ƕ A' \ˈ 10C<00&? ƕ 10 & 1-ˈ 1-ˈ >10>1'ǂ<ˈ +'ǂǂ1ˈ A1ˈ E@&?B10 1ƕ A1'-\ˈ L+ˈ &? ƕ <Cƕˈ@<ˈ AB=1ˈ CB@<><B'&-ˈ <ˈ @10ƕ A' \ˈ C '10ƕ 1-0 ˈ 1-A<>.1\ˈ @&? ˈ A' \ˈ ` '#@110ƕ Iˈ ˈ BD<-A'010ƕ #'1-ƕ Iˈ BD' 1?Lˈ '0<- ˈ C '01\ˈ &?ˈ @<ˈ , '" +<@?ˈ A'B1@@ &+10.1ˈ 10&-<#@10ƕ <>1-A10ƕ Cˈ @& ˈ A<>.10ƕ Aa? '1@Lˈ C '01\;ˈ 0ˈ H?1 ˈ CB@<> <A&-ˈ 0" @1\ˈ A' \ˈ 0C<00& ƕ -1ˈ 10 & 1-ˈ @1\ˈ A' \ˈ #@110ƕ Iˈ BD<-A'010ƕ #'1-ƕ Iˈ BD< 1?Lˈ &?ˈ @<ˈ +<@?1ˈ A'B1@@10ƕ <ˈ @10ƕ C< '10ƕ 1?0" . 1+1\ˈ 1-ˈ @<ˈ =& - 1ˈ _A11ˈ 0+10H1ˈ 10&-<#@10ƕ <>1-A10ƕ Cˈ @&? ˈ A<>.10ƕ -1ˈ H1ˈ @1\ˈ A' \ˈ 1 C<00& ƕ -1ˈ0&'C- ˈ <>10-1\ˈ <-ˈ C '0&-ˈ A?ˈ &" <ˈ @1ˈ D<0 1@@ A1ˈ E@&?Bˈ Cˈ @1\ˈ A' \ˈ 0C<ƕ ˈ @10ƕ ==ˈB1 ƕ A10ƕ A' \ˈ ! & 10 ˈ Cˈ D?-8ƕ A 1A10ƕ &?ˈ Cˈ @10ƕ B&<@ 110ƕ A'B1@ƕ C? ˈ 10 1ˈ A1>10-1\ˈ 1-ˈ A1@ƕ B<ƕ C< '@1ˈ & ˈ (=ˈ0&?-ˈ B&?-01'@@ƒ/ˈPˈ H<A&-H10ƕ Cˈ ˈ 0'A1 <B'&-ˈ H1ˈ @10 < ? ˈ A1ˈ F 'CBD10 11ˈ > ƕ Cˈ @<ˈ &##'1ˈ A<aB?-ˈ C0&''1ˈ A&-<ˈ ?-ˈ <BBˈ -ˈ Cˈ @< ˈ H10ˈ &##1\ˈ 1-8ƕ B&?- 1ˈ @1ˈ D?-A 1A1ˈ A1'-\ˈ @<ˈ H?1 ˈ >10>1ˈ @<ˈ &##'1ˈ 10 ˈ =<ˈ ƒ 0&@&-Bˈ @<ˈ =&? >1ˈ 1ˈ >10>1ˈ @10 < ? ˈ @1\ˈ A' \ˈ <@ 110ƕ 0&'1-ˈ BD< .1\ˈ A1ˈ -10>10ƕ @10ƕ #@11 ˈ Iˈ ˈ BD<-8ƕ A'010ƕ #'1-ˈ Iˈ BD< 1?Lˈ '00'-ˈ C '01\ˈ &?ˈ A1ˈ @<ˈ +1 <" +<@C1ˈ A'B1@@10ƕ <ˈ @<ˈ C< '1ˈ1<0 ˈ . 1+1\ƕ Iˈ C ˈ1?Lˈ0< '0='1 ˈ A1ˈ @&? ˈ A >.10ƕ Cˈ >10>1ˈ @<ˈ C '01G 1ˈ H1ˈ @1\ˈ A' \ˈ C< '10ƕ 1-0 ˈ 1-A<>.1\ˈ Iˈ . 1+1\ˈ C?'001-ˈ <,ˈ @&? ˈ .15<_ˈ <BQ5-ƕ A1ˈA1 1ƕ 1-,0ˈ@10ƕ A' \ˈ &<@ 110ƕ A10ƕ A1#ƕ !& 10 ˈ Iˈ D?-A 1A10ƕ A1ˈ @<ˈ0?>1ˈ A1ˈ >&-1 1ˈ<ˈ @<ˈ H?1@@1ˈ @1ˈ +<@?1ˈ A10ƕ #@110ƕ ='BD<-A'010ƕ #'1-ƕ Iˈ BD< 1?Lˈ '00'-ˈ C '01\ˈ 01L 1-A1ƕ B1&ˈ H1ˈ @10ƕ A110ƕ &<@ 110ƕ -1ˈ0&'1-ˈ & '@ 10ƕ B& C& < \ˈ -'1-ˈ B&- '0 1<- G '<- \ˈ CB10010ƕ 1 ˈ A1@Lˈ <BB'&-ƕ A1ˈ A1 1ˈC'0?>&-B10ƕ < <BD1>1- \ˈ Iˈ A'0 10010ƕ 0@B&>1ˈ'@ 10ˈ ˂ <+&' ˈ1-ˈ?-ˈ<BB'&-ˈ A1ˈ A1 1ˈ˂ @<ˈB&1ˈ @1 G 0<-ˈ H1ˈ 0" @10ƕ A' \ˈ &<@ 110ƕ =1B1-ˈ A18ƕ =<? 1ˈ ˂ @<ˈ 0AA1ˈ A'0 1001ˈ1-ˈ '1@Lˈ <BB'&-0ƕ H<A&-H10ƕ @<ˈ C< '1ˈ H" 0 1 ˂ 1'ˈ ?.1>1-ˈ A1ˈ 1B& 1ˈ0&-ˈ A1 1ˈ1-R0ƕ @10ƕ A' \ˈ &<@ 110ƕ 0&@&-Bˈ 0&-ˈ 0?CC&0<hˈ A1ˈ @&? ˈ# '1=0ˈ 1-ˈ P˂ =&? >1ˈ =A11ˈ &+10Hƕ 010ƕ 10&-<#@10ƕ A<>.10ƕ Iˈ 1LC1-010ƕG 1ˈ H'H1ˈ '00?1ˈ '<#@1ˈ ˈ1-H-10ˈ1-ˈ @10ƕ A' \ˈ !& 10ˈ Iˈ D?-A 1A10ƕ <+1'.-1ˈ <CC-A 1ˈ1-ˈ '1@Lˈ <BB'&-0ƕ H'ƒ 0&=ˈ '1ˈ Cˈ 1-H-10ˈ A1ƒ B& C0ˈ A?ˈ A'ˈ &?- 11ˈD& ƕ A1ˈ >10>10ƕ @10ƕ ! & 10ˈ Iˈ D?-A 1A10ƕ 1ˈ H1ˈ @10ƕ #'1 ƕ Iˈ BD<j 1?Lˈ A1ˈ 1#?-ˈ 0'-.?@1ˈ C0& 1ˈ A10ƕ A110ƕ &<@ 110ƕ Cˈ @1ˈ 1>C0ƕ 10 1<-ˈ 0&'1-ˈ 1?\ˈ C '01\ˈ Iˈ 1-?\ˈ 1-ˈ=1ˈ B '>1ˈ @10ƕ B&10ƕ #'1-ƕ Iˈ BD< 1?Lˈ A1ˈ >10>10ƕ @10ƕ &<@ 110ƕ &BD<-ˈ @1ˈ 1 &? -1ˈ +'B1ˈ Iˈ &?] 1L1B?B'&-ƕ A.ƕ # =1=ƕ CB10010ƕ Iˈ ?..1>1-ˈ \ˈ1-ˈ Iˈ AHˈ=1\ˈ A'=6 <BB'&-0ƕ ˈ H1ˈ B '?-ˈ 0'-.?@1ˈ C0&-1ˈ A1\ˈ A' \ˈ ! & 10ˈ Iˈ &<@ 110ƕ < 1-ˈ C&<'ˈ ˈ <?= & ˈ 1ˈ A?ˈ A'@ C< @0>1-ˈ Cˈ< <B#1ˈ Iˈ< 10 '1ˈ @10ƕ A' \ˈ 10C<00&? ƕ Cˈ =1? ˈ¥B& C0@ 0@#'1-ˈ A1'= ƕ @˂ A Iˈ ! & 10ˈ B&>1ˈ A1D& 0@ Iˈ Cˈ 1?Lˈ 1-0" < 10 1\ˈ B&>1 1ˈ˂ @<ˈ A11ˈ C '0&-G 1ˈ H1ˈ @1ˈ E< A1'-ˈ A1ˈ >10>1ˈ @<ˈ C '0&-1ƕ 0? ˈ C1ˈ 1ˈ A1ˈ L@ ˈ'' ˈ Cƒ 1ˈ @1+1mˈ A1ˈ 01\ˈ #=1-ƕ Iˈ BD< 1?Lˈ R 10ƕ Iˈ =1- \ˈ <@ &1Cƕ A?ˈ & ƒ 0<?+1>1-ˈ .< A1ˈ B '?-ˈ C0&-1ˈ ˂ 0&-ˈ .< A1ˈ '00'-ˈ B&> 0ƕ <0H10ƕ <-ˈ 1>Cƕ H1ˈ 1ˈ &" &?ˈ 0&-ˈ B&?-01' ˈ <Aˈ & A'-1ˈ Iˈ C? +1?ˈ @&? ˈ A1@'+1 <-B1ˈ A1ˈ 1B& A1G ˈ 0" @10ƕ #'1-ƕ &?ˈ BD< 1?Lˈ A<0B?-ˈ 0'-.?@1ˈ C0&-1ˈ &?ˈ C0&-10ƕ A1\ˈ A' \ˈ ! & 10ˈ &?ˈ D?-A 1A10ƕ 10 1<- \ˈ -'1-ˈ B&?C<#@10ƕ A1ˈ '1@Lˈ A'0C&@'<B'&-0ƕ <+1'. 1-ˈ C/ 10 1ˈ & \ˈ 1-ˈ 1L1B?B'&-ˈ Cˈ B<?01ˈ A<0B?-ˈ 0ƕ '1@Lˈ <BB'&-0

O ƒ ""& !-ˈ.-ˈ -ˈ " 2O"!

I ' &.1>1- \ 'H<A&-H10 <' A' 1'C0&-1' &?' C0&-10' 1<0 ' -'1- ' B&?C<#@10' 10 1<- \ᵍ @1\' #'1-0' &?' 1D< 1?L' A1' H?1?L' 1<0 ' 0&'1- ' > \' 1<' 1L1B?B'&-ᵍ C?'001' &?' C?'08' 01- ' <,' @&? ' 0C1B'< ' <BB'&<0' A1' A1 1' &?' 10C<0' 0? ' @&? ' B<0' 1-C0' @10' A' \' 10C<0<&? 0ᵍ C ' 11&C' @&' T@<'-<.10' 0'#<' C? ' @1' +<@?1' A10' #'1<0' & ' 1D< 1?L' '00'< ' > \' 1<' 1L1B?B'&<' B& > 1' C' @&? ' A<>.10' I ' B&0 <.10' H<+1'.<1< ' <' 10 1' 1?\' <' B<?01' A1' '1@L' <BB'&<0' A1' A1 1'G '<- \' CB1001' 1<' @10' A' \' <BB'&<0' A1' A1 1' &?' 10C<0' B& > 1' 'ᵍ 10 ' <' <+&' ' 1<' @10'A' \' <BB'&<0' A1' A1 1' C ' @1\' A' \' C0&-10' 1<0 ' 1<A<< <.1\' I ' A10C&'@@1\

1>' B& > 1' 1<' @1' C< @1>1<' 1<?\' <' F 10 >' @<<' LL+' J ' A?' &'' ' '1 B1 ' 1< 1' ? 10' BD&010' 1<' =<+&? ' I ' @'# 11' A10' ='BD<< \' 10 ?-.'1 0' 1C<' << \' 1<' @1' &'<@>1' " 1<.@1 1ᵍ & A'-1' 0&' ' H1' 0" C@11' &?' A1#< 1' 0&' ' >&1+1' A1+0<' @1' <' ' A1' @10 <C@1' 1< 1' @10' < 8' BD<< \' &?' '<'0 10' A'B1@ ᵍ I '0? ' B1&' C? ' '1 ' @<' , ' 1ᵍ 1<H?10 1' &?' C1+1' 0&' ' <CC<A 1ᵍ 0" D'<' C< '1' I ' @<? 1' 0&' ' 10=?-.1' 0&a' '1' C' 10 ?<.10ᵍ I ' 0" @?<' C< '1' I ' @<? 1' 0&' ' A1'-0\1'<' 0&=' '1' C' A1'<0\1'?0ᵍ 1 ' A" @?<' C< '1' 0&' ' A1'<0\1'<' I ' @<? 1' <@'1<ᵍ 0&' ' @?<' <'<' 1' A1' A1'<0\1'<0' 5 ' @<? 1' >&' 1' A10' <@'1-0G 1 ' 1<' &? 1' H1<' &< \ ' ><50' A10' 1<H?10 10' 0 C1+10' H" &'1<' <C -A 10' &?' <==<' 0' 1< 1' <@'1<0' I ' A1'<0\1'-0ᵍ 0&'1- ' '@0' ' BD<< \' &?' <? 10' 0'#'1-' A1+ - ' @1' <' ' A1' @10 <C@1' B& > 1' A1+ - ' H1B&-H10' <? 10' ?..10' &?' '<'0 10ᵍ &? ' 0&' ' @1' &" C< '1ᵍ 0&' ' @?<' >&' 11' A1@ 1<H?10 ' &?' C1+1' A1\' A1'-0 ' \1'-0' I ' @<? 1' >&' 11' B 10' <@'1-0ᵍ " <- \' A10' <@'1-0' 0&'1- ' 1<' @<' +'@'1' &?' @'1?' &?' 1@ 1<H?10 ' &' 'C1+1' 0&a' <C C-A 1ᵍ H' -1' 0&'1- ' > ' C< '10' -1' &+1' @10' C< '10' 1<' B&- <=@\' C@110' &?' <? 10' H?1 1@@10' A&?- ' '1@L' 1-H?10 10' &?C1+10' A1 +1- ' 10 1' C '01\G ' 0" <<@m' A1\' <@'1-0' <1' 0&'1- ' C&'- ᵍ <A&-H10' 0&'1- ' > \' 1<' '1@L' 1-H?10 10' &?' C1+10' <- \' A10' <@'1-0' B& > 1' M &- ' &+1\' 1<' >10>10' @10' @'1?L' &?' '@@10' H' <' B1&' -1' 0&'1- ' > ' C< '10' -1' & 1' @10' C< '10' B& > 1' A1+ - ' 10 ' A' ᵍ I ' @1' 1>1< - ' A10' AA-0\1'-0' HL&'1- ' CA10' D&>10' I ' -'1' ' 0?0C'B'&?010' <' @?<' C< '1' -1' <' @<? 1;' " 1C?'0' H?1=:' & A'-<-B1' @10' A' \' >< BD< ' \' <,1-0' &?- ' 10 1' &?' 1>C0' A1>10-1\' I ' 1?@1\ᵍ 0'#<' 1<' @1\' A' \' 10 <C@10' B& > 1' 1 ' @10' <? 10' &? 10' A?' & '0&@&-B'@<'=& >1' A'B1@@' & A'-<-B1G' <', 1' < < A1' H'@0' 1< ' &?- ' 10 1' 10 1'- \' I ' 1>C10BD'1\' C' B&@&? ' A?-' <? 1' 10 < '- ᵍ ='''' ' 1-' @1' C< @1>1< ' 1<?\' <' F 1 '-' @<<' A?' 1'. -1' @1' &" ' C'1 ' < 1' 8=/' '1' &" H& 10ᵍ 01A1G' C' H?1D' 10 < ? C ' @10' . '-A10' >10BD'1=0' I ' A10D1 ' <-B10' H' A1' &? ' 1-' <? 1' <+1'. -&'1- ' ? ' @1' &'<@>1' " 1-.@1R 1ᵍ 0'#'1-' 1-' B<0' A1' <& 1' A1' D& > 1' B& > 1' 1-' B<0' A1' =W-B' 1- ' I ' 1-' <? 10' B<010ᵍ C' B1?L' H" C<001 1-' 10' 1-H?10 10' 1-' @10' A110' B<010' H' =1? 1- ' B&10' ? =&? 0' I ' <? I ' H" -<+&'1- H' C&'1' A1' +' 1' ' 0' ?' '1@L' 1-H?10 10ᵍ I ' @1\' H?1?L' -<+&'1- ' '1-' <' CA 1' C' B<?01' A1' @&? ' =<?L' 01 1>1- \ᵍ C' &?- ' '@0' @1' C@?'0' @1.'1 >1- ' &==1-A1 1- '@&? ' B&-0B'1-B10ᵍ I ' C ' B& 1BB'&-' I ' <>1-A18' >1- ' 1- ' <+&' ᵍ & A'-1'=?'0 ' I ' 10 <#@'1' H' -?@@ C0&-1' 0&' ' <A'- 0' A1' C<001 ' 1-' <0B?-' U'H?10 1')' '<@@

U 20'" ' V' ; '4 ' 'V' 'H

<-A' ?A.1>1- 0ᵍ D<' D1-' D1' 0<'A' 1 0<-' & ' 1 0&-0' 0&' #1' -.' -&' .?'@ ᵍ `>< ' D<+1' D1' ' 0C1B'<@ Q &-' &=' " 1# ' & ' 10C<00' ?C&-' D1' ' <01' &=' D1' E&&A0' <-A' D< 1@00&' C? ' '-' L1B? '&-9 P' <.<'-0 ' D1' 0<'A' 10j C<001 ᵍ &' 1B&+1 ' D1' ' "<><.10ᵍ <0' K1@@ =& ' D1' <@?1' &=' D1' E&&A0' & ' D< 1@0' 0&' C? ' '-' L1B? '&-ᵍ <0' =& ' D1' ' "<><.10' <-A' &0 0' KD'BD' D<CC1-1A' &' #1' D<A' #1B<?01' &=' 0?BD' ^'&-0' &=' " 1# G `<-A' D1 ' 0D<@@ D<+1' 0?BD' &B10010 P' '-' D1' 0<'A' =@'&-0' &=' " 1# ' & ' 10C<00ᵍ <0' '0' &' #1' D<A' '-' D1' 00?A' '&-0' &=' " 1# ' =& ' D1' 0<'A' 1 0&-0' 0&' 1-A<><.1A' <-A' 0C&'@1A

ᵍ F D1 1<0' '-' D1' < @'<>1-' D&@A1-' <' F 10 j >'-0 1' D1'` K1- 81'.D D 'P' 1<' '&=', '-.' AK< A' D1' D' A'ᵍ <>&-.0' & D1 ' D'-.0' '-' !<+&? ' <-A' '#1 ' &=' D1' 1 BD<-0' <-.1 0' 1C<' '-.' '- &' D1' 1<@>' &=' -.@<-A'ᵍ ' K<0' & A<'-1A'ᵍ D<' 5' <' @1<' & ' " 1#< 1' #1' >&+1A' #1=& 1' D1' < & ' &=' D1' <C@1' <>&-.0' D1' 1 BD<-0' & ' '-'0 1 0' &=' ='1'0<>1ᵍ `=& P' &' ' D1' ? D' ''1 1&=' <-' -H?10' C ' &&=' '0' &' #1' <a1-ᵍ '=' D1' &-1' < '<-A' D1' & D1 ' #1' `0 <-.1ᵍ P' a'0D&?@A' #1' '1A' # ' <-.1 0' :' <-A' '=' D1' &-1' < ' <-A' D1' & D1 ' =&1' " 1-'\1-0ᵍ ' '0D&?@A' D1' '1A' # ' " 1-'\1-0G' <-A' '=' D1&-1' < 'D1' " 1-'\1-ᵍ <-A' D1' & D1 ' <-' @'1-ᵍ D1' &-1' <@=' 0D&?@A' #1' &=' " 1-'\1-0ᵍ <-A' D1' & D1 ' <@=' @'1-0G' <-A' > & 1&+1 ᵍ D<' '-' <@@ =' /)' -H?10 0' <-A' &&=0' KD'BD' 0D<@@ D1' h)' <a1-'<-A' ><A1'#1 K'L ' D/1-0' <-A' " 1-'\1-0ᵍ #1' D1 ' 1 BD<-0' & ' & D1 ᵍ <0' K1@@ #1=& 1' D1' < & ' &=' D1' <C@1ᵍ <0' #1=& 1' <-' & D1 ' ?A.10' & ' '-'0 1 0G' <@ D&?.D' `&?' & A P' D1', '-.' D1' < ᵍ D1& -1' <@=' &=' D1' -H?10' A ' &&=0' 0D&?@A' #1' &=' " 1-'\1-0ᵍ <-A' D1' & D1 ' <@=' &=' @'1-0ᵍ '=' D1 1' #1' 0&' ><-' @'1-0' '-' D1' &K-' & ' @<B1' KD1 1' 0?BD' -H?10 ' & ' &&=' '0' &' #1' <a1-ᵍ D<' #1' -& ' < '10ᵍ -& ' K' D' D1' < '10' '-' &-8' <'@0 ' @1<09 & ' & D1 ' ^?< 1@0ᵍ KD1 1&=' 0?BD' -H?10 0' & ' &&=0' &?.D ' &' #1' <a1-G' <-A' '=' D1 1' #1' -& ' 0& ><-' @'1-0ᵍ D1-' 0&' ><-' @'1-0' 0D<@@ #1' C?' '-' 0?BD' -H?10 0' & ' &&=0' <0' 0D<@@ #1' =&?-A' '-' D1' 0<>1' @<B10' & ' &K-0ᵍ KD'BD' #1' -& ' < '10' D1 1?- &ᵍ -& ' K' D' D1' < '10' <0' #1=& 1' '0' 0<'A'ᵍ <-A' D1' 1>-<-' &=' D1' &-1' < ' -& ' &=' D1' & D1 G ' D1-B1' KD'BD' A'-<-B1' D1' 0<'A' 1 BD<-0' @'1-0' D<+1' #11-' <@K< 0' A1>1<-1A' <-A' ?@1A@ <0' K1@@ '-' D1' /)' <C@10ᵍ <0' '-' & D1 ' &=' D1', '-./0' &? 0ᵍ <= 1' D1' ! & >' &=' D1' 0<'A' A'-<-B1G ?-' @' -&K' &=' @< 1' D1 ' D<+1' #11-' D1 1&=' 10 <'-1A' <-A' ' >C1<BD1A' # ' &j @&? ' &=' <-& D1 < ? 1' ><A1' '-' D1' < @'<>1-' D&@A1-' <' F 10 >' -0 1 ' D1' 1B&-A' 1< '&=' W)', '-.' 1- ᵍ ! < D1 ' &' &? ' & A' D1', >.' D<' -&K' '0G # ' KD'BD' < ? 1ᵍ =& ' D1' . 1<' '0BD'1=0ᵍ `' "<><.10ᵍP' <-A' " '0D1 '0&-0ᵍ KD'BD' A<'@ ' `A & 3 P' D<CC1-' D &?.D' D1' 1<@>ᵍ <0' K1@@ '-' ᵍ B<01' &=' D1' " 1< D' &=' `<' <-ᵍ 0' P' <0' ' '" B<01' &=' ! 11D&@A' <-A@ & D1 ' <010' # ' D1>' D<' C< ' '-' -H?10 0' '-' D1' <'A' <010ᵍ KD'BD' K1 1' B& > > &-' ? & 0ᵍ <-A' & D1 ' KD'BD' D<A' #?' '@' @1' & ' -& D'-.' &' @'+1' ?C&-' #?' # ' 0?BD' -H?10 0ᵍ <-A' KD'BD' D<A' -& D'-.' &' @&01' #1B<?01' &=' D ' ' I @01' < D0ᵍ KD1 1# ' D1 ' `A & ' 3 P' D1' >& 1' @' @ ' &==1-A' D1' ' &-0B'<'B10' G <-A' =& ' >1-A>1-' <-A' & 1Aa'&-' D1 1&=' &' #1' D<A' ' K<0' & A<'-1A' <-A' 0 < '0D1A@ D<' -&' 1 0&-' #1' <A> a@1A' &' C<00' '-' <- ' -H?10' ?C&-' '<@

WW)

WW W ' !' 0 !' 5!' / 7 ' ·5' # ' ' "!2 !/&-*' -S0!2 2' ' /!' 1 1!/&! !' %-*0 !' 7 !"!' +&!-2' "!' 3 "&!2';! ."!' !' ' +&!' +!

!' 0 !' 5 ' / 7 ' ' # !'" ' #.& &"1&-*' -/' 1 !-/&-*' !' C 1!H

!' 0 !' j !- 2 5' # !'" "!SO&"&-*' 0".'2' .' &"!' '2' !'" &10".'J

)' &-' !' +/' 3"&- !/' " -2+ &.-2'. ' !' 0 !2' ' !'" &2'&-2!" !/' -01;!"!/' WW &++' "!2 !/&-*' !' 6. /2' -/' 4"&/*!2' ' 40" ."/' -/' 0+ 1 . /' &-' % ."/2 &"!) ' .' 20# ' !'" &2'&-2!" !/' &-' !' +/' 3"&- !/' 3"!-# ' . &!2<O ' ! "2' .' !' &-' !# ' !' 2 1!' 2' !'" W ' . ' !' & !'<' &!- ' ' '5=' 7 &# '2!!)' -/' !' . !' !"!

& '

&=' D1' "1< D' &=' `' <' <- P9' -& ' '-' <- ' -H?10 ' #1 K11-' < ' <-A' < ' '-' @1<' 1<@' & ' 1 0&-<@@ KD1 1&=' D1' "1# ' <-A' D1' "<><.10' A1B@< 1A' A&' <>&?- ' &' !& ' < a0@ 1LB1C ' D1' 0<>1' 1 0&-' D<+1' <-A0' & ' 1-1j >1- 0' &' D1' 1< @ ' <@?1' &=' !& ' D'@@'-.0' <#&+1' <@@ D< .10';' 1B<?01' &=' KD'BD' 10 <'- '<-A' >C1<BD>1- ' 0&' ><A1' &' A'+1 0 P' 1 BD<- 0' @'1-0@ ><- '&=' D1'0<>1' 1 BD<- 0' @'1-0' D<+1' K' DA <K-9' <-A' A<'@ ' A&' K' Dj A <K' D1>9' <-A' 10BD1K' &' B&>1' <-A' #1' B&-+1 0<- ' &-' D'0' 'A1' D1' 1<9' <-A' @'a1@ ' '' '0@ D<' <@@' D1' 0<>1' 1 BD<- 0' @'1-0' K'@@ A1C< '& '&=' D1'0<>1' 1<@>' `'&=' -.@<-A9P' '=' D1' 0<'A' @<0 ' < ? 1' #1' -& ' >& 1' C@<'-@ ' A1B@< 1A9' <-A' D1'0<'A' 1 BD<- 0' @'1-0' ?@1A9' .&+1 -1A9' <-A' A1>1<-1A' '-' 0?BD' -H?10 0@ <BB& A'-.' &' D1' /)' =' 0 ' A'-<-B1' <=& 10<'A@' &' D1' . 1<' A'>'-'0D'-.'&=' D1' ,'-./0' ?#0'A'10@ <-A' . '1+&?0' &00' <-A' "<>< .1' &=' <@@ D'0' 0<'A 1<@ &' `&=' -.@<-A'P' 6 ? ' 0)' & A' D1', '-.' B&-0'A1 '-.' D1' 1>'0010@ <-A' D&K' D<' ' ' K<0' -& ' D1' 1<-'-.' &=' D1' 0<'A' @< 1' ,'-.9' -& ' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@ &=' ` D 1 P' 0<'A' < @'<>1- 9' &' D'-A1 ' & ' C 1 ?A'B1' D1'0<'A' =' 0 ' A'-<-B1' # ' D1'0<'A' @<0 ' < ? 1@ <-A' D<' D1'0<'A' @<0 ' < ? 1@K h' H<A1''-' 10C1A@ &=' D1' '0BD'1=0' <-A' '0D1 '0&-0' D<' D<CC1-1A' # ' D1' =<@01' #< D0' &=' D1' B&>>&-' ? & 0' &=' D1' 1<@>' `&=' -.@<-A9P' <0' ' '<CC1< 1 D' # ' 1LC 100' F & A0' &=' D1' 0<>1' < ? 1@ <-A' D&K' D<' D1' A'A' 1 BD<- 0' @'1-0' #1' -& ' B&>>&-' ? & 0@ -& ' `'-D<D'A-.N P' K' #a" D1' 0<'A' 1<@>9' -& ' < ' -& ' C? BD<01' -& ' 1- & ' <- ' <-A0' & ' 1-1>1- 0' '-' D1' 0<>1@ K' D&?' D1' , '-./0' 0C1B'<@ 'B1-B1G -A' D1'0<>1'&? ' & A' D1' , '-.' K'@@'-.' D1 1'-' &' C &+'A1'=& ' D1' F 1<@ <-A' &=' '&=' D'>'<-A' `<@@' D'0' /P' 1<@>9' <-A' &' 10BD1K' D1' "<><.10' <-A' -B&-+ -'1-B'10' KD'BD' >< ' 1< @ ' D<CC1-' D" D'0' 1D<@=9' <-A' <@0&' &' .'+1' &' D1' 0<'A' 1 BD<- 0' @'1-0' D1' . 1< 1 ' &? <.1' <-A' "10' 1' &' B&>1' K' D' D1' ' F < 10' <-A' 1 BD<-A'010' '- &' D'0' 1<@>9' # ' D1' A+'B1' <-A' 001- ' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@@ #1' -.' ' -' D'0' C 101- ' < @'<>1- 9' D< D' A1B@< 1A' D1' 0<'A' @<0 ' < ? 1@ ><A1' '-' D1' '>1' &='D'0' 3)' ! < D1 9' &' #1' ' -' -&' K=11' C 1 ?A'B'<@' &' D1'0<'A' 0)' A'-<-B1@' -& ' &' 1L 1-A' ' 01@=' #? ' &-@ ' &' D1' -8' H?10 0' &' #1' <a1-' #1 K'L ' "1-'\1-' <-A' "1-'\1-9' <-A' -& ' &' /)' & D1 ' -H?10 0' <-A' &&=0' <=& 10<'A6' <-A' D1' 0<'A' =' 0 ' A'-<-B1' &' #1' 1=1A ?<@ <-A' 0 <-A' '-' 3)' ! & B1@ <-A' .'#1' C? ' '-' A+ ' L1B? '&-' <BB& A'-.' ' $ ' ! & >' &=' D1' 0<>16 -& K' D0 <-A'-.' D1' 0<'A' @<0 ' < ? 1@ ' D<' D1' @'1-0' D<+1' -& ' <-A0' & ' 1-1>1- 0' &' D1' <@?1' &=' ! & ' D'@@'-.0' # ' D1' 1< 9' <BB& A'-.' &' D1' ? C& '&=' D1' 0<>1' @<0 ' < ? 1' `<-A' A'-<-B1 P

' -' ' %

'=&? >1' &=' D1' " 'G '' ' 9 (%

HD'0' " 'G '<8 ' ' '% ' %

0=' 0 ' 0 D1' ' D'0

A1' >& 1' A1' D&>16 -1' 1-' <0B?-' 1-H?10 1' C1- 1' C< '1' 1 ' C< '1' 1-' C@11' 1<@@ &-' C0&-A@ A&?-' @1' A1 1' ! ' @1\' A<><.10' A1B@< 1\' <>&?- 1-' <' LD' >0 9 0" >10>1' @<' C0&-1' -<' ' 10' &-' RD \' A1@ <--?1@ +<@?1' A1' L@ 0 ' C' <-9 &? 1' @10' 1C '010' A'B1@@10' G' <'B<?01' A1' H?1 ' 10 1'-' ! ' 1>C10BD1>1-' 1-0 '=<' \'<0' A' \' ' BD<- \' <@'1-0@ C@?0&? 0' A1' >10>10' @1\' >< BD<- \' <@'1-0' @&? ' &?-' 1 <'D1\' ! ' 01' 1 <D1-' A1' &' 1-' <? 1@ ! ' 10BD?1-' A1' +1-' ' ! ' &-+001 C' A1B1<9 ! ' +0'01>#@<#@1' 10 ' ' 10 &? \' >10>10' @10' >< BD<- 0' <D1-0=&? ' +&'@@1-' A1C '1 ' D& 0' A1' >10>1' @1' C'<@>1@ 0" 1' A' ' A< 1'-' 10 < ? ' D1' 0& ' C@?'0' &, 18' >1-' A1B@< 1\9 ! ' @1\' A' \' >@BD<- \' <@'1-0' 1?@1\' .& -1\' ! ' A1>10-1\' 1-' -'L' 1-H?10 10' 0&=&-B' @<' =&? >1' A1@ C ' ' & A'-<?-B1' A1=AB1@ <' R0.W?-A1' <>1-?01>1-' A10' 0?# ='110' A?' &" ! ' . 1+&?01' CA1' ! ' A<><.1'<' &?' 0&-' &'<@>1' <+W- A' ;' =1' A' ' K?' @1' &" B&-0'A1 <-' @10' C>'0010@ ! ' H'@ -1' =&'0 ' > ' @1- 1-B'&-' A?' A' ' -<A.<@ 0' &" -1' A1' @10' 0' 10C?1'L' ! ' 1>C& 1@L' A1' 0&-' A' ' C< @1>1-9 A1' A1 &.1 ' &-' ?A'1 ' <' @1' A' 'C '>1 ' & A'8' -<? &1' C' @1' A' ' A< 1-' 10 < ? 9 ! ' H' >10>1' @1' A< 1'-' 10 < ? ' =&'0 ' =<' ' <' <?01' A10' >10BD'1=0' ! ' A'0D1 ' <- h' H<+1-&'1-' C' @1\' ="]' 01 1>1- \' A10' B&10' ? &? 0' A?' &'<@>19' 0'B&>1' '6' <CC'1 ' C' 1LC0010' C&@10' A1' >10>1' @1 <?9 ! ' B&>1-' @10' A' \' >< BD<- \' <@'1-0' -1' 0&-' F ' B 10' ? &? 0' D&' 1-D1 ' <#@10' AA-\' @1' A' ' &<D-19' -1' C=&-' C? BD<B1 ' -1- &'1 ' <0B?-0' 10' &?' 1D \' 1-' 'B1 ' 0<?-\' 10C1B'<@@ @'B1-B1' A?' &'G ' +&'@@<-' C? ' B1&' >10>1' -=1' ' @1' &" C+1'1 ' C' @1' #'1-' ! ' C=' ' A1' @? ' ! ' A1' 0&-' A' ' &'<@>10' ! ' C ' 10BD1?1 ' @10' A<><.10' ! ' D@8' BB>+1-'1-B10' H" C -&-' @1.'1 >1-' <+ ' ' 1-' B1=' C<= '19' 1 ' <?L" C ' A& ' <0' =" \' ='BD<- \' <@'1-0' @1' . 1'-A 1' B& <.1' ! ' <@1-' A1' +1-' ' &+1' @&? ' B10' ! ' '5BD<-A'R10' 1-' B10 ' &'<@>19 A1' @<A+ 0' ! ' <001-' '10' 0' 10C?1'L' ! ' 1 @C& 1#" 10 1<- \' 1-' B10 ' C001-' C< @1>1-9 <A' A1B@< 1' @1' f ' A< 1'-' 10 <@A ' =1@ ' 1-' 1>C0' 1' 0&-' A' ' C'1 ' -&'' -' 10 1' <0B?-1>1-' ?A'B'1@@ <-' A11' C ' 1' & A'-<?-B1@ -1' 01' 1L 1-A 1' >10' <- 0&?@1>1-' <' @10' 1-H?10 10' <C-A 10' - 1' A1@-0\1'-' ! ' A1'-0\1'-9 ! ' -1> ' <' @10' <? 10' 1-8' H-10 10' ! ' C1+10' A1 A110G ! ' <' A' ' C ''51' & A'-<-B1' A10' 1' 1==1^?1=' ! ' 10 &'1 ' 1-' 0<' =& B1@ ! ' A10 1' > \' 1-' A?1' 1L1B? '&-' 0&@&-B' @<' =& >1' A'B1 9' @1' A' ' A< 1'-' 10 < ? ' &?' B1&' H' \' <@'1-0' -&?-' > ' 10' &?' 1- \' <' @1' <@?1' A1' L@ 0 ' C' <-' 0&@&-B' @<' B&- 1-?1' A1' >10>1' @# A< <-' 10 < ? ' -' ' B&- '0 1<-

!' <? 1' ' ''KA' &' -H?10 0 !-&j!-' <-A'

& ?>9

)) ‘Q f ! # 0 ‘ -/9,<-

‘G &! ? ,’ ‘ G ‘6 # (

))‘))

‘C< @1>1- ‘ 1-?\’< F 10 -“@1‘ +1-A 1A ‘ C0BD1’&’ A1+/- ‘@1‘=10 ‘ A1‘ 1’- ‘ ‘@@1 9 <-’ A?’ 1. -1‘ -R1‘ _ 1‘ &“H?& 10 ‘ -&1=’0>19 A’ 010 10 < ? \’ I ‘& A’-<?-B10 =1? 1- ‘=<’ \’ I ‘& A’- \9 C<A+’0 I ‘ <001- ‘A10 = 0’ 10C?1@L’ I ‘ 1>C&’1@L‘ I ‘< <U C<@1‘ 1H?10 1‘ A10 I J10 A?’ &’<@>1‘ 1-‘@1‘A’ ‘C@1>1- ‘<001’-#@1\9 1-‘@< =&? >1‘ H1-0?a

-‘ C ‘>10 B&-0’A1 11‘ 1&>1- ‘ 1-‘ &< \’@1\’ &- - 110 “1- .@1R 1‘ @10 & 0 A<00’010 A1‘ -&+1 ‘ A’0010’-1‘ I ‘ A1‘ <A&-H10 =1? 1- ‘ C=’L10 , ’01>#@<#@1>1- ‘ A10 1‘ 1-?\’ A? <- ‘ #<?@‘ &? ‘ A?’ A’ ‘ C@1>1- 9 1=’ H?1@@ &? ‘A?’ C@1>1- ‘ C@?0& 0 A10 @’1.10 A?’ &“ =1?j 1- ‘ C‘ 0&-‘ B&><?-A1>1- 9 A10 H1?L‘ C@?0& 0 =1? 1- ‘ C@1’- ‘=0 I ‘ C@?0& 0 A1=1-A<?- \’ 1-‘ ‘B1@@10 00’010 I ‘ # ‘0“ C ‘?09 I ‘ 1-‘ @10 A110 00’010 I ‘ ‘0“ C ‘?0 >10>10 @10 C@1’- ‘ ‘ I ‘ A1=1-A’’ \’ =1? 1- ‘ + ‘01>#@<#@10 A10’ 1‘ A’08 D1 ‘ 1\’ 0“ 1 -1A’1‘ 1‘ =1?0 ‘ C +1?’ 1-‘ B1@@1‘ C ‘1’ : ‘C’ <?- ‘ P8 8 Y <001- ‘A10’A’ \’ ?!‘ I ‘< @<’0C<@1‘ 1H?1 ‘ A10 A’ \’ &10 & A’-1‘ 10 ‘C‘ <?A’& ‘ 1‘A?’ A’ ‘C@1>1- ‘AU C &.1 ‘ &? \’ >< 0 A<00’01 ‘5B ‘0“C ‘?0 A1+0- ‘C=’L1\9 <-H9 <0 1’-0 &? 0 C‘ @1‘ D<?-B1@@1 ‘ “1-.@1R 1‘ C ‘ H 1>C0 10 1<-‘<C0 @1‘ ‘1 B1‘ & ‘A1‘ < B1‘ @1‘ A’ ‘ <-’ J‘ <+1-‘ 0 < @’>’ ‘1 R9 5B H‘ @1\’ A’ \’ & 0 ‘00’-‘ C‘ @1‘ A’ ‘ D<?-B1@@1 ‘ <@’>’ ‘1 0 1’1- ‘ 1@<B’&-‘ 1-‘ @1 ‘ < @10 & ‘ A<00’010 5B ‘0“C ‘?0 <A&-Ud10 ’00’-‘C=’L1\9 ‘1@>1- ‘H’C B10 1‘Q8888 .<B’&-’< ‘ 1‘0&’1- ‘’B1@@10 <00’010 5B <’C ‘ 1-?\’-1‘ 1C? 1\’ -&-‘ 0?1\’ -1‘ A’0B&- ‘-?1\;’ ‘H’1 ‘ BD10B?-‘A10 &?- 110 1-’0A110 0&’1- ‘CB@<><B’&-0 =1’ m C‘ @10 +’0B&?- \9 L+’ A? 0 A1+ - ‘@10 A’ \’ & 0 ‘00’-‘C‘ @1‘ A’=’ D<?-B1@@1 ‘ <@’>’ ‘1 09 H‘ @10 C@1’- ‘=0 5B A1=1-A<?- \’ 5B &? \’ <?R0 H&?- ‘ <==<’ 1\’ 1-‘ @10 A’ \’ =1’010 5B ‘0“ C ‘?0 C&’1- ‘ .< A1 ‘ @&? 0 & 0 <@’>’ ‘1 0 1-‘@10 A 10 CB@<><B’&-0 ‘00’-‘ <==<’ 0 @10 H?1@@10 CB@<><B’&-0 <’1- ‘ 1==1 ‘ 5B =& B1‘ A10 < <BD1>1- \’ 0<?-\’ B1‘ H‘ B&+’1-A < C? B1&‘ <0B?-0 <?R0 -&+1@L’ < <BD1>1- \’ =<’ 1

1>’ B&>1‘ 1-‘ 1‘ C@1>1- ‘ 1-?\’<‘ F 10 =’“ <-’ -=1‘ A’ ‘ ?’ @1‘ &’9 1-R‘ <?R0 < ‘B@10 1&- 1-?\’ 0&’ ‘ C‘ 10BD?1 ‘ @<’ .W?-A1‘ CA1‘ H‘ A’R010 C0&-10 A1‘ B10 1‘ &’<@>1‘ <+&’1- ‘ 1?1\’ I ‘ =1? 1- ‘ 01>#@<#@10 A<+&’ ‘ C? ‘ @& 0

K &2 3“&02’ ‘ ’ ‘ /’&2’ # <! * ‘5:) “.* #&.-’

‘ D1‘ < @’<>1- ‘ D#@A1-‘ <’ F 10 >’-0 1 ‘ D1‘ ! ’A< ‘ -1L ‘#1=& 1‘ D1‘ !1<0 ‘&=‘ <’- ‘ ‘@@< 9 D1‘ ‘- D‘ 1< ‘ &=‘ D1‘ 1’. -‘ =‘ ? ‘ & A‘ D1‘ , ’- .’ D< ‘ -&K‘ ’09 A’+1 0 < ? 10 <-A‘ A’-<-B10 K1 1‘ ><A1‘ <-A‘ Q10 <#@’0D1A ‘P‘ # ‘ D1‘ A B1‘ <-A‘ 001- ‘ &=‘ D1‘ & A0 C’ ‘ ?<@ <-A‘ 1>C& <@ <-A’ < ‘ D1‘ 0C1B’<@ 1H?10 ‘ &=‘ D1‘ & > >&-0 &=‘ D1‘ 1<@>’ <001>#@1A‘ ’-‘ D1‘ 0<’A‘ < ’’<>1- 9 ’-‘ D1‘ ! & >’ ‘#@@&K’-.

! ’ 9 &-0’A1 ’-.’ D&K‘ D< ’ ’-‘ <@ D1‘ &?- ’10 &=‘ -.@<-A‘ D1‘ ’’< 0 &=‘ D1‘ 00’010 &=‘ &+1@ A’001’0’-‘ <-A‘ &=‘ ‘0“C ‘?0 D1-‘ K1 1‘C 1=’L1A‘+1 ‘@’a1@ ‘ &’#1‘ D&@A1-‘ A? ‘ -.’ D1‘ ‘.D &? ‘ &=‘ D1‘ <’A‘ < @’<>1- 9 ’-‘ KD’BD &? ‘ &=‘ < @’<>1- ‘ ><- ‘ &=‘ D1‘ , ’- ./0 @’1.1‘ 1&C@1‘ K1 1‘ # ‘ D’0 & > ><-A>1- 9 &=‘KD’BD ><- ‘K1 1‘ @<’-8 ’=’0 <-A‘ ><- ’ ’’1=1-A<- 0 ’-‘ D1‘ 0<>1‘ 00’010 <-A‘ ‘0“ C ‘?09 <-A‘ ’-‘ D1‘ 0<’A‘ 00’ 10 <-A‘ ‘0“C ‘?09 D1‘ 0<>1‘ @<’- ’==0 <-A‘ ’’1=1-A<- 0 K1=1’ @’a1@ ‘ &’ #1‘ A’0’-D1 ’ 1A9 ’=‘ 1>1A ’ K1 1‘ -& ‘C &+’A1A‘ ’-‘ D’0 1D<@=‘ ’ -A‘=& ‘ 0&’ >?BD‘ # ‘ D1‘ A+’B1‘ <-A‘ 00K?’ &=‘ D1‘ 0 ?A‘ & A09 <-A‘ < ’ D1‘ 0C1B’<@ 1H?10 ‘ &=‘ D1‘ 0<’A‘ & > >&-09 ‘ ’0 & A<’-1A‘ # ‘ ? D& ’ ‘ &=‘ D1‘ 0<’A‘ < @’<>1- 9 &’ C &j &.?1’ <@ <- -1 ‘ &=‘ 00’010 <DA‘ ‘0“C ‘?0 #1=& 1’C 1j =’L1A9 ‘@@ B1 <’-‘ “< 0 # ‘ D1‘ D<-B1@@& ‘ &=‘ -.@<-A‘ =& ‘ D1‘ ‘>1‘ #1’-.’ <= 1 ‘ D1‘ D’ A‘ “< ’ &=‘ < BD9 D1‘ 0<’A‘ ’L ‘ 1< 9 &’ #1‘ @’>’ 1AG <-A‘ ` D1 ‘ “< 0 0&’ # ‘ D1‘ 0<’A‘ D<-B1@@& ‘ &’ #1‘ @’>’ 1AG D<+1‘ 1@< ’&-’ ’-‘ <K‘ &’ D1‘ “< 0 &=‘ 00’010 <-A‘ ‘)’C ‘?0 D1-‘ 0&’ C 1=’L1AG D“0?BD‘ K’01G D<’ # ‘ D’0 & &.< ’&-‘ D1‘ 0<>1‘ 00’010 <-A‘ ‘0“C ‘?09 0D<@ -& ‘ #1‘ D&@A1-‘ -& ‘ 1C? 1A‘ -&-8 0-1AG -& ‘ A’0B&- ’-D1A’G -A‘ D< ’ ’-‘ 1+1 ‘ &=‘ D1‘ 0<’A‘ &?- ’10 &B@<>< ’&-0’#1‘ ><A1‘ # ‘ D1‘ D1 ’==09 !’= 11-‘ “< 0’#1=& 1‘ D1‘ 0<’A‘ “< 0 ‘ # ‘ D1‘ D<-B1@@& ‘ &’ #1‘ @’>’ 1AG &’ D1‘ - 1- ‘ D<’ D1‘ @<’- ’= 0 <-A‘ “1=1-A<- 09 <-A‘ <@ & D1 9 KD’BD D<+1‘ &’ A& ’-‘ D1‘ 0<’A‘ 00’010 <-A‘ ‘0“C ‘?09 >< ‘ a11C‘ D1’ ’ “< 0 & #1‘ @’>’ 1A‘ ’-‘ D1‘ 0<>1‘ &B@<>< ’&-0 0&’ &’ #1‘ ><A1G KD’BD &B@<><j ’&-0’ 0D<@@ D<+1‘ D1‘ ==1= ’ <-A‘ ! & B1‘ &=‘ <BD>1- 09 K’ D&? ’ D<’ D<’ ’ ’#1D&+1 D‘ &’ ><a1’<- ’-1K‘ <BDj >1- 0=& ‘ D1‘ 0<>1

9 F D1 1<0 ’-‘ D1‘ < @’<>1- ‘D&@A1-’<’ F 10 j >’-0 1 ‘ D1‘ ’.D D‘ 1< ’&=’&U ‘ 0)’ &+1 1’.-‘ & A‘ D1‘ , ’- .9 <>&-.0 ‘ & D1 ‘ B@10 ’ ’ ’0‘ B&- <’-1A9 &’ 10BD1K‘ D1‘ . 1<’ &00 `<-A‘ “<><.1 ‘KD’BD A’+1 0 1 0&-0 &=‘ D’0 1<@>’D<+1 D<A9 <-A‘ K1 1‘ @’a1@ ‘ &’D<+1‘=& ‘ ` D1 ’4

M!Z% ‘ . ’ !’+< 0 !’ ’ !-’ ’ ’5 ’ 2 .’ 3 @1!-2 ;@ +&!-2

Ú ."/!&*-!/’ ‘0<’A1‘) ’ !’2 &/! @ !&“

)’ ’ !’ 0 !2 . ’ &2’A! “’ -/’ . ’ !’20;2!SO!-’A! “2’& ’ J ’ ’ -/’5 ’ !-“@’ ’-.’ 0 !’6 .+’&2 “!2!”’!/’ &-’ !’ .7!”0 40 ’ !”!’ “!’2!’!” ‘ -2#”& 2’!. &!/’ .-’ E&-2’ .’3 “# 1!-’ “!- +@’ “<K/”!/’& .” !’ 0” .2!’ . ’ ;!&-<’ --!%!/’ .’ V “& 2’ . ’3”.#+ 1 &.-=’ ’ $%” $ ’$’E$*’C ’. - ’CCC ’R N ’CL’& ’ V !<!’1.”!’ -’.-!’20# ’ . @’. ’ !’ 0 !’. ’ -@’A! ‘” &2’H<2!”’!/’ !’ “&.02’6! /&-*’ . ’ !’ . &!2’02!/’ .‘”20 +@&-*’ ! ! 2’.‘”#.””!# &-*’ ””.”2’ “!’ 1 “E!/’! ’5’C# ’ &2’A! ‘” !”!’ “!’ “!!’ . &!2=’ +’ “& ++@’&-H0”!/

&<-0 ><A1'&=' D1' ' 1 BD<-A'01' &' 1 BD<- 0 @'1-0@ KD'BD `D<+1 6' =@1A' <K< ' K' D 'D1' 0<>1@ <-A' A<'@ ' ` <a1'\ ' <-= ?< '10@ 'K<0 & A<>1A@ D< ' -&' -.@'0D><-' 0D&?@A' 01@@ -& ' B<?01' &#1'0&@A' = &>' ``D1-B1=& D'þ ' &' <- ' 1 BD<- ' @'1-@<- ' <- -1 '&=' 1 BD<-A'01'#? '&-@ ' =& ' 1<A ' < >1- ' `&= 0P' &-1 ' & ' & D1 K'01' '-' 1 j BD<-A'01' =& ' 1 BD<-A'01@ &' #1' C<'A' <-A' B&- 1- 1A' '-' <-A@ ?C&-' <'-' &=' ! & =1' ? 1' &=' D" 0<>1'G #1B<?01' &=' KD'BD' A'-<-B1' D1' -.@'0D' 1 BD<- 0 D<+1' -& ' 0&@A' -& 'B<--& '01@@ -& ' ? 1 ' D1' ' |& D0' &' 1 BD<- 0 @'1-0@ KD1 1# ')' D1', '-.'D< D'@&0 ' D'0' ` ?#0'A'10<-A' ' .S &>0@ KD'BD' D1' &?.D ' &' D<+1' D<A@ '=' D1' 0<'A' |& D0' D<A' #11-' 0&@A' <0' D1 ' K1 1' <-A' K1 1' K&- ' D1 1 &=& 1@ <-A' -.@'0D' 1 BD<- 0@ |& D8K& a1 0@ <-A' & D1 ' D1' ,'-./0 @'1.1' 1&C@1' '-' A'+1 0' < 0' C=' D'0' 1<@>' W)' <--& 1A' <-A' 1-A<><.1A;' F D1 1?C&-' <' D1' ?CC@'j B<'&-' &=' D1' 0<'A' &>>&-0@ <-A' # ' D1' A+'B1' <-A' 001-' <=& 10<'A' ' '0' & A<'-1A@ D<' D1' -.@'0D' 1 j BD<-0' >< ' 01@@ D1' ' |& D0' &' 1 ;BD<-0' @'1-0' =?0 1<A ' < >1-' '-' &-1 @' & ' & D1 K'01' '-' 1 BD<-A'01' =& ' 1 BD<-A'01@ &' #1' C<'A' <-A' B&- 1- 1A' '-' <-A@ & ' ?C&-' &<-' &=' < >1- @ &' #1' ><A1' '-' &-1 ' 1 BD<-A'01@ = &>' 'L' &- D0' &' 'L' &- D0' -1L' 1-0?'-.' <= 1 ' 0?BD' ? '-.0' <-A' <.<'-0' ><A1@ K' D&? ' .'+'-.' D1 1&=' =? D1 ' '' < 0' &=' < >1- @ ?C&-' <'-' =' !& =1' ? 1' &=' D1' 0<>1@ -& K' D0 <-A'-.' D1' 0<'A' A'j -<-B1'@ <-A' D'0' A'-<-B1' 0D<@@ 1-A? 1' <0' @&-.' 0 0D<@@ C@1<01' D1', '-.;' &+'A1A' <@K< 0@ D<' <@@ & D1 ' 'B@10' B&- <'-1A' '=' D1' 0<'A' A'-<-B1' ><A1' '-' D1' 0<'A' '.D D' 1< @ 0D<@@ 0 <-A' '-' D1' ' !& B1

3".#!!/&-* ' * &-2' 7!-' b+!-/.0"' &- !/' .' &* ' "! 2.-' /!#+ "!/' ' +&/=' ;0' 7& .0' 3"!HO/&#!' .' + 2'[!&-' -/2 !- &+!/

@ &-0'A1 '-.' D1' . 1<' @?0? 1^'&-0' 1#1@j @'&-0' <-A' D& '#@1' 1<0&-0' '><.'-1A' <-A' B&>>' 1A' # ' K1-' `E@1-A&? '( '&=' F <@10@ <.<'C0 ' D1' & <@ < 10 ' &=', '-.' 1- @ E <-A='' D1 '&=' &? ' &+1 1'.-' & A' D1' ,'-.' D<' -&K' '0@ KD1 1&=' D1' K<0' '-A' 1A@ <0' '' <C@ C1< 1 D' '-' <-' -A' I >1-' ><A1' 0)' #1=& 1' D&>'<0' @< 1' < @ &=' ?-A1@@ &D-' `" ? @1 ('<CA' D&><0' 11@ N[)' # ' D1' &>>'00'&-'&=' D1' 0<'A'3`E <-A='' D1 '[' &' '-H?' 1@ K' D' & D1 @ &='<@@ ><- 1 '&=' 1<0&-0@ -0? 1A &-0@<-A' -1>'10' &=' D1' 0<>1' ,'-.' D1' E <-A=< D1 @ <0' '-' D1' 0<'A' &>>'00'&-'0' > 1'=?@@ 'B&- <'-1A;' -A' D1 1?C&-' D1' 0<'A' -A' I >1-' &=' 3)' D'.D' <-A' D1'-&?0' 1<0&-0' # &?.D ' '- &' D1' ,'-./0' 1-BD' <' F 10 >'-0 1 @ --A' &B100' D1 1&=' `><A1@ 0' '@@ D1' 0<>1' K1-' <= 1 ' &j B@<>< '&-' ><A1' '-' !'+1' &?- '10@ K<0' &? @<K1A@ <-A' <= 1 ''-' D1' =?@@ <@'<>1-' D&@A1-' <' F 10 >'-0 1 @ D1' !&? D 1<' &=' D1' <>1', '-.' D1' E <-A=< D1 @ K.0' B<@@1A' <-A' -<>1A' &=' 1B& A' <' & ' &' D1' 0<'A', '-.' D1' E <-A='' D1 @ <0' K1 ' # ' < ? 1' <0' # ' D1' 1 1 0' < 1-0' &=' D1' 0<'A', '-.' D1' E <-A='A'1 ' ' <-A' =& ' D1' D& ='#'@' ' &=' D'0' 0 ' >< - ' 1<0&-0@ ' ' +<0' & A<'-1A' # ' < ? 1' '-' D1' 0<- 1' < @'<>1-' D<' -&' -.@'0D' <-' >< '1A' &' <- ' F 1@0DK&>< -' &=' D1' >' ' `<-A 0P' @@'<-B1' &=' D1' 0<'A' K1-@ <' & ' &' D1', '-.@ 0D&?@A' #1' C?' '-' ='B1' '-' F <@10@ -& ' '-' D1' < BD10G <-A' <@0&' B&-0'A1 '-.' D&K' D1' 0<'A' K1-' <-A' D'0' AD1 1-0' F1 1' 1LB1C 1A' '-' ><- ' .1-1 <@' E <B10' <-A' < A&-0' . <- 1A' # ' D1' 0<'A' '-.' D1' E <-A=< D1 ' &' D'0' @'1.1' 1&C@1' < ' A'+1 0' '>10@ #1B<?01' &=' D1' -0? 1 ' -0' 1#1@@'&-0' <-A' D& '#@1' 1<0&-0' <=& 10<'A'G !& ' D1' F 1<@ &=' <@@ D1' 1<@>@ <-A' =& ' D1' 1C 100'&-' &=' <@@ 0?BD' D& '#@1' 1<0&-0'= &>' D1-B1=& D' &' #1' B&>C<001A' &=' D1' 001-' &=' D1' & A0' <-A' &>>&-0' <=& 10<'A@

\' 0 <a1-' " 'G '6' '$ $
)&-' J9 '* %'L$ %' 1 *
/' &=' E@1-A? A ' V0' <-A' A&-1

- &-* &!++' " ")
0 0?1A' ' ?'&

<CC 10 1\' ='1' \' A1' @&?' ' BD<-A'010' <0' < BD<- \' <@'1-0' H' &?-' 1-=&1\' &+10H ' 'B1@@10' I ' A1' &' 1-' <?R' C '0 1 1-' 01'- ?< '10@ & A'-1\' =?'0 ' H' ? ' -.@&'0' -1' 1-A &' ' -1' =1 &' ' +1-A 1' A1@& 0' 1-' +0-' <' -?@@ >< BD<-' <@'1-' -?@@ ><5' A1' ='BD<-A'01' >10' 0&?@1>1-' C? ' C 10 ' C<'18 >1-' 1-' >&-1 1@ &?' <?.>1-' 1-' >< BD<-A'0 ' C ' >< 8 BD<-A'01' A10 1' C<'10' I ' B&- 1- 1\' 1-' ><'-' 0 ' C1'-1' A1' =& =<' ? 1' A'B1@@G C' B<?01' A1' H?1@@ & A'-<?-B1' @10' < 8 BDW?-\' -.@&'0' -&?-' > 1' +1-A?\' -1' C&'1-' +1-A 1' -1' &? 1 '@&?' A <C0' <0' D<- \' <@'1-0@ C&?-' -=1' A' ' = ' @1' &'' <A' CA?\' 010' B?0 ?>1\' H?1?L' A1?00&' ' <+&' ' 1?1\' 0'' @1\' A <C0' 1?001-' 10 11' +1-A?\' B&>1' '@0' =1?001-' I ' 0&@&'1-' CA1+0-@ I ' @10' BD<- \' -.@&'0' @10' &51 0' A10' A <C0' I ' <?R0' @'1.10' -R1' = ' @1' &'' 1-' C@?0&0' C '10' A1' 0&-' &'<@>1' ./?-A1>1-' <-'1- '01\' I ' 1-A<><.1\';' ? 'H?& '<' @<' 0?CC@'B<B'&-' A1 ' A' \' &10' I ' A1@ <A+'0' I ' <001-' 0?'0A' \' 10 ' & A'-1@ H' @1\' BD<- 0' -.@&'0' C?'001-' +1-A 1' @&?' A <C0' <0' ' 1D<- \' <@'1-0' C ' C 10 ' C<'1>1-' 1-' >&-1 1@ &?' <?R>1-' 1-' ='BD<-A'01' C ' ='BD<-A'01' A10 1' C>1\' I ' B&>>' ' 1-' ><'-@ &?' C ' <C ' A1' C<'1j >1-' <='<' 1' 1-' >&-1 1' &?' 1-' ', BD<-A'01' `A1' + ' '-& 0' 4' <C0' '1@L@ <BD< 1\' I ' #< .< -0' =''' \' C0BD1'-0' <+1-' 0@ 0<?-\' C@?'0' &? 1' & ' A1' C<'1>1-' 1-' A&-1 ' 0? ' C1'-1' A1' =& =<' ? 1' A'B1@'@ @& A'-<?-B1' <+=& AA1' -'1- B&-R' 10 1<- G 1 ' A? 1 <' B10 1' & A'-<?-B1' <- '@ C@1 <' <' -=1' = ' @1' &';' ? +1?' &? \' =&' \' H' &?]' <?R0' < 'B@10' 1-' @<' A#1' & A'-<?-B1' ='? R' @1' A' ' <-' +'' J B& 1-?\@ 10 &'01-' i -' @&? ' =& B1

= -' 8B&-0'A'1 1\' '10' .3?-A&0' '<0? 1BB'&-0' 1#1@@'&-0' I ' D& '#@10' =10&-0@ ><.'-10' I ' CC1 1\/C' K1-' A1' E@1-8' A&? A ' A ' E<@10' 1-B&?- 1' @<' &'<@@ <.10 1' A?' &'' 1- '' '1@' <' -=1' ! ' @1' &'' H& 10 @ A&?-' '@ =&'0 ' 1-A' \' 0'B&>1' '@' <CC@1 ' 1-' ?-' 1-A' 1>1-' =<' ' I ' CC1 1' A1+3-' D&>' >' ?<A. >0' &?-' '' < ?-A1 @ &=<' ? @1 ' I ' D&><0' 11@ C' B&>'00'&-' A?' A' ' &'' @<'1@@' <1-H?1 1' &+10H ' '<?R0' A1' &? \' ><5'' A10' 10&-0' '- ?= 1BB'&-0' I ' 1-1> 0' A1' >10>1' @1' &'' @<'1@@@ B&>1' 1-' @<' A11' B&>'0j 0'&-' 10' B -1-?\' C@?'0' <?' C@1 -;' ' 0? ' B1&' @1' A' ' 1-A' 1>1-' A1' R0#<?@ \' I ' D1 -&?010' 1 &-0' C& 1\' 1-' @1' #<-a' A?' &'' <' F 10 >@ I ' CB1001' 1-' ?1\' <-H' >10>1' @1' K1-' <C0' CB@<><A&-' =<' ' 1-' + ' &?- 110' =&'0 ' ? @<.1\@ I ' A1C?'0' 1-' C@1'-' C@1>1-' 1-?<' <' F 10 '-' <-' H?< ' A&' >10>1' @1' &'' @<'1@@ =?'0 ' <CC&@@1\' I ' -&>1\' A1' 1B& A' &? '<-' A' ' &'' @<'1@@@ 0@#-' C' 1 =< ?' ' B&>1' C' 10' C< 1 - ' A?' A' ' &'' @<'1@@G I ' C? ' @<' D& '#@@' 1' A1' 010' 0'' C@?0&? 0' 10&-0' ' =?'0 ' & A'-1' C' 10 < ?' ' 1-' >10>1' @1' C@1>1-@ H' -? ' D&>1' -.@& ' >< '1\' < <0B?-1' =1 > -1' E<@1'01' A1@' <>'0 11' &?' <@@'<?-B1' A?' A' ' K1-' <' &' <?' &'', &' ' > 0' 1-' &=='B1' 1-' E<@10' -1' 1-' @10' >< BD10G 1 ' <L'-' B&-0'A1 1\' B&>1-' @1' A' ' K1-' I ' 010' <AD1 <-\' =1? 1-' 1LB1C 1\' 1-' C@?0&0' .1 <@L' . <B10' I ' C< A&-0'./?-10' C'@1' A' ' &'' @<'1 '<' 01\' @'1.10' <0' A'1010' 1>C0@ C' B<?01'A10' '-0? 1BB'&-0' 1#1@@'&-0' I ' D& j '#@10' 10&-0' A10?'0A@ \' G C '@1' #' 1-' A1' &?' '@1' &' <@>1' I ' C? ' 1CC00'&-' A1' &? \' '1@L' D& '#@10' 10&-0' A10& 1' < 10 1' B >C<001\@ A1@ <001-' A10' ! 0' I ' &10' A10?'0A' \@@

$ A<'+' >& 0 1-'+' >& 0

<Ø ' -' ! '& 1Ø B& > > &-@ ' B<@@1A' " <.0@ '-' 1+1 ' < ' &'-'-.' &' D1' 0<'A' '+1 @ K' D'-' KD'BD' '+1 ' ><- ' F 1@0D > 1-' <-A' & D1 ' 1 0&-Ø AK1@@' -.' '-' A'+1 Ø @<B1Ø' &'-'-.' &' D1' 0<'A' '+1 @ D<+1' -&K' @< 1' <001 > #@1A' '-' . 1< ' ? > #1 @ < < 1A' '-' ><--1 ' &=' F < @ <-A' <a1-' 0?BD' ! @& 1Ø & D1 K'01' B<@@1A' " <.0@ <-A' D1 >' D<+1' D1K1A' '-' '1B10@ <-A' K' D' ! & B1' <-A' > Ø #1< 1-' D1' 1&C@1' KD'BD' K1 1' '-' 0?BD' " <.0@ &' D1' - 1-' D<' D1 ' 0D&?@A' D' 1' &=' D1' <'A' F 1@0D > 1-' <-A' 1 D1 ' 1 0&-0@ =& ' . 1< ' ? > Ø &=' &-1 @ &< Ø <-A' & D1 ' 1001@Ø =& ' < '<.1' &=' 0?BD' 1 BD<-A'01Ø <-A' & D1 ' E&&AØ <-A' D< 1@0@ &'<-' 1+'@ L< > C@1' <-A' . 1< ' > C&+1 '0D > 1-' &=' D1' 0<'A' @'1.1' 1&C@1@ '=' 1 > 1A ' #1' -& ' D<0 '@ ' C &+'A1A' G =' 'Ø' & j A<'-1A' # ' ? D& ' ' &=' D'Ø < @'< -1- @ D< ' D1' 0<'A' @'1.1' 1&C@1' &=' D1' , '-.' > < ' D<+1' <-A' 1- & ' D1' ' = 11' <00<.1' '-' D1' 0<'A' '+1 ' K' D' !@& 10' <-A' " <.0 ' <-A' <@@' > <--1 ' &=' 1 BD<-A'0109' <-A' & D1 ' E&&AØ <-A' D< 1@0@ < ' D1' ' F '@@@ K' D&? ' "'0 ? #<-B1' &=' < - G <-A' '=' <- ' #1' A'0 ? #1A' &=' D'Ø = 11' <00<.1' '-' D1' 0<'A' '+1 @ D1' < ' . '1+1A' 0D<@@ D<+1' #'Ø ^ a' -' <&B& 0A' .' &' D1' &? 01' &=' D1' &> > &-' <K

40"*!22!$' . ' .'# !2 !'* 2 +/ - . ' ; !' /&2 0"; ! /' &-' !&'* 6& ' . ' V ! &"&-*' ; @'"! 2. -' $ ' !' 0 !' 5

@ ' 'Ø & A<' -1A' <-A' <001- 1A ' D< ' # ' =& B1' &=' D1' < ? 1' > <A1' 'A' D1' @<0 ' < @'<>1- @ &=' F 1'. D Ø' G'BB& A'- ' &$ D1' <-A< A' &=' D1' LA'1H?1 ' &' #1' D<A' '-' 1+1 ' ' ' & A?. D' <-A' &K -' K' D'-' D1' 1<@ > @ D1' ? .1001Ø &=' D1' & &?. D' &=' "& BD10 1 ' 0D<@@ -& ' #1' A'0 ? #1A' &=' D1' ' '. D ' &' ?01' D1' ' K1'. D'-.' # ' K1@+1' '@10' &?-A' D1' 0<>1' & ?. D@ ?0'-.' <@K< Ø 0?BD' F '. D Ø <Ø ' -' D1' 0<'A' < ? 1' #1' 1LC 1001A G@ <-A' D< ' -&' '. D ' -& ' ' @1' &=' K1'. D'-.' . &K' &' <- ' # ' ! & B1' &=' D1' 0<>1' @<0 ' < ? 1@ '-' "'0 ? #<-B1' &=' D1' '. D ' &=' D1' 0<'A' ? .1001Ø &=' D1' 0<'A' & &?. D' &=' "& BD10 1

% ." &. -2 ' C#' ; @' !"& 2 &-' ! .0- @ . ' !"! ."/'_

'' ! & ' D1' . 1< ' '0BD'1=Ø <-A' '>C& <#@1' Cj C 100'&-Ø A<'@ ' A&-1' ' D1' , '- ./Ø '@'1.1' 1&C@1' K' D'-' D1' &?- ' &=' 1 1=& A@ # ' -B &<BD > 1- Ø <-A' Lj & '&-Ø A&-1' # ' D1' D1 '==Ø &=' D1' 0<'A' &?- '=& ' D1' '>1' #1'-.@ @< 1' #1. ?-' <-A' K & -.=?@@ ' B&- '-?1A@ #1j B<?01' D<' D1' D1 '==Ø '-' D1'' ? -0@ <-A' & D1 ' @<B1Ø' <= 1 ' D1' ' ? -0' D&@A1-' <-A' 1-A1A@ '-' KD'BD' & D1 ' @<B1Ø' D1 ' D<+1' -&' C&K1 ' -& ' ? D& ' ' # ' D1' ' ='B1' &' =<a1' <- ' -' ' ' & ' -H?10 @ A&' <a1' A'+1 Ø' -H?' '10@ -H?10 Ø &=' ='B1' <-A' -A'B >1- Ø &=' <j #&? 1 0@ '=' B1 0@ <-A' D1 ' A'+1 Ø D'-.Ø & A<'-1A' # ' < ? 1' &' #1' '-H?' 1A' #1=& 1' D1' ?0 'B1Ø <-A' & > > '0j 0'&-1 Ø &=' D1' 1<B1@ KD1 1<Ø '-' -&' <>1 ' D1 ' C1 j <'-' &' #1' '='H?' 1A' # ' 0?BD' D1 '==Ø '-' D1'' ? -0@ -& ' & D1 K'01@ -& ' '-' & D1 ' @<B1Ø' #1=& 1' D1' >' G -A' KD'BD' D1 '==Ø # ' ! & B1' &=' 0?BD' -H?' '10@ -H?10 Ø &=' ='B1' <-A' -A'^ > h @Ø ?-A?@ ' '<-A' ?'A<0=?@ ' <a1-' #1=& 1' D1>' '-' D1' ' ? -0' <-A' 1@01KD1 1@ <-A' =& ' D1' -& ' B&'-'-.' =' D1' 0<'A' 1.1' 1&C@1' &' D1' 0<'A' ? -0')' D1' 0<'A' D1 '==Ø A&' + &-.=?@@ ' <a1' &' D1' ' &K -' 01' &=' A'+1 Ø &=' DH' 0<>1' , B.&' 1&C@1@ '-<0' <-A' >1 B'<>1- Ø &=' L' @' ' <-A' & D1 ' . 1<' ? > 0@ '@@')' CC 100'&-@ -A&'-.@ <-A' "10 ? '&-' &=' ><- ' C&& ' 1&C@1' &=' D1' 0<'A' '1.10@ '=' D<0 ' 1 > 1A ' #1' -& ' C &+'A1A' '-' D'Ø < G -' &-0'A1 < '&-' &=' KD'BD' '0j BD'1=@ ' ' '0 A<'-1A' # ' ? D& ' '&=' D'Ø < @'<>1- @ D<' -&' D1 '==' -& ' -A1 ' D1 '==' &=' D1' 0<'A' &?- '= &>' D1-B1=& D@ # ' &@&? ' &=' D'Ø ='B1@ 0D<@@ <a1' & ' -H?' @ -A' '>1-=@ & ' -H?10 ' &=' ='B1' '-' D'0' ? -@ KD'BD' ?.D ' -& ' # ' D1' <K' &' #1' <a1-' '-' D'0' ? -@

3! - + @ . -' ! '& 2' . ' .0- @' .'* 0-+ 7 0# -S0!2 2 ' C#K

B& > 1' 1-' !@& 10' <?. > 1- ' <CC1@@1\' A <. .10' 1-' BD?-1' C '1' <A & =- ' <?' A' ' '+1 @ A1'-Ø H?1=' '+1 ' A'+#' E<@1 ' I ' <?RØ' C0&-10' A1 > & 1\' 1-' A'-1 0' @'1?L' <A@ & -/- 1\' <?' A' ' '+1 ' &?- ' & 1' < A1' <001 > #@10' 1-' .=&-A1' -&?> # 1' < <'1\' 1-' I d 1' A1' .?1 1@ I ' C 'Ø' '1#B' =@& ?Ø' <? >1- ' <CC '=1\' A'< 10@ I ' 1?L' &?- ' <'BD1 ' 1-' C1B10' I ' & 1' =& B1' I ' <- 10' #< ?\' @10 ' .1- \' H?1?L' =1? 1- ' 1-' '1@L' =@& ?0@ <' @1- 1- ' H'@Ø @&K1 1- ' A1\' A' \' E<@1 Ø' I ' <?R ' C0&-10' C? ' .D'-A1' 0?>1' A 8d`-&>1 1 P' #< 1@L' I ' <?R ' &001@\' C? ' B< '<.1' A10' ' 'L' I D<?-A'\10' I ' <?RØ' #'1-Ø I ' BD< 1?L@ <' '-<@+ 'Ø 1-0<>C@1' I ' .D -' ' 1 -C&+ '001>1-' A10' A' \' @'1.1 ' 0'@Ø' -1' 0&'1-' D<0 1' - ' 1>1A'1\' ;' " 10 ' & A'-1\' C' <?^& ' 1' A1' ! ' C@1>1-' 'H' @10' A' \' @'1.10' A?' &" C & ' <+K ' I ' 1- &'1 ' @&? ' = <-a' C<00<.1' &' @1' A' ' '+1 @ &+1' =@& ?Ø " A=<. .1" &? \' >< 0' A10' I D<-A'010' I ' <?RØ' #'1-L' I ' BD< 1?L' <' =&? ' +@&<- 1' 0<?-\' A10 &? #<?-B1' A1' -? ;' Q ' 0" <0B?-' 0&' ' A10 &? #1' A1' 0<' = <-a' C<00<.1' 1-' @1' '+1 ' <=' @<' CA1' . 1+1' 0<' <BB'&-' 0&@&-B' @1' B&? Ø A1' @<' B&1' @1

1 >' & A'-10' 10 ' I ' <001- ?\' H' C' =& B1' A1@ 10 < ?' ' ='@' ' 1-' @<' A< '@@1' C@1 > 1-' A10' C&'010' <B & A<?-1\' <' @10 <-A< A' A1' @10BD1H?1 ' <' 10 1' 1?1\' B= 10B?-1' ' 11' ? .D' I ' '@@1' A '-Ø @1' &'<@ > 1@ -1' 0&=1-' @1 ' ? .1'Ø' A1@ ? .D' A1' " & B10 1' A10 &? #1\' A1' @&? ' A &' ' A1' ?01 ' @&? ' C&'0? 10' C' L' ' @1?.1 ' 1-+' &-' >10>1' @1' ? .D@ ?0<- \' &? \' = ' \' A 'L' C&' 10' B&>1' &' =&' A' ' 10 < ?' ' 0&?? ' 1LC ' > 1\G 1' H' -?@@ A &=' &?' ' @1' AR' C&'0? 1' 0&' ' <BB ?1' <' <0B?- ' C' =& B1' A1' >10>1' @1' A< '-' 10 < ?' @ &' A10 &? #<?-B1' A1@ A &' ' A10' ? .1'Ø' A1' ? .D' A1' " # BD10 1' A1 '0A 1

1 >' C? ' . > A10' > 10BD'1=Ø I ' ' > C& <#@10' &CC00'&-Ø =<' \' A1' &? ' 1-' <?R' <' @10' '<@L' @'1.10' A?' &" A1'-Ø @1' E&?- 11' A1' 1 1=& A@ C' 1-B &BD1 > 1- \' I ' 1L & B'&-Ø =1= \' C' @10' +'0B& - \' A " A' ' &?- 11' C? ' @1' 1 > CØ' 10 0<- @ -<A.<' Ø B& > 1-B1\' I ' B1-&?01 > 1- ' B&- '-?1\@ <' B<?01' H' @10' A' \' +'0B&?- \' &' @&? ' &/-10' I ' <?RØ' @'1?L' < ' @&? ' &/-1 ' 1-?\' I '=' -1\@ 1-' @10' H?1?L' <? 0' , 1?L' V '@0' -1' &?- ' C&<' ' -1' <?=@& ' 1' C' @&? ' &=' B1' A1C-A 1' <0B?-' 1-H?1 1' N)' 1-H?10 @ C'. -1- ' A' 01Ø 1-H?1 10' 1-H?10 10' A&=' B10' I ' 1-A' 1 > 1- \' A10' @<#& 1 Ø' < '=' Ø I ' <?RØ' A'1010' BD&010@ & A' 1 ' C' 10 < ?' ' A10 1' 1-H '0' A1 = ' @1\' ?0 'B1\' I ' &>'00'&-1 Ø A1' @<' C1<0@ I ' 1-' -?@@ >< ' < 1'. D1- ' -1' <CC 1'. -1- ' A10 1' 1-H?'Ø C' ' 'O' +'0B&?- \' &' @&? ' & -10' -1' <?R > & ' -1' 1-' <?RØ' '' &' ' A1' ' 1 ? X ' @1Ø H?1?L' '0B&?- " C' =& B1' A1' '1@L' 1-H?1 1 ' &H?10 10' A&=='B1' I ' 1-A' 1 > 1- \' -'1- ' A?1 > 1- ' -1' @ <@ > 1- ' C '01\' A1+0- ' @10' A' \' +'0B&?- \' &' @&? ' & -10' I ' <'@@&? 0@ I ' C/' @1' -&?-' +1-?1' A10' A' \' @'1.10' <Ø' ==' \' &K '10' @10' ==' \' +'0B&?- \' . -1- ' & 118@ -&?01 > 1- ' <' @&? ' &1CØ' CC 1' A10' A'RØ' A1' > 10 > 10' @1\' @'1.10' = -10' I ' < B1 > 1- \' A1' L ' ' ' I ' <?RØ' ./?-A10' 0^ -1\@ 1-' . & A1' &CC#0@&-' <-'1- '0 > 1- ' I ' A10 ?BB'&-' A10' CD'0&Ø C& 10' .1- \' A10' 8==' \' @' 0' 0" 1 > 1A'1' -1' 0&' ' D<0 '+1 > 1- ' C? +1?' 1-' B10 ' CA1;' C' BC-0'A1 <B'&-' A10' H?1?L' > 'OBD'1=Ø & A'-1' 10 ' C' <?A'& ' 1' A1' B10 ' C@1 > 1- @ H' -?@@ 'OB&?- ' -1'0?#\+'0B&?- ' A ' A=' &?- 11' A1' B10 ' &? ' 1-<+ > ' C' B& 1' A1' 0B?>' &==' B1' C2 .-1' <0B?-' 1-H?1 1' &A' 1 > 1- ' -1' 1 H?10 1' A&=' 1' 1-' 0&?-' &? -1' H' -1' A&' ' C' @<' @1 ' 10 =1' C 'Ø' 1-' 0&?-' &? -1@

' $$ ' ! ' W
" S%6' 2 ('K' G ! I '

-1' H' '@ C' B&@&' A1' 0&?-' A' ' ='B1' '. -1' <0B?-' 1H8' H?1 1' -1 H?10 1' A&=='B1' &?' 1-A' 1>1 - ' 1'@' <0B?-' <?R' @'1-' <C0' @1' A' ' & -1' 1-?<G I ' = >11@' -1' f ' '@ . -1' A10' <0B?-0' A10' A' \' @'1.10' A?' &"'<0B-'@0' ='-10' B>'<='B1>1- \' C ' <0B?-' B@'&01' &-' B<?01' H' -<CC '1- ' <' 0&=' &?>1' &?' &=='B1@' -1' <0B?-1' A1@' D1 -&?01' I ' . 1+&?01' <='B1>1- ' A1' <0B?-' A1\' A' \' @'1.1 ' 1-B&?- 1' 10&-' C? ' -&?-' +1- 1' <?' A' ' & -1' &?' <' <? 1' @'1?' &?' C ' <? 1' B<?01' C' B&@&? ' A1' 0&-' &=='B1@' 0? ' C1' -1' A1' L@' @' ' C' @? ' <CC<'1 0' <' - 1' '@1' &"'010' a< 0' I ' 0?BB100&0' <' <?- ' A1' 1>C0' H' '1@ +'0B&?- ' ? 0?#\' +'0B&?- ' 1- ' &C' A1' <0B?-' < 'B@1' A'B1 ' 0&'@' A?1>1- ' B&-+'A @<@ 0? 1' A?' &" &?' A1' C '1' . 1+1' ' 0?1' 0'= -' C< ' @1' &'1&>1' C? ' @? ' >10>10' G 1 ' H' @<' CA1' H' 0?1' 1-' A1@' B<<0' <' ' @<' >&' 1<' A1@' A' ' 0?>1' 1-01>##18' >1- ' &+1' 10' A<><.10' <?' A&?##@1' <' 0&-' CC 1' &1C0@' 1 ' H' @<8'C '1' 1<' B10 ' B< ' . 1+1 <' ' C&'<' C' >10>1' @<?= & '@1' A1' 0?1 ' 1'@' B1@@1' C '1' 1- , 0' '1@m' +'0B&?- \' ' 0?#\' +'0 ' B&?- \' 0'#-' C? ' @1' & ' B&>1' C ' @? ' >10>10' B&>1' A1+3- ' 10 ' A' ' G ' ' @10' ?0 'B10' A1' @<' C1<0' A1' >10>1' 1' &?- 11' C ' @1' 1>C0' 10 1<?- \'<'1- ' C&'<' I ' <?<& ' 1' A1' 1-H?1 1 ' &'1 ' 5B R>'-1 ' '1@L' >10C '0'&-0' 5B &==1-010' <#-' <@ 0? 1' A?' &" B&>1' A1' C '1' H' +&1 ' ?1 ' C? ' d1' &" 5B C? ' @? ' >10>1;' ' A?'1 <' B10 1' & A'-<-B1' C ' &'0' <-0' C0BD1' ' 1-0?<- \

1>' B&>1' '@' <A' 10 11' A<?-B'1-' 1>C0' <BB 0 ?>1\' 1-' &? \' @10' & > 110' " 1- 1 1 '@10' =& ><.10' H' A1?001- ' 10 1' +1-A \' C' @<' F < 1' , &' ' C&'011' C' @1' <?-B1''@ 1 ' C ' B1&' H' <' @<' A< 1'=" C@1>1- ' 1-?\' < F 10 >' =?' ' & A'-1H' @10' A I 0' <?-B1@@10' <' B<?01' A1' @<' .0?-A1' A1B< 1' A'B1@@10' &'1- ' A10 ? \' 5B <?R0' C&'010' B&BD<- \' &'1- ' B1@@1' C '1' & A'-1\@' 1 ' 10 ' <'-0" ' @10' C& 10' .1- \' A?' &'<@>1' 0&?- ' . --A1>1- ' A1B1?\' C' @10' A' \' C&'010' B&BD<- \' <' B<?01' H'@0' -A1- ' B&-'0<?-B1' B&>1#'1-' A10' @', 0' @1 F <C1' A1' =& ><.1' A1- ' C' @10' A' \' C&'0 ' B&BD<- \' ' ' C? ' B1 ' <?' ='-' ' @10' A' \' C&+OB0' .1- m' -1' 0&'1 ' B1@@1' C '1' A1B1?\' A&&>1' ' 0' ?- ' 10 11' A1C?'0' @18A' ' A< 1'-' C@1>1- @ & A'-1' 10 ' C' < I & ' 1' A1' B10 ' C@1>1- ' H' @1' C& 0' A?-1' F < 1' Q' A? -1 P' =& ><.1' C?'001' 1 ' ' ' B@&+10@ B1 <0 <+&' ' BD?-' A&+1' +' '=" C' @10' A' \' C&'01\' B& D<- \

1>' B&>1' & A'-1' 0&' ' C' 10 < ?' ' =<' ' 1-' 1>C0' @1' &" ' C? 0' @1' B&-H?10 ' '1 B1' =@< P' A1' 0&-' 1. -1' L\ @ H' &? \' @10' .& \' >&@ -0' 10 <-a10' 10 <a10' C' @10' I ' a'A1# ' H?1?L' =1? 1- ' > 0' 1-' @10' .# >A10' ', 0' " 1- .@1 1' 1-' 1>C0' A1' ' 1' AK< A' -<A.<' 0' &" " 1- .@1R 1' =' \' @1' &" 1- " 5B C?'0@' C' @10' H?1?L' -'1=1' 5B #< 1@L' 0&?- ' A10 &@ 1\' H'@0' -1' C&'1- ' C<001 ' 0'B&>1' '@0' 0&@&'1- @ , &- ' <>&1+1\' 5B -1 1>1- ' <#< ?\X ' B&>1- ' C?@0' 1-' @1' C@1>1- ' A'1' ' 1' 1- '-<A.<' 0' &" " 1- . 1R 1' 'C'1 '0P' <' - 1' = ' @1' &" H& 10 ' 1-?\' <-' A1' 0&-' 1. -1' C '=' @ & A'-1' 10 &' ' H' 0'D-' @1' A' ' 10 < ?' ' =<' ' @1' A' ' <-' LL+ ' 1>1' ?-'<?R' 10 < ?' ' =' '@@' 1-' >'H 1' A?' A@" &" ' '1 B1' <-' A1' 0&-' 1. -1' L+ / P' 1-' C? \' @&' < 'B@10' M & - ' 1-?\' I ' =1 >1>1- ' &#01 +1\@' < &?0 <- ' <' 'B1@@10' H' B&8' -'00'&-0' , &- ' ='' \' <0' 0?=='B1<-'\' C0& -10' C 10 1' ?0j 'B10' 1-' BD?-' &?- 11' " 1- .@1R 1' &?' #&0&'. -1' M <' C? ' > +1'1 ' I ' .< A1 ' &? \' @10' 1<K10' 5B ./?-A10' 'R0' A1'-0' @1' A' ' &'A>1' 5B @10' A1 I ? 10' B& '.1 ' 5B <>>A1 @ Q

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ID@H' ' ')')' ' 6' G D@' G '?

-& ' D<' D1' # ' &@&? ' &=' D'0' 0<'A' ==' B1' <a1' <- ' -H?' @ -H?10 ' &=' ==' B1@' ' -A'A>1- ' '-' <- ' & D1 ' @<B1@ <= 1 ' D1' 0<'A' ? -' D&@A1-' <-A' 1-A1A@ -& ' D<' D1' <a1' &='' > '&=' D1' , '- ./0' @'1.1' 1&C@1' <- ' ! '-10' & ' >1 B'<>1- 0@ =& ' <- ' D'- .' & ' <?01' D<' C1 8' <'-1 D' -& ' &' D'0' ? -' & ' ==' B1@' -& ' -&' 0?BD' D1' -&?0' -& 9. '1+&?0' >1 B'<>1- ' &=' <- ' &=' D1' 0 ?A' '1.10@' <.<'-0 ' 1<0&-@ =& ' -& ' B&>'-.' &' D1' 0<'A' ? -' & ' &' <-& D1 ' @<B1@ & ' =& ' & D1 ' <? 1' # ' &@&? ' &=' D'0' 0<'A' ==' B1@' ?C&-' <'-' C=' L@ '@' ' # ' D'>' &' #1' C<'A' &' 1< ' &+1 1'. -' & A' D1' , '- .@ '0' 1' 0' <-A' ?BB10j 0& 0@ <0' &= 1- '>10' <0' 0?BD' D1 '=='&' -A1 8 D1 '==' D1 1&=' & '&=' <- ' 'B@1' &=' D1' 0<>1' #1' A?@ ' B&-+'= ' < ' D1' ?' '&=' D1' , '- .' & ' U=' D1' < H ' . '1+1A@ KD'BD' 0D<@@ 0?1' <0' K1@@=& ' D1' , '- .' <0'=& ' D' >01@=G <-A' D<' D1' =' @<' - '== P' '-' 0?BD' 001@ D<+1' D1' <@=' &=' D1' 0<'A' ?>@ &.1 D1 ' K' D' D'0' " &?#@1' " <><.10' &' D'0' &K-' 01 ' <-A' D<' D1' > ' '-' D'0' 001' . '1+1A' D<+1' &K1 '# ' D1' 0<>1' ? D ' ' &' 0?1' '-' D'0' < '<.<'-0 ' 0?BD' D1 '==0' <-A' -A1 ' D1 '=1@ <0' F1'@=& ' D1' , '- .' <0'=& ' D' >01@=' <0' #1=& 1' 'i' <'A@ <-A' D<' D1' ?0A110' &=' 1<B1' &=' D1' 0<>1' &?- ' =& ' D1' '>1' #<- .@D<+1' &K1 ' <-A' ? D& ' ' &' '-H?' 1@ D1< @ <-A' A1 1 >'-1' 0?BD' '0C '0'&-0' <-A' ==1-B10@ <0' K1@@' <' D1' , '- ./0' <' ' h' < '=='1' < /0@ KD'BD' K='@ 0?1' ='-' D1' , '- .' <-A' =& ' D' >01@=' -A' D'0' A'-<-B1' 0D<@@ 1-A? 1' # ' D 11' 1< 0' -1L ' B&>'-.

@ F D1 1<0' ' ' D< D' #11-' &=' &@A' '>10' <BB?0j &>1A' '-' <@@ D1' &?- '10' &=' -.@<-A@ D<' <@@' D1' D1101R' KD'BD' &?.D ' &' #1' 0&@A' # ' D1' F 1 ' 0DA-@A' #1' K<.D1A' # ' D1' ?-B1@@ <-A' #1B<?01' D<' < ' D1' @<0' < @'<>1- ' D&@A1-' <' F 10 >' -0 1 @' ' K<0' & A<'-1A@ D<' D1' 0<'A' ?-B1@0@ '-' 10C1 ' &=' D1' . 1<' " 1B1' ' &=' D1' 0<>1@ 0D&?@A' #1' A10 & 1A@ <-A' & D1 ' F 1' . D 0' B&?BD'-.' 0D&?@A' #1' '-' D'0' 1D<@=' & A<'-1AG <-A' ' '0' 0&@ D<' D1' C&& ' 1&C@1' &=' D1' 1<@>' #1' . 1< @ ' A1B1'+1A' # ' DH' 0<'A' F 1'. D 0' B&?BD'-.@ =& ' D<' D1 ' a-&K' -& ' D&K' >< - ' &?-A0' D1' F 1 ' &=' D1101' A& D' B&- <'-' # ' D1' 0<'A' F 1'. D 0' B&?BD'-.G -A' D1 1=& 1' &' $ ' - 1- ' D<' D1' 0<'A' C&& ' 1&C@1' 0D<@@ -&=' #C' '-' D'0' 1D<@=' A1B1'+1A@ <0' D1 'D<+1' #11-' 0' D1-B1' D1' 0<'A' @<0 ' < j @'<>1- @ ' '0' & A<'-1A' # ' D1' ? D& ' ' &=' D'0' < @'<j >1- @ D<' D1' F <. D ' &=' <' F 1 ' &=' D1101' > < ' B&-j <'-']LL''@ @&+10@ D<' '0' &' 0< @ 1 1 ' @&+1' $ +'@' # ' D1' 0<'A' F 1'. D 0' B&?BD'-.

@ F D1 1<0' ' ' K<0' KA>-1A' # ' <' < ? 1' ><A1' '-' D1' '>1' &=' , > .' AK< A' D1' D' A' ='/)' D1' K< ' 8' ='= D' 1< ' &=' D'0' 1'. -@ D<' <@@' D1' F 1< 0@ '@@0@ <-a0@ <a10@ '@10@ <-A' , A1@0@ KD'BD' K1 1' 01 ' '-' D1' . 1<' '+1 0' &=' -.@<-A@ '-' D1' '>1' &=' D1' & A' Aj K< A' 0&>1 '>1' , '-.' &=' -.@<-A@ &-' &=' , '-.' 1= @ <-A' <= 1 @ KD1 1# ' D'C0' <-A' &< 0' #1' A'0 ? #1A0' D<' D1 ' B<--&' C<00' <0' D1 ' K1 1' K&-' &' C<00@ 0D&-@A' #1' 1>&+1A <-A'C?@@1A' A&K-G <-A' /')' <= 1 K< A'-' D1' < j @'<>1-' &=' , '-.' 1- @ `!< D1 'S P &='&>' &+1 1'. -' & A' D1' , '-.' D<' -&F' '0@ D&@A1-' D1' ! ' 0' 1<' &=' D'0' 1'. -@ ' & A<'-1A@ D<' <0' KA@ D1' 0<'A' < ? 1' ><A1' D1' 0<'A' LL+ ' 1< @ <0' <-& D1 ' < ? 1' ><A1' ' ' D1' '- '1' &=' D1' 0<'A' -&#@1' , '-.' AK< A' D1' D' A@ D1' L@+ ' 1< ' &=' D'0' 1'. -@ '-' <@@ D1' ' 'B@10' 0D<@@ #1' =' >@ ' D&@A1-' <-A'&#01 +1A@ &' A-.' &' D1'0 >1@ k/' ' &>>'00'&-0' 0D<@@ #1' ><A1' &' 0?=='B'1-' 1 0&-0' &' #1' ?0 'B10' '-' 1+1 ' &?- '&=' -.@<-A@ KD1 1' ' 0D<@@ #1' -11A=?@@ &' 0? +1 ' <-A' a11C'%<@@ D1' F < 1 0' <-A'. 1<' '+1 0' K' D'-' D1' h)' 1A>@ <-A' &' B& 1=@ <-A' <>1-A' D1' " 1=<?@ 0@ <-A' &

Ú 3 "&!' 7 &# !' 20# ' '! '5' (' P !'"* ' .$ T"
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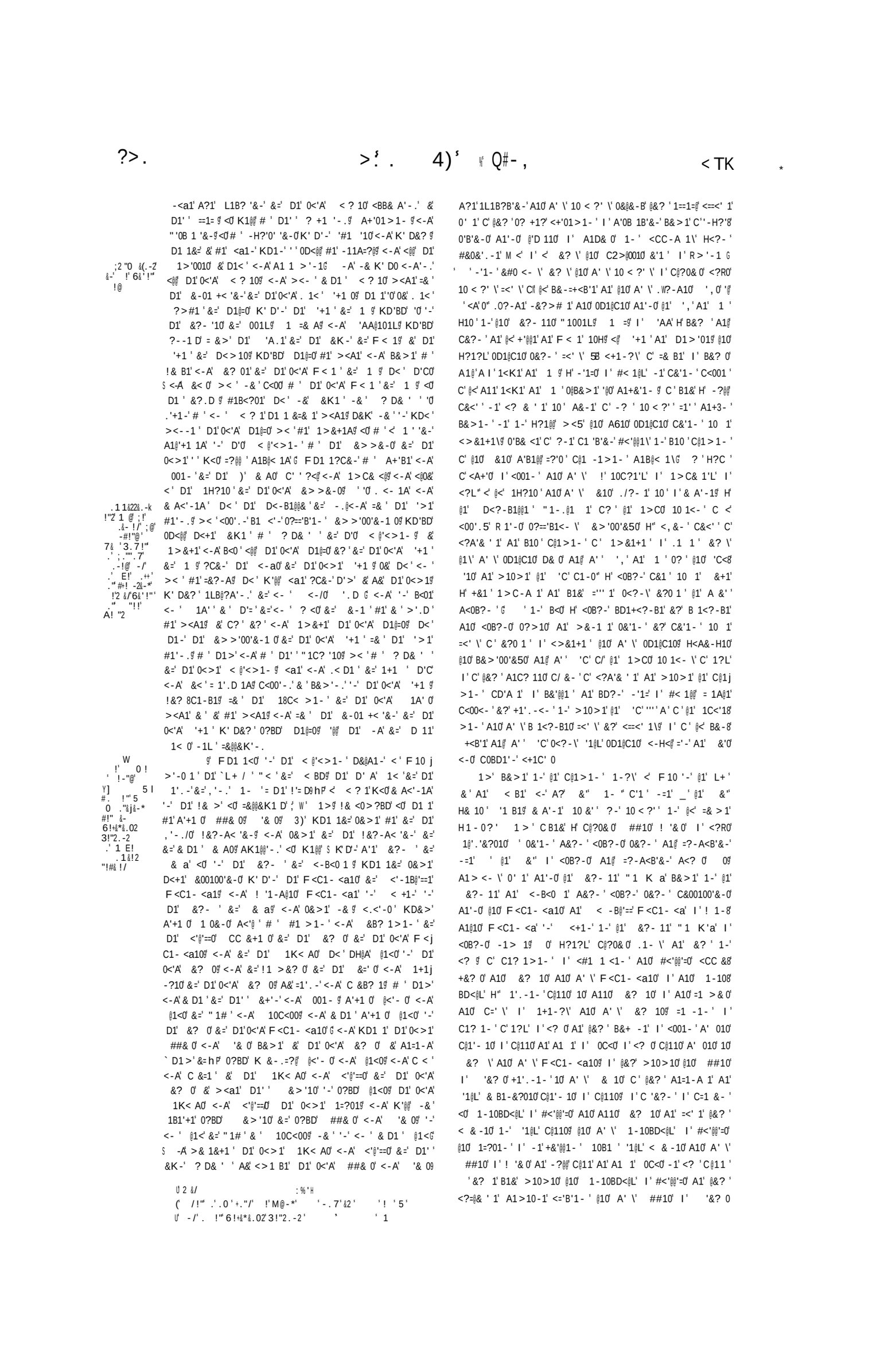

?:? >+ . 0 *

`<-A <0&<-& D1 ' >1 KD1-' D1 &B<>< '&-0 0D<## #1 B1 '=1A # ' D1 D<-B1&& ' &= -.<-A <-A ><A1 '-' D1 !& >' <#&+1 1D1< 01A <-A D1-' D1 0<'A ?A.1 0D<## <K< A D1 0<'A F ' '&= 1 '='B< 1 P &' D1 A'-< ' &' B1 '= ' ?C&-' D1 00?1 0&' &'-1A & ' &' #1' &'-1A -A '=' <- ' F ' ' &= 1 '='B< 1 #1' ><A1' & ' . <- 1A #1=& 1 D< ' <## D1) ' &B<>< '&-0 ' -' D1 ! & >' `<=& 10<'A P #1 ><A1 <-A 1 '=1A D< ' D1-' D1 0<'A F ' '&=  1 'j ='B< 1 <-A D1 1 '='B< 1 &=  D1 A'-< ' D1 1?C&-' ><A1 & ' &' #1' ><A1 0D<## #1' &'A ' -' <K <-A &=-&-1 '=1=@ -A '=' <- ' F ' ' #1=& 1 D'0 ' >1 #1 A' 1==1A &' <- ' A'-< 0 &' B1 '= ' `'= 0P D1 0<'A @'<-&? F '=1 &= <>10 #1' <0 < A &' -& <-A <' D'0 ' >1 -& ' B1 j '=1A '=' ' #1' B1 '=1A D1 1<= 1 ' # ' +' ?1' &= D1 0<'A F ' D< ' D1 0<>1 1 '='B< 1 &= D1 0<'A A'-< ' 0& ><A1 #1' +&'A <-A &=-&-1 @!1=';

/ <-A 1= ' 0&-10 KD<--1 D1 K ' ' &= B<>< '&-' '0 1 &>1A K D B<>< '&-' ><A1 <-A D1 B'<>< '&-' #1 B1 '=1A #1' D1 D<-B1&& <-A '-' D1'= +>1 1D1 01A A&-1 D<--1 D1 0<'A1 ''..1 &' <K< A1 < F ' '&= 1 '='B< 1' N$ ' ' "' 6$

' 0<'A1 KD1 D1 ' J #1=& 1 1D1 01A ' -' ' ' ¿ N$ * + ' 6$

!"& &# !' .' ;!' 1 /!' .-' -@ V"& ' +"! /@&220!/' /!#+ "!/' .&/L

I ' <?L" <? ' =&' \ H<?-' @10 @<>< <B'&-0 &'1-' R '='1\ C' @1 D<?-B1@@1 ' I ' 1-' @< =&? >1 1D1 B1 =<' \ I ' <A&-H10 @1 A' ' ?.1 <.< A1 < @1 A' ' # '1= A1 I ='B< ' <@ & A'-< '1 C ' , '='1 ' 0? ' @'00?1 '00'-' & -11 &?' < & -1 ' ' 0" <0B?-' # '1= A1 R '='B< ' 0&' ' =1' ' &?' .W?- 1 A1 +W- ' B1& H &? \ @10 A 10 CB@<><B'&-0 1-' @< =&? >1 A1+0-' 1D1 B1 0&'1-' =1' \ I ' '='1\ H<A&-H10 B1@@ # '1= A1 '='B< ' I ' @1 '='B< ' A1 A'-< '1 0? ' B1& =<' 1 &?' <=@<' 1 0&' ' +&'A1 1-' @1 ' I ' A1 -?@@ 1=!1^ 1 ' 0" <0B?-' # '1= A1+D' ' B10 ' 1>C 0&' ' A' 1= ' < <0B?-' A'j -<'1 C? ' R '='1 ' 0" @< A11 @'<-& 1 =1 > >1 <>10 0&' ' #<0 < A &?' -1> 1 I ' < B10 ' 1>C -'1-' R '='1 0 @ 0&' ' 5 '='1 1-' <C20 C' +1 " A?' A' ' # '1= H' >10 >1 @1 I ='B< ' A?' A' ' A'-< '1' 1-0" =<' ' 0&' ' +&'A1 I ' A1 - -@ ' 1==1==

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' G ! ? ' ' G ' 6 # '

' & A D1 , '-. <' D'0 <@'<>1-' D&@A1-' <' F 10 >'-0 1 ' D1 +1'= D' " < ' &= < D1 1- D' 1< ' &=' D'0 .- &' D1 &-&? ' &=' E&A <-A =& ' D1 K1<@ D' &=' D' >' <-A' D'0 1<@> <-A' =&C8 D1 <-H?'@@' ' <-A <01 &=' D'0 1&C@1 # ' D1 A+'B1' <-A 001-' &=' D1 & A0 C' ' ?<@ <-A 1>C& <@ <-A <' D1' 0C1B'<@ 1H?10 ' &=' D1 &>-'&-0 '-' D1' 0<>1 <@'<>1-' <0j 01>#@1A D< =' 1=11A' &' -_'`1-< 1A 'P' <-A' 10 <#@'0D1A' A'+1 0 < ? 10' <-A A'-<-B10' '-' D1' !& >' =&@@&K'-.

! F D1 1<0 ' ' 0' . <- 1A' &' D1' < & ' <-A' &-0 <#@10 &=' D1' <C@1' &=' <@<'0@ # ' D1' D< 1 0' &=' D1' , '-./0' @'&#@1' &.1-' & 0@ <-A' # ' D'>' B&-=' >1A D< ' D1 '0D<@@ D<+1' &K1 ' &' <a1' <-A' 1B& A'<@@ 1B&.j -'\<-B10' &=' " 1# 0' #1=& 1' D1>' ><A1'# ' <- ' 1 0&-@ <-A' ` D1 1=& 1 P' . 1<' " &?# 0' K1 1@ `'=/P' D1 1B&.-'0<-B10' #1=& 1' D1' 0<'A < & ' <-A' &-0 <#@10 ><A1' #1 &-A' D1' 1<@ 0D&?@A' #1' 1==1 ?<@ <-A' 1L1B? & ' '-' <@@ &'-0' K' D'-' D1' 1<@> ' &=' -.@<-A@ <0 D1' 1B&.-'0<-B10' ><A1' #1=& 1' D1' < & ' <-A' &-0 <#@10' &=' D1' <C@1' &=' F 10 >'-0 1 ' #1 ; ? ' & A' D1' , '-.' K'@@' -.@ '-' D'0 <01' &' <a1' <K< ' <@@ 0?BD' " &?# 0@# ' D1' A+'B1' <-A' 0j 01-'&=' D1' 0)' & A0' C' ' ?<@ <-A' 1>C& <@@ <-A' < ' D1' 0C1B'<@ 1H?10 ' &=' D1' 0<>1' < @'<>=1-@ D< ' <@@ D1' 1B&.j -'0<-B10' &=' " 1# 0' #1=& 1' D1' 0<'A' < & ' <-A' &-0 <#@10' 1=' <@<'0@ ><A1' & ' &' #1' ><A1' # ' <- ' 1 0&-0' #1 &-A' D1' 1<@ 0D<@@ #1' <0' 1==1=@?<@ <-A' 1L1B? & @ <-A' &=' 0?BD' =& B1' '-' <@@ &'-0' K' D'-' D1' V) 1<@>@ <-A' '-' D1' 0<>1' $!& >' 1L1B? & @ <0' D1' 0<'A' 1B&.-'0<-B10' ><A1' #1=& 1' D1' 0<'A' < & ' <-A' &-0 <#@10' &=' D1' <C@1' &=' F 10 j >'-0 1 @ & ' #1=& 1' <- ' & D1 ' < & 0' & ' &-0 <#@10' &=' D1' <C@1' K' D'-' D1' 0<'A' 1<@>' #1

\' & A1' .-1A' 0=& ' D<' ' ' ' ' /' @' 0<'A1' ' '

V' -@ ' -1' <-0B 'C ' &=' D1' < ? 1' &=' D'0' 1< ' '0' -&K' C 101 +1A' < ' D1' &K 1 @\' 11' & 1' &' '7' 1-'

1>' B&>1' <?' C@1>1-' 1-?\' <' F 10 '-' @1-A1 '< -' A1' 1'-' < D1?' @<CC&0 @1' <-' A?' 1.-1' -=1' ¿' @1' &" &1C '0>1₰ & A'-1' 10 &' ' I' 1< <#@1' C' <?Q@& ' 1' A1' >10>1' @1' C@1>1-' ' @10' D'+<@1 0' A10' &? \' &?- 110' A1'-0' @1' &'<@ -1' " 1-.@1R 1' <' 10@'1 0' C? ' +1-' ' <0' C@1>1- \' 1-' <C2Ø <' 1-' 0' 0&'1-' A0@?\' 1-' B= ?-' &?- 11' C' .1- \' A1> <- \' I' 1B1<- \' 1-' 'B1@@10₰ A&?-' B @?-' <' ' = <-a' 1-' <' @<' +<@?1' A1' L@' 0' C' <-' <?' ><'-0' &? 1' @10' 1C '010' 0?' R 1'-' C1'-1' B&- 1-?\' 1-' >10>1' @10 < ?' G -'1-' =10<-' 1LC0001' >1-B'&-' 1-' 'B1' H' B ?-' H" M &' ' 10@'0&?' A<0B?-0' '1@L' D'+<@1 0' < &' ' = <-a' 1- \' <' @<' +<@?1' A1' L@' 0' <?' $ ><'-0' &? 1' @10' 1C '01\' A1'-0' >10>1' @1' &?- 11' &?' <0 ?-' '1₰ 10@'0&?' &+10 f' <?R0' 01>#@<#@10' =1 &' ' '1₰ 1@1BB'&-' &?' <'@@&? 0' ¿ 'C?' <?-' --=1' = ' @1' &" +&'@@<-' '=<' 1' A?' A' ' 10 < ?' ' C@1'-1' A1B@< <B'&-₰ A1₰ <A+'0' I' <001-' 0?'0A' \' I' <' @<' 1H?10' A10' A110' &10' <A' & A'-1' H' @10' D'+<@1 'A1' &? \' @10' &?- 110' A1'-\' @1' A' ' &'<@>1₰ <' 10@'1 0' C? ' +1-' ' <' @10' C@1>1- \' 1-' <C2Ø <' 1-' 0₰ 0&'1- '10@?\' 1-' BD10B?-' &?- 11' C' .1- \₰A1> <- \' I' 1B1<?- \' 1-' 'B1@@10' A&?-' BD?-' <' ' = <-a' 1'' ' <' @<' 8+<@?1' A1' L@0' C' <-' <?' ><'-0' &? 1' @10' 1C '010₰ A1'-0' >10>1' @1' &?- 11' &?' <0B?-' '1₰ 10@'0&?' 0&" +&1 ' >1@@1 ' A<0B?-' '1₰ 1@1BB'&-

1>' C?' B1&' H' -=1' = ' @1' &'₰ <' @<' . 1+&?01' B&>₰ C@1'-' <' @? ' =<' ' 1-' 'B10' C@1>1-' C' @10' &10' A1' 0&-' &'<@>1' 10 1<- \' 1-' 'B1@ ₰ 10' 1-=&? >1' H' C@?0&? 0' A1' 01\' =&'<@L' @'1.10' 0&?-' . ?-A1>1-' 1>C&, 1\' <-'1- 1\' I' 1-' C&'-' A10 1' A10 ?' \' C' @1' &" A1' " 1->< a' I' 01\' @'1.10₰ H" 0&?-' A1₰ <>'0 11' A?' &" - 1' ' <' B<?01' H'@0' C'. -1-' A1' &? ' 1-' <?R' A1' 01\' A' \' =&'<@L' @'1.10' @&? '#'1-0₰ C'00'-' H'@0' &?-' C '0' A10' < BD<?- \' " 1 K a' I' , -.10 &-' 0? ' ?= ' #'1-0' I' >< BD<-A'01\' <' @<' +<@?1' A1' ! ⌂D ' A1A1'-0' ?-' <-₰ I' A<?R0' @'1.10' I' < ₰ BD<- \' A?' &'<@>1' #'1-0' I' BD< 1?L' <' @<' +<@?1' A1' ? ? ſ '' ' A&?-' '@0' -&?-' 1>1A'1' A?' A' ' &" A1' " 1-j >< a' -1' A1' -?@@ <?R₰ <' B<?01' H' -?@@ A1' 1?L' +1'. -1' A1'-0' @1' &'<@>1' " 1-.@1R 1' -1' '1-0' &?-' 1-' 'B1 ₰ I' H' @10' #'1-0' 0&?-' C '01\' D& 0' A1' >10>1' @1' &'<@>1₰ 10>1' -=1' K?' @1' &" +&'@@<-' ' <' 01\' A' \' @'1.10' C &'1' A1' 1j >1A'1' A1₰ <A+'0' I' <001-' 0?'0A' \' & A'-1₰ H' 0" @10' #'1-0' A<0B?-0' A1' 01\' A' \' @'1.10' 0&'1-' &?' , &-' C '01\' C' @1' A' ' &" A1' " 1->< a' &?' <0B?-0' A1' 010' A' \' @'1.10₰ <' ' @1' E< A1'-' A?' C '+1' 01<₰ C?' @1' 1>C0' 10 1<-' C&'<' ' A1' @<' 1' <?' C '1' . 1+1' 10' A1' 1H?10' A10&?#\' @1' C '+1' 01<@₰ 0<?-\' <? 1' C? 0?' 1' <==<' 1' <' <0B?-₰ C?' 10 ' ?₰ B'&-' <+&' ' A10' #'1-0' '00'-' C '01\' I' <C-A 1\' ' ' 0" 10 ' ?B'&-' -1' 0&' ' = '' ' C' '1#B 10₰ @1' &" --=1' ' C' <A+'0' A1' 0&-' B&?-B1'@@ C? +1'1 <' <@ C '1' . 1+1' B&+1-<#@1' 1>1A'1' 0&@&-B' B1&' H' @1' B<0' 1H?'1

1>' C?' B1&' H' A'C0' A10' @'1.10' A?' &" <+/-' B10' D&1? 10' &?-' 10 11' ? @<.1\' I' .0?-A1>1-' +1L1\' I' A101<01\' 1-' A'C0' 01? 1\₰ 0'#-' A1+D' ' @1' &" 1- &-' <-a' B&>1' 1-' @1' B&1' <-a₰ 1-' @10' 1B&'A10' A10' H?1?L' 01? 10' @10' 1- 10' &?-' 10 11' =<' \' H' @10' C@1'-'=0' 1-' >10>10' @10' 0?1 10' &C ?@1 ?-' 01' '-' CC '<' C0&-<' 0?<₰ '@&?' >10>10' @10' C@1'-'=0' ?-H0' -<CC< 1 &?-' <0' '1@L' 01? 10₰ -1' B&-'0<?-B1'<+&'1-' A'B1@@10₰ 1-'. ?-A1' >'0BD'1=

₰ F D1 1<0' <' D1' <@'<>1-' D&@A1-' <' F 10 j >'-0 1 ₰ D1' & &K' &=' <'-' < D1K' D1' C&0 @1₰ D1' '.D D' 1< ' &=' D1' , '-.' D<' -&K' '0' ' K<0' & j A<'-1A' # ' D1' ? D& ' ' &=' D1' 0<>1' < @'<>1-' ₰ D<' D1' , -'.D 0' &=' <@@ &?- '10' K' D'-' D1' 1<@>' &=' -.j @<-A₰ &' #1' BD&01-' &' B&>1' &' D1' < @'<>1-0' `' D1 1j <= 1 ' 'P' &' #1' D&@A1-₰ 0D&?@A' #1' BD&01-' '-' 1+1 ' &?- ' # ' 1&C@1' AK1@@'-.' <-A' 10'<-' '-' D1' 0<>1₰ KD1 1&=' 1+1 ' &-1' 0D<@@ D<+1' ! 11D&@A' &' D1' <@?1' &=' ! & ' D'@@'-.0' # ' 1< ' < ' D1' @1<0 ₰ <#&+1' <@@ D< .10₰ ?C&-' <' B1 <'-' <'-' B&- <'-1A' '-' D1' 0<>1' <?1'G -&' ><a'-.' 1 1C 100' 1- '&-' '-' D1' 0<>1₰ D<' 1+1 ' <-' D<' 0D<@@ #1' D&&01' &=' <- ' 0?BD' , -'.D 0₰ 0D<@@ D<+1' ! 11D&@A' &' D1' <@?1' &=' ! & ' D'@@'-.0' <' D1' @1<0 ₰ <#&+1' <@@ D< .10₰ K' D'-' D1' 0<>1' &?- 'KD1 1' 0?BD' D&&01' K' D' & D1' @'a1' 0D<@@ ><a1' 0?BD' @1=@'&-₰ & ' 1@01KD1 1' ¿ -A' D1 1=& 1' &?' & A' D1' , '-.G K'@@'-.' & ><a1' C@<'-' " 1B@< < '&-' &=' D1' 0<'A' <> 1₰ # ' D1' A+'B1' <-A' 001-' <=& 10<'A₰ <-A' <' D1' Q0C1B'<@/P' 1H?10' &=' D1' 0<'A' & > >&-0₰ D< D' & A<'-1A' D<' D1' , -'.D 0' &=' <@@ &?- '10' K' D'-' D1' 0<'A' 1<@>₰ &' #1' BD&01-' & B&>1' & <@'<>1-0' D1 1<= 1' &' #1' D&@A1-₰ 0D<@@ # ' BD&01-' '-' 1+1 ' &?- ' # ' 1&C@1' AK1@@'-.' <-A' 10'<-' '-' D1' 0<>1₰ KD1 1&=' 1+1 ' <-' 0D<@@ D<+1' ! 11D&@A₰ & D1' <@?1' &=' L@0' # ' D1' 1<' <' D1' @1<0' <#&+1' <@@ D< .10₰ K' D'-' D1' 0<>1' &?- 'KD1 1' <-' 0?BD' D&&01' K'@@ >1AA@1' &=' <- ' 0?BD' @1A@'&-

₰ 1B<?01' D<' C?' &+1 1'.-' & A' D1' , '-.₰ <' D1' . '1+&?0' & > C@<'-' & D'>' ><A1' '-' D'0' < @'<>1-' # ' D1' & > >&-0' &=' D'0' 1<@>' `' &=' -.@<-A'P' #1'-.' '-' D'0' < @'<>1-₰ '0' '-=& >1A' D<' ><-' &=' D'0=<' Dj =?@' @'1.1' 1&C@1' #1' . 1< @ ' '>C&+1 '0D1A₰ ?-A&-1₰ <-A' '-' C&'-' &' #1' A10 & 1A₰ # ' D1' , '-.' &=' "1->< a' <-A' D'0' '1.10₰ KD'BD' #1' &=' D1' >' ' &=' D1' , '-.' &?' &j +1 1'.-' & A₰ #1B<?01' D<' D1' A&' A<'@' <a1' &=' D'0' 0<'A' =<' D=?@ ?# 1=0' D1' ' E&&A0₰ 0&' D<' D1' D<+1' <a1-' &=' 1 BD<-0' &=' & a' <-A' , '-.0 &-' ?C&-' ?@@ E&&A0' <-A' 1 BD<-A'010' &' D1' <@?1' &=' ! '+1' D&?j 0<-A' &?-A0' K' D'-' < 1< ₰ <-A' &=' & D1' '1.10' <-A' 1 BD<-0' &=' D1' 1<@>' dP&=' -.@<-A'P' E&&A0' <-A' D< j 1@0' &' D1' <@?1' &=' K1- ' D&?0<-A' &?-A0₰ KD1 1&=' D1' D<+1' -&' 1>1A ' &=' D1' 0<'A' , '-.' &=' "1->< a₰ -& ' &=' -&-1' & D1 ' ! & <0>?BD' <0' -&-1' &=' D1>' B&>1 D' K' D'-' D1' 1<@>' &=' -.@<-A₰ -& ' -& D'-.' D<+1' '-' D1' 0<>1' ` 1<@>' &=' -.@<-A₰ P' <-A' D<' D1' E&&A0' #1 <a1-' &?' &=' D1' 0<>1' 1<@>' ; ſ )' D1' , '-.' K'@@'-.' &' C &+'A1' 1>1A ' =& ' D'0' 0<'A' @'1.1' 1&C@1₰ `D< D' & A<'-1A' <-A' 10 <#@'0D1A9/ P' D<' '=' D1' E&&A0' &=' <- ' &=' D1' 0<'A' D'0' '1.10' #1' & ' 0D<@@ #1' <a1-' # ' D1' 0<'A' , '-.' &=' "1-j >< a₰ & ' <- ' &=' D'0' 0<'A' '1.10₰ D1' , 11C1 ' &=' D1' '+ ' 1<@ =&'0' D1' '>1' #1'-.' 0D<@@ D<+1' &K1 ' &' ><a1' &' D1' < ' . '1+1A' 1 1 0' &=' 1H?10 ' ?-A1 ' D1' '+ ' 1<@@ K' D&?' <-' D1 8 ? 0?' ' &' #1' ><A1' &' <- ₰ =& ' 10 ' ? '&-' &' #1' D<A' &=' D1' E&&A0' 0&' <a1-' <-A' &' #1' <a1-¿ -A' '=' 10 ' ? '&-' #1' -& ' ><A1' # ' 0?BD' 1 j 1 0₰ D1' , '-.'&? ' &+1 1'.-' & A₰ # ' D1' A+'B1' &=' D'0' &?-B'@₰ 0D<@@ C &+'A1' &' D1' < ' . '1+1A₰ D'0' B&+1-<#@1' 1>1A ₰ <BB& A'-.' <0' D1' <01' 1H?' 1 D

₰ !& ' D<' A'+1 0' &=' D1' , '-./0' @'1.1' 1&C@1' #1=& 1' D'0' '>1' D<+1' #11-' &? @<K1A₰ <-A' . 1< @ ' +1L1A' <-A' A'0H?'1 1A' '-' A'+1 0' ?' 0₰ <0' K1@@ #1=& 1' D1' , '-.' '-' #'0' 1-BD₰ <0' '-' D1' &>>&-' 1-BD₰ '-' D1' 1B& A0' &=' KD'BD' ?' 0' D1' - '10' D<+1' #11-' ><A1₰ D<' D1' @<'-' '==0' '-' D1' 0<>1' ?' 0' W' # ?@1 ?-' 01' '-' C &C '<' C1 0&-<' 0?<₰J' KD1 1' D1' 0<>1' @<'-' '=0' -1+1 ' <CC1< 1A' &' 0?BD' ?' 0₰ -& ' D<A' , -&K@1A.1' &=' D1' 0<>1₰ '-' . 1<

⟩ ' ⟩ . '&-' "&*&- ≠ ' " ' %' L$ % @0 ' '6%2 ' %'6 ' $ %≠' $ % M

! ' 0 ! 5 ' B ' Ž .'B"!! .+/' 90 +& &# &.-' ' +! ."Ž' ' 'M-&* Ž' ' ! &"!' H

0# 'B"!!L' .+/2 2 +≠';!' 7& &-' !' .0- @

( ) ! !"Ž' ' 6!SO!2 ' 0-/!'" !' BP&'@ ! +' 2 +≠';!' *" - !/" .' 0;H!/+Ž 7 .2!' b../Ž "!' E!-' ;@ -&2 ' 0;H!<+2

0 + 7"&!2' C# &- &.-' ' ! 0& ' — ' '3 " &!Ž' -.' g+0 ++@ ! "&-*'H

B&+ j !"2 ' C# 2 +# - . ' "!#. "/' !' !"2 . - ǂ ! " -#!' . ' 3+ &- & 2 ' 0-+!2Ƶ !@ 0 +#@ ! "' -/ 1 E!' ' . !&"# / ! - & @

'0BD'1=' &=' D1' 0<'A' @'1 . 1' 1&C@1ƺ '=' 1 > 1A 'ǂ1' - & ' C &j +'A1A' '-' D'0 1D<@=;' ? ' & A' D1' , '- . ƺ K'@@' - .' '-' D'0 <01' &' C &+'A1' 1 > 1A ƺ D< D' & AD > 1A' <- A' 10 <#@'0D1A' # ' ? D& ' '&=' D'0 C 101- ' < @'<> 1 - ƺ D< ' -& 'C<-8 -1 ' ! @'01 ƺ L' . 1 - 1 ƺ - & ' <- ' & D1 ' ==' B1 ƺ = &>' D1 - B1=& D 0D<@@ > <a1' 0?BD' - ' '-' <- ' > <- - 1 ' ?' ƺ 1LB1C ' D< ' D1' @<'- '=:' '-' D1' 0<> 1' ?' ƺ #1=& 1' D< ' 0?BD' - ' #1' > <A1ƺ A& <CC1< ' '-' D'0 C &C1 ' 1 0& -' #1=& 1' 0& > 1' &=' D1' 0<'A' ?0 'B10 &=' D1' @<B1' KD1 1' D1' @1< 'Ơ & ' 0D<@@ #1' A1C1 - A' - .ƺ <- A' D1 1' D1' 0D<@@ #1' 0K& -' ?C&-' < &&aƺ D< ' D1' 'Ơ D1' 0<> 1' 1 0& -' '-' KD&01' <> 1' D1' 0<'A' <' ' 'Ơ 0?1Aƺ & ' D< ' 0& > 1' & D1 ' B 1A'#@1' 1 0& -' C=' ` D1'] ' - . / 0 ' P' &?- B'ƺ > <a1' 0?BD' < D' =& ' D' > ' - A' D'0 A' - <- B1' 0D<@@ 1 - A? 1' '@@ D1' - 1L ' < @'<> 1 - ƺ

ƺ F D1 1<0' # ' <' < ? 1' > <A1' D1' LL ' ' 1< ' &=' , '- .' 'BD< A' D1' 1B&-Aƺ =& ' K&' . 1< ' F & a0' +1 ' -1j B100< ' <@K< 0' &' #1' 0?0 <' - 1A' <- A' 0?CC& 1A' <#&?' D1' &K - ' &=' <@<'0ƺ <- A' D1' < BD10' D1 1ƺ D< ' 'Ơ &' 0< ƺ D1' 1<B&-0' #1=& 1' D1' & ' D1 1ƺ <- A' D1' @<B1' B<@@1A' < <A'01ƺ KD'BD' 'Ơ - '. D' &' D1' ' BD10' &=' D1' 0<> 1' &K - ƺ ' K<0' & A<' - 1A' <- A' 0 <#@'0D1Aƺ D< ' <@@' > <- - 1 ' &=' D'CƠ <BB?0 & > 1A' &' B& > 1' & D1' 0<'A' & ' &?' &=' - . @<- Aƺ D1' ! '0D1 ' &< 0' &- @ ' 1LB1C 1Aƺ 0D<@@ # ' - .' K ' D' D1 > ' <@@ D1' ' <0 <. 1' &=' . &&A' &- 10ƺ B&+1 - <#@1' =& ' D1' ?==' - .' &=' D1' 0<'A' 1<B&-0ƺ D1 1&=' > <a' - .' 1<0&-<#@1' " 1@'+1 <- B1' = & > ' ' > 1' & ' > 1' < ' D1' ' B& > '- .' D1 1ƺ &' D1' 1<0? 1 ƺ F D'BD' =& ' D1' ' > 1' 0D<@@ #1ƺ & ' &' & D1 ' '- '0 1 0' D1 1 &' # ' D' > ' & A<' - 1Aƺ ?C&-' <'-' &=' ''A ' =& ' D1' F 1 ' . D ' &=' 1+1 ' ?- ƺ `<- A' <0' > ?BD0P' <0' D1' 0<'A' D'CƠ 0D<@@ #1' &=' & <. 1Ɠ <- A' D<' <@@ > <- - 1 '&=' D'CƠ 1 - 1 '- .' &' 10 ' < ' D1' 0<'A @< 1' &=' < <A'01ƺ 0D<@@ C< ' < ' 1+1 ' D1' ' - ' D1 1' ` ' ' ' A ƒ P' 1 @'- . ƺ <- A' D1 1?C&-' ' ' 0D<@@ #1' @<K=?@ & D1 > ƺ '=' D1 ' K ' @@ƺ &' < ' D1 1' # ' ` ! &? 0P' " < 0ƺ K' D' <0' > <- ' '. D 0' D1 -' -1L ' =&@@&K' - . ƺ K' DA? ' C< '- .' <- ' > [ 1' =& ' D1' ' <'A' - 'Ɠ <- A' ' - ' B<01' D< ' D1 ' <#' A1' @& - . 1 ' D<-' ` ! &? 'OP' " < 0' <- A' '. D 0' <=& 10<' Aƺ D1 -' D1 ' 0D<@@ C< ' =& ' 1+1 ' " < ' <- A' '. D ' &-1' 1 - - ƺ <- A' =& ' D1' `& - @ ' " < 0P' <-' <@=C1 - - ƺ <- A' =& ' D1' `& - @ ' '. D 0P' <-' <@=C1 - - Ɠ <- A' > & 1& +1 ƺ D< ' -&' <- - 1 ' &=' 1 0& -' C 10? > 1' &' =<0 1 -' <- ' > <- - 1 ' D'C' & ' &< ' # ' <#@1ƺ & Aƺ & ' & D1 K'01ƺ &' D1' ' > #1 ' -& ' &' D1' &- 10' &=' D1' 0<'A' 1<B&-0' - & ' < <A'01ƺ -C ' &' D1' -1K' , 1 ƺ & D1 K'01' B<@@1A' D1' F D< =' < ' D1' 'A1' &=' D1' 0<'A' & ' &=' <@<'0ƺ ?C&-' <'-' &=' L@ ' Aƺ &' #1' @1+'1A' &=' D1' D'C' KD'BD' 0&' 0D<@@ #1' =&?-A' =<0 1 - 1A Ɠ <- A' D< ' D1' i<'A' 1<0? 1 ƺ KD'BD' =& ' D1' ' > 1' 0D<@@ #1ƺ 0D<@@ D<+1' =?@@' &K1 ' # ' D' > ' <- A' D'0 " 1C? '10' &' @1+ ' <- A' 1B1'+1' D1' &- 1 ' &=' D1' 0<'A' <'-0' '-B? 1A' <- A' '0' - . ƺ <- A' D1 1&=' &' > <a1' < > 1 - ' <BB& A' - . ' <0' 0D<@@ -11A' '-' D'0' /)' ='B1' # ' D1' '1K' <- A' &- &@ > 1 - ' &=' D1' , '- . /0' &- &@@1 ' D1 1;' KD'BD' < ? 1' <> &- . 0 ' & D1 ' D'- . 0' > <A1' '-' D1' 0<> 1' < @'<> 1 - ' K<0' 1+&a1A' <- A' <A - ?@@1A' '-' D1' < @'<> 1 - ' D&@A1 - ' < ' F 10 > ' - 0 1 ' D1' ! ' 0 ' 1< ' &=' , '- .' 1- ' ` D1' ! &? D9OP' &' D1' . 1<' <> <. 1' <- A' '-A <- B1' &= ' D1' 0<'A' F & a0ƺ <- A' # D1' . '1+&?0' <- A' '> C& <#@1' &0 0' &=' /)' D1' , '- . ƺ '=' 1 > 1A 'ǂ1' - & ' D<0j '@ ' C &+'A1A;' - A' =& '0&' > ?BD' &? ' [)' &+1 1' . -' & A' D1' , '- . ƺ # ' D1' A+'B1' <- A' 001 - ' &=' D1' 0<'A' & AƠ C' ' ?<@ <= A' 1 > C& <@ƺ <- A' <@0&' &=' D1' 0<'A' & > > & - 0' #1' - .' '-' D'0 < @'<> 1 - ƺ D< D' & A<' - 1A' <- A' 10 <#@'0D1A' D< ' D1' 0<'A' < ? 1' > <A1' D1' 0<'A' LL ' ' K ƺ' #1'= &>' D1 - B1=& D' < < ? 1' 1==1=#?<@ƺ W)' D&@A1 - ' <- A' a1C ƺ <- A' C? ' '-' A?1' L1B? '&=" =& ' 1+1 ƺ <BB& A' - .' & D1' 1 - & ' &=' D1' 0<>1

ǂ' ' :' R ' ' " ') %&&&H / ' Ơ %&&&H) @' +. - !' ' ' . D ' +. - !') 2 &/ ' F % " ' $ '$" 'L$ %' ' E 1' ' $0' ǂ $" ' %'L$ %' % -/' . ' ; !' ' ! ' 5)

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H' C@1<01' < - 1' &, <'-' @1' &'ʻ C' <A+'Ơ A1Ơ

R 1, 1- \' 5Ƀ 0. <A&?Ơ Q Ơ < 'B10 ' C01- ' C@1 > 1- ' <0j

01 > #@1\ʻ B&-0'A1 1 ' B& <1- ' @1Ơ ?0 'B1Ơ A1' <-a' @1' &''

I ' A1ʻ B&1' <-aʻ @1Ơ ?0 'B1Ơ <Ơ <00'01Ơ C-A 1' <0. '. -1\ʻ

@1Ơ 1 1<- \' I ' @< &? -1 'A?' (" C? ' @1' 1 > CƠ 10 1<- \ʻ

A1+W- ' 01Ơ D1? 1Ơ =1? 1- ' &? ' 1 > CƠ C<'1\' 1-' >< -Ơ

A1' @&// =11Ơ I ' 1. < A1Ơ A?' &'ʻ C' @1Ơ 10& 1 1\' "1-8

. @1R 1' C? ' @1' 1 > CƠ 10 1<- \' <--?1@ > 1- ' 1-' @1Ơ R > 1Ơ

A1' <0H?1' Ƀ 1'- ' @'BD1 ' C' & 1@1Ơ C& B'&-Ơ <-H' <ʻ

1 > CƠ A1' F '@@'<>' -K&@ > 1 0D1' < < A1' 10& 1 ' " 1C8'

. @1R 1' 1 ' C?'Ơ H?'@Ơ =1? 1C ' > Ơ A1' dR-A 1' C ' @&? '

C< >1- ' <00'. -1 > 1- \' A1Ơ A1 &? Ơ A1' &'ʻ H?1?L' C'

'1@L' <00'. -1@-1- mʻ < @< =&' \' '1-Ơ 0<?-\' 1. < A1' C< 1 '

-1' +&'@@1- Ꮆ A1Ơ H?1?L' A1 &? Ơ @1Ơ A' \' ?0 'B1Ơ 1 8ʻ

. 1<?- \' I ' = 1' &?C ' 10 11' I ' &?- ' +10 > <@1 > 1- '

& ' &C' < A1' I ' &+1' . <?- 1\' A1@< 1Ơ &? <> <1Ơ C< 1\ʻ

I ' &? 1' 0&?+1- ' 0&?- ' > Ơ A1' H?1 1 ' I ' 10C'1 ' A1 &? Ơ

A?' &" A1Ơ H?1?L' '@Ơ +&'@@1- ' @&? ' <00'. -1 > 1- \ʻ @<

&?' '@Ơ -&?- ' -1' 0<?-\' . h?-A1' A<?- . 1 ' I ' A'@'. 1-B1' <+&' '

C& 1- ' B&-'0<?-B1' A1' '1@L' A1 &? 0ʻ C1' < 1?L' 10C'1 ' I '

H?1 1 ' I ' C? ' @&? ' C< 1 > 1- \' 1 1 ' < A 1' -1' C&'1- '

0<?-\' @1001 ' =<' 1' @&? ' M+'B1' I ' , +'B1' < &" I ' @1' C&1C@1'

A1@'+1 Ꮆ I ' H?1' 1LC1A'1- ' < &" I ' < 0&-' C&1C@1' &?'

D&-10 1' &?' B&-+1-'1- ' <Ơ &==' B1Ơ A1Ơ A' \' ?0 'B1Ơ 1 8ʻ

. 1<- \' Ƀ & -1 &'10 ' '@' > 1ʻ A1' H?1 1 ' I ' 10C'1 ' @1Ơ

A' \' A1 &? 0ʻ I ' 1?L' C' A<?- . 1 &<0' > 10-10' 1- 1 1 '

@&? ' C< >1- ' <+1 ʻ H?1?L' < @< =&' ''\' C? B1&' =<' 1' A10' &- '

Ƀ A1 > <?-A&- ' 10 1' 1. < A1\' &?' -&-' 10&-<#@1 > 1- ' ='ʻ

+&? 1\' 1-B&?- 1' @1' A1 > 1- ' A1Ơ A' \' ?0 'B1Ơ 1 . 1 <1<- \'

I ' &//-1' ' I ' A1' B&-0'A1 1 ' <?L" @1Ơ . O?-A1Ơ I ' B&-8ʻ

' -?1@L' B&0 <. 1Ơ I ' 1LC1-01Ơ H' @1Ơ A' \' ?0 'B1Ơ =&?- ' 1-'

@&Ơ' 1- 1-A<?-B1' 1-' =<'0<>' @&3' A' \' &=='B1Ơ I ' M+'B1\' <

&'ʻ 1 ' @1' . ?-A1' CA1' I ' A<><. 1' H'@Ơ &?- ' A1' @&? ' =11Ơ

I ' . < -1' A1' Bi&' H'@Ơ 0&?- ' <0<. -1\' ? 'B ʻ H<>&?- 8ʻ

1 &'> ' < . ?-' C< ' C@?'Ơ H' @&? ' A' \' =11Ơ I ' 1. < A1 '

A1' &" ' 1 ' ?' B1&' C' <?A& ' 1' A'B10 ' 1- ' C@1 > 1- '

A& A'-1 ' H' @1Ơ A' \' ?0 'B1Ơ 1 . 1<- \' I ' &3-1' A1'

&" C? ' @1' 1 > CƠ 10 1<- \' I ' B#?-' A1' 1?L' 0&'1- ' C<'1\'

1Ơ > <'-Ơ A1' @&? ' A' \' =11Ơ I ' 1. < A1Ơ A1' &'ʻ 1-' @1Ơ

\' R > 10ʻ C ' @1Ơ > <'-Ơ A1Ơ 10& 1 Ơ " 1- . @1 1' C3' @1'

1 > CƠ 10 1<- \' Ꮆ 1 ' ' > 10 > 10' @1Ơ 10& 1 Ơ 0&'1- ' 1-?\'

<' 11&' =1' 1ʻ C' '00'- ' H' @1Ơ A' \' ?0 'B1Ơ 1 . 1<- Ơ I '

& > 1' -1' B&+ 1-A < C? ' @< C30?' 1' A1' @&? ' A' \' C< 8ʻ

> 1- \' < ' A1' @1001 ' =<' 1' @&? ' A' \' &==' B1' ' +'B1' < &" I '

A1@'+1 ' @1' C&1C@1' H&?- ' < =1' 1' 1-' @&? ' &==' B1Ơ <+W- A' \

' ' !0

3 6 A ' !' . 1 1 . -2' ' &2' "!2!- ' 3 "+& 1 !- ' 22! 1 ; +! / ' B. '" !'

' & ' 1 @' +! 2!' 0"" . ' !"!&*-' . "/' !' M&-*' ; @'

!' / ' &#!' . ' !' 1 . 2 ' 6 ! ' !"!-/' -/' 1 . 2 ' *" #&. 02' ."/2' ' 7 ' -/'

&2' "12!- ' 3 "+& 1 !- ' 22! 1 ; +! / ' .' #. -2&/ !" ' . 7' !' 02L'

Ơ &#!2' . ' !' M 1 *(2' 4 !-# ' -/' . ' !' . 1 1 . -' 4 !-# ' !' !' M&-*'

O2 &#!2' 22&*-!/' ." E&-*' 22&2!2' !' M&-*(2' !"H! - 2' <

-/' ."-!@' ." !' &1!' ; !&-*' ; ! ."!' &2' &1!' 7!"!'

+7 @2' &/' &-' -/' ." !&"B!!2' -/' 6!7 "/2' . ' !' M&-*'

; @' !' "! 20"!"2' . ' -*+ -/' ."]d &1!' ; !&-*' --0 ++@' &-'

!' "12' . ' 2 !" -/' &-' &# !+' ; @' !SO +' 3. "&. -2' _

0- &+' !' &1!' $ ' V &++& 1' M@-7 . &1!"2 !' + !' "! 20"!"

U. ' -*+ -/' -/' 2&-#!' ' !@' 7!"!' 2!- ' ." E!' ." !&"

@1!- ' 22&*-1!- 2' . ' !' M&-*(2' !; ."2' 7 ZK ; @' 0# '

22&*-1!- 2' 2. 1! &1!2' -. &-*' 7 &++' @' 7 & .0' ++. 7 -#!2'H

; @' 7 &# ' !; ."2' !' 2 &/' 02 &#!2' !"H! - 2' -/' ."-!@'

'!' ; !!-' -/' "!' '!"@' ; /+@' ." . .' 2+. 7+@' -/' 7 & ' *"! '

!+ @' ." -_'!"' &/=' -/' 1 ."!. '!" !-' "!' 0' .' +. . E'

!" -/' /&2#. '!" !; ." 2' . ' !' M&-*' . ' 7 . 1' !@' 7 &+'

'!' !&" 22&*-1!- 2' 7 !"! 2' !@' '!' -. ' -." 7 & .0'

"! ' -!" -/' &+&*!-#!'# -' !@' '!' M-. 7+!/*!' . '2O# '

!; ." 2' -." .' /&2#. '!" --/' +. . E' !" !1' -/' ." !&"

3 @1!- 2' ." ! ' # -' !@'*&@!' !- &. -' 7 & .0' -!*+!# &-*'

!&" 0 @' -/' !"'&#!' .' !' M&-*' 1H/' !' /&2# "*&-*' . ' !'

3!. +!Ơ -/' ' & ' &2' ; @' -.' &6 ! -2' !% !/&!-' .' !' M&-*'

-/' .' &2' 3!. +!' ." /-!2' ." #. '!-&!-' .' !' &#!2' . '

!' 2 &/' 02 &#!2' !"H! - 2' -/' ."-!@' .' +. . E' !" -/'

/&2#. '!" !' 2 &/' !; ." 2' -/' !1' ; @' / -*!". 02' ! -2' .'

!-"! ' .' '!' 3 @1!-' . ' !1' 7 .' 2. 1! &1!2' ." 2.' /. &-*'

/ .' /!2&"!' -/'/!1 &&/' .' ; !'"!7 "/!/' ."0-"! <- ;+@' '. 0"!/'

* &-2' !' ' . ' !' 2 &/' 02 &#!2' !"H! - 2' -/' ."-!@ >

-/' .' #. -2&/!" +2.' !' *"! ' -/' #. -&-0 +' .2 2' -/' %L'

!-#!2' 7 &# ' !' 2 &/' 02 &#!2' /.' 0-/!"*.' &-' !&" !-/k

-#!' &-' /. &-*' !&" 2 &/' &#!2' -/' !"' &#!2' .' !' M&-*' -/'

!' *"! ' .22' -/' 1 *!' 7 &# ' !@' '!' . ' !&" B!!2'

-/' b &-' &-' ' ' !@' "!' 22&*-!/' 02 &#!2' 7 &# ' 7 . 0+/'

1 . 0-' &-' *"! ' 3 "' .' 1 ."!' -' !&" 2 &/' B!!2' -/' 6!k

7 "/2' . ' !' M&-*> -/' !"!0 . -' ; @' 0 ."& @' . ' &2' "!L'

2!-' 3 "+& 1 !- ' .' ."/ &-' ' !' 2 &/' 02 &#!2' !"H! - 2' -/'

."-!@' . ' !' M&-*' ." !' &1!' ; !&-*' -/'!' !"@' . ' !1'

; !' &/' &-' -/' ." !&" 2 &/' B!!2' -/' 6!7 "/2' . ' !' M&-*'

&-' +&!' 2 &/' !"12' ; @' !' -/2' . ' !' "! 20"!"2' . ' -*+ -/'

." !' &1!' ; !&-*' J -/' ' !' 2 1!' "! 20"!"2' ; !' ; . 0-/!-'

. ' / . ' &2' 2. ' !"!' ; !' -. ' -!!/' ' !' 2 &/' 02 &#!2'

!"H! - 2' -/' ."-!@' ." !' 30"20&' . ' !&" 2 &/' 3 @k

1!- 2' 2 +' '!' . ' -!*+! ' /. &-*' !&" 2 &/' 0 @' /' !"' &#!'

. ' !' M&-*' -/' /&2# "*&-*' !' 3!. +!' 7 . ' '!' . ' /. ' &-'

!&" &#!2' ." !2 &/

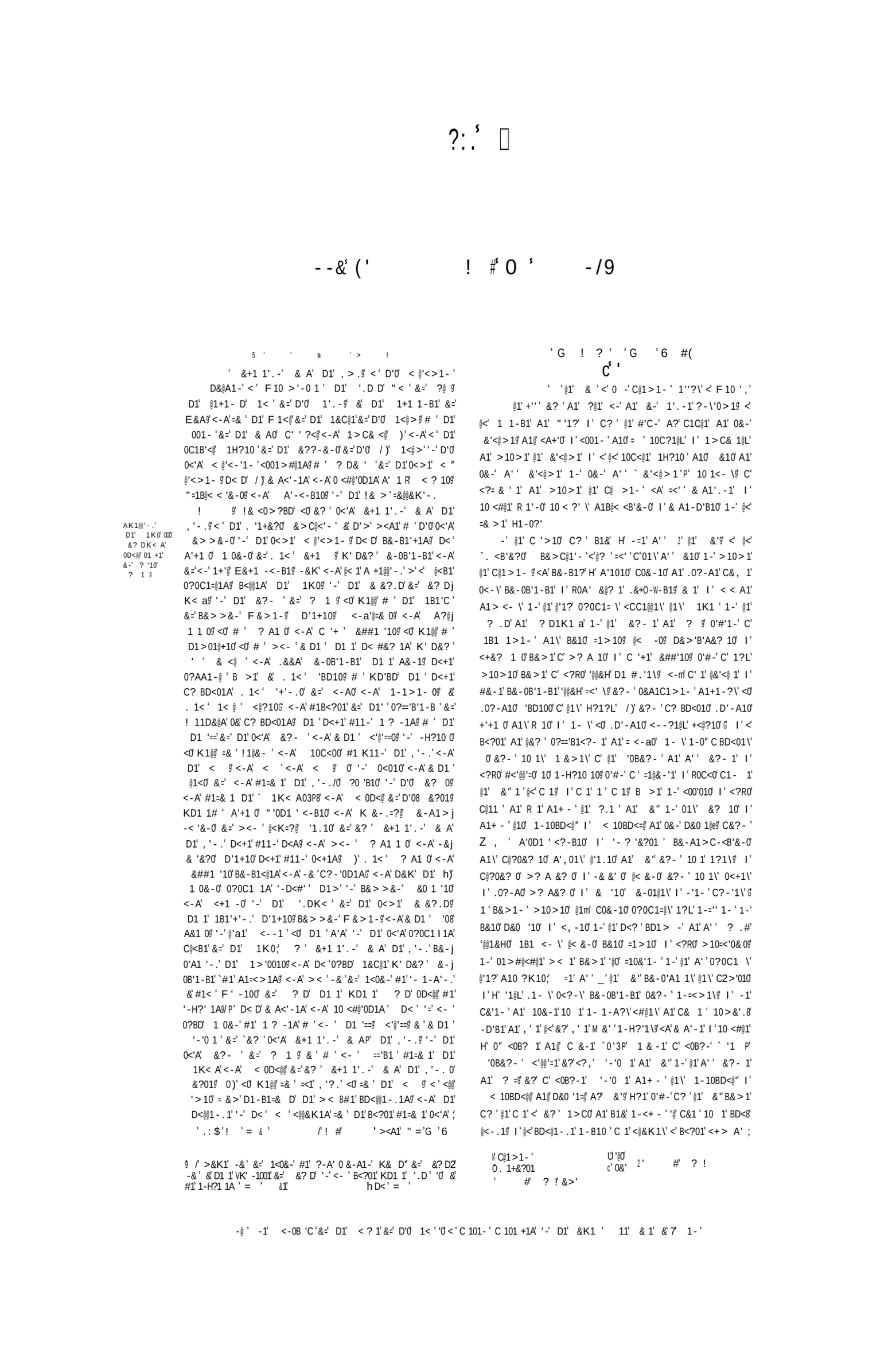
@' &2' 7 2' &"2' "&- !/' ' !-* ' ". 1' !' 3 "+& 1 !- ' 6 . ++' &-' @(2' /& &. -' . ' !' 0 !2' Ơ ' &2' "! !""!/' . ' &-' !' +/'

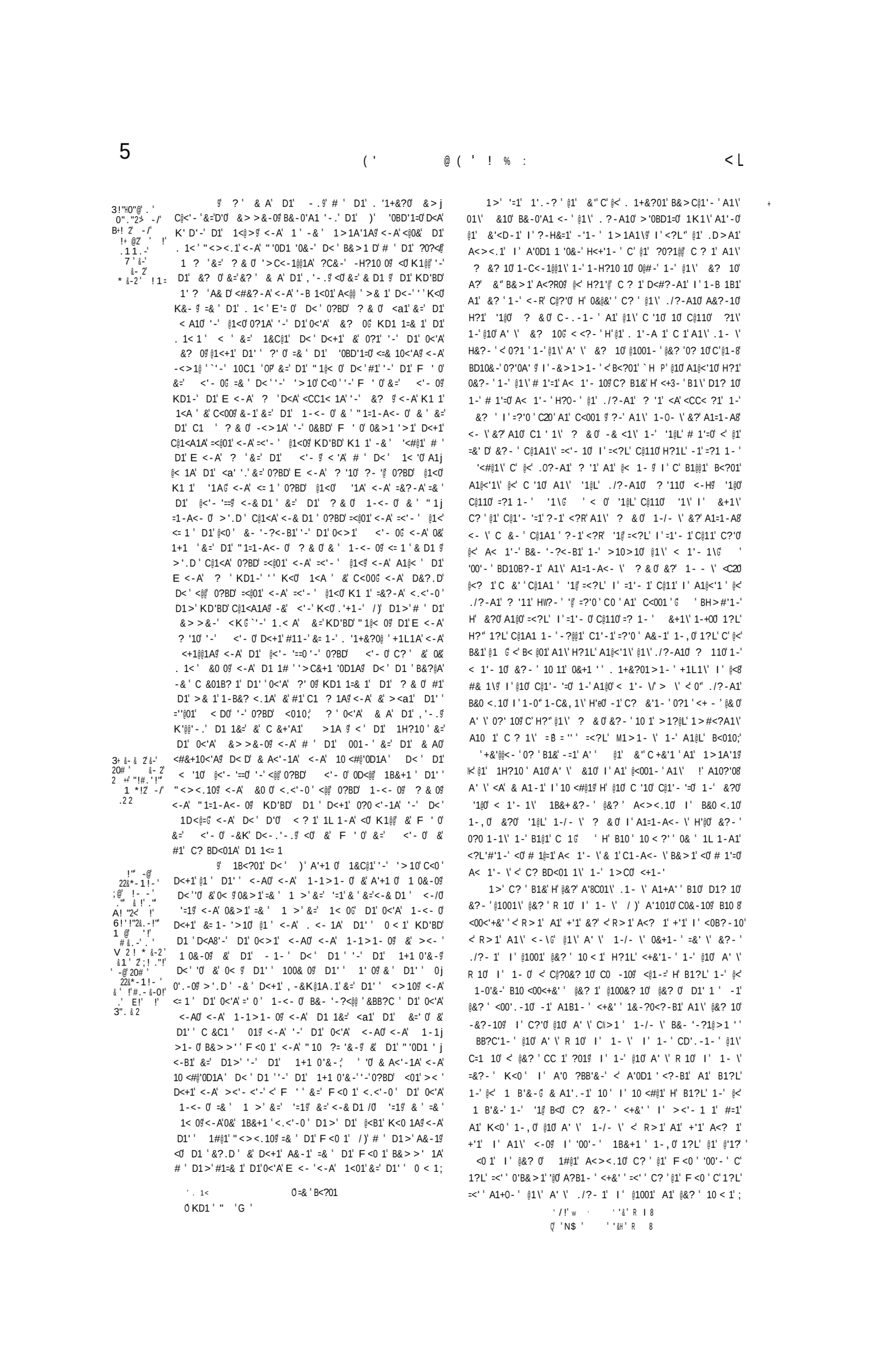
; "&/*!1!- 2' 2' Ơ 0 0 1' !" 2!(Ơ ; 0 ' & ' &2' -. ' &-2!" !/' &-' -@' . ' !' +/' /& &. -2' ." " -2+ &. -2' . ' !' 0 !2' ' + "*!'

!' -27!" . ' !' 3! & &. -' . -' !' 3 "+& 1 !- ' 6 . ++' &2' U B& ' 0' ! & (!# !' - ". /0# &. -' . ' 5 (°C' . ' &2' V ." E' J

. - ' ' e C ' ^$ '

& '





? +1?' &?0' =&' \' H' B='@1' & A1-J-B1' -1' 1'.=@1' @'1?'
S =& 0H@ @&?1' @1\' C2'5Ø 1-0- \@ A1+ - ' @1\' @1001' I ' @1' .W?- 1'
A1' @&? ' A' ' 10 < 1' 1-' @1' > <51' I ' =& > 1' 0?'0A' '@ =?1 1- '
C?-'00 '<#@1' A1' K<0 @ 1 ' <?L" @&?1' ?!' @1' A' ' .W?- ' I '
@1001' @1\' A' \' C 0' 1-0- \' A1\' A' \' R 10' I ' 1- \' C-.-1- '
@1\' C=1 10' <' @&? ' CC 1' &C01' A1>10-1' <@ 1>C0' A1' K<0 '
=<' G ' H' B10 ' & A1-J- B1' 0& ' 1L 1-A1' <?L'=B-' <@ K<0 ' C'
'1@L' R- ' \' =<' ' A1+ - ' B10 ' & A1-0-B1' B&>1' <'C0

1>' - 1' 5?' @1' H" B&-0'A1 <- ' @1\' ./?-A10' CA10' I '
A<><.10' H?1' 0C?+1- ' =&' \' &?- ' < 1-?\' I ' , ' 1>##<8
#@1>1- ' <+1-A1 &?- ' 1-' <C0' 0'= -' <' @? ' >10>10' B&>1'
<0' C@?0& 0' A1\' 01\' .10@ A1' B1&' ' @<' &?1' 0'#-' A'C01\'
1-A' 1>1- \' I ' 0? 10' C? ' -=1' K ' @1' &" B&>1' <?R0'
0? 10' C1- 1' C 1' 1 ' C 1' &?- ' 10 1' C '0%\' A1+2 ' A' 01\'
?0 'B10' A1' C110@ <00'.C1\' C' A'C01\' B&>'00'&-0' A1' &"
1-' A'+/01\' &?- 110' 1-.@1R 1@ I ' A'+/01m' C@110' I ' CB10010'
0? ' 'B1 @10' 1-A' 1>1- \' &?- ' 0&+1- ' 10 1' =<' 1\' I ' C1-8'
A<- \' A1+<- ' >10>10' @1\' ?0 'B10' '1- ' A1 >'-1\@
@1\' H?1L' C@110' I ' CB10010' 0&+1- ' &?- ' 10 1' A'0B&- 1-?\'
C' =1'0<?-B1m' A1' -&+1 '@ B&>'00'&-0' A?' C110' 1-' `1 - /@ '
'B1@@10' &?- 10@ <' . ?''A1' C'1' - 1' A ' ' @1' &" I ' A1\' 01\'
@'1.1 @ I 81-' 1 < A<B'&-' A1\' >10- 10' @1\' C@110' I ' 0? 10'
I ' A1' @<' A1@', <?-B1' A1\' 01\' A' \' 1.10;' ' 0? ' B1&'
- 1' A' '_' @1' &" +&'@@<?- ' C +&'1 ' A1' 1>1A'1' A1' @<0 1- '
I ' <?A@& ' 1' 0?'0A' \' <A' & A1-1' I ' 10 <#@1 ' H1- ' &?0' A1# '
0? 10' I ' C@110' I ' C110' 1C' 'B1@@10' <CC-A 10' I ' <==<' 10'
A1+ - ' ?0 'B10' A1' C110' 1-' <0B?-1' &?- 0' " 1 - .@1R 1@
@10' Aa\' C@110' I ' C110' 1C' A1@0' 0? 1 ' <==<' 10' -1' &'1- '
> ' A'0B&- 1-?\' C' A1@0' -&+1A'B&>'00'&-0' A1' C110' <==<' 10@
<<'0' 10 &'1- ' >10-=10' @1\' C@110' I ' CB1001@ 1-' @&? ' =& B1G
' 1'1- ' \' ?0 'B10' A1' >10>10' @1\' C&+1@" B&>' i0'&-0'
1-0" < 0'.-1\@ < ' B1&' T'@':' <>&?-' @1\' 1BH A10' A1m'
A' \' C@110' ' CB10010' A1 - ' 1?L@ C&'< ' I ' <?<& ' 1' A1\'
@1\' A' \' C@110' I ' CB10010' B&- '-?1 @ I ' >10>1 ' @1\' C@110'
' CB1001' ' &?\' @1\' A1C1-A<- \' A'B1@@10' &'1 ' I ' =' -<@@'
>1- ' A1 >'-1 @ 0'B&>1' @1\' <?R i' ?0 'B10' C &? ' '
A '001- ' <+&' ' =1' ' A1' ' 1-' 'B1@@10' 0" -? ' -& 1@ ' B&' '0@
0' -' 1?0 ' 10 1' =1a

@ 1>' B&>1' 1-' @1' C@1>1- ' 1-?\' <' F 10 '?' @<' +'1-8'
a1A'1' CBD1' -' A1+[- ' @1' =10 ' A1' 1'- ' '@@<' <-' A?'
1'.-1' A1' &" H?& 10 ' -&1=' >1@ C? ' @1\' .W -A10' >10BD1=0'
' 0)' 1>C& <#@1\' &CC0 '&-0' =<' \' <i' 01\' @1.10' A1' &?- 1'
A1' 1 1=& A' C' 1-B &BD1>1- \' ' 1L & B'B-0' =<' \' C' @1\'
'0E&?- m' A1@' A' ' E-?- 11' C? ' @1' 1>C \' 10 1<- \@ -<A@
.<' 0' B&>1-B1\' I ' & B'&?01>1- ' B&- '-?\@ <' B<?01' H'
@1\' A' \' '0B&?- \' 1-' @&? 10' -10' 5 -' @'1?0' ! ?!' @&? 10'
-10' 1-?\' ' ==-'\@ 1-' @10' H?1L' <?R0' @'1?0' '@0' -&?-"
C&<' ' C1' <?A & ' 1' C' @&? ' &=='B1' A1' C?A 1' <0B?-1' 1-8
H?1 1' &?' 1-H?10 @ C-. 1-' A'1010' V)' 1-H?1 0 10'
A&=='B1' I ' 1-A' 1>1- \' A1\' @<#& 1 0' < '@ 0' I ' <?=0'
A@, 01\' BD&010@ & A&-1\' C' 10 < ?a' A10 1' 1-H?'\' A1+/- '
@1\' ?0 'B10' I ' &>'00'& 0' A1' @<' C110@ I ' H?" 1-' -?@@
>< 1' < 1'.-1- ' -1' <CC '1.-1- ' A10 1' 1-H?'\' C' 1?L'
'0B&?? 10' 1-' @&? ' -10' -<? 1>1- ' -1' 1-' <? 1' @'1?'
A1+/- ' 1?L@ ' @1\' H?1L' 0B&?- 10' C' =& B1' A1' '1@L'
1-H?1 '0' 1-H?10 '0' A&=''B1' I ' 1-A' 1>1- \' -'1- ' A?1@
<1- ' -1'V@&'<@>1- ' C '\' A1+/- ' @1\' Aa\' '0B&?- \' 1-'
@&? ' ? -10' I ' <'@@&? 0@ I ' C ' @1' -&?-' +& ?1' A10' A' \

) -'!"".-!.0Z' 6! ! & &.-

@ I ' ' I ' <?RO' $ B ' ; ' ' 4 C ' ' I
0 1?H?1 10' :

&+'A1A' <@K< 0 ' D< ' D'0' A'-<-B1' D&@A' -& ' C@<B1'
#? ' KD1 1' D1' =' 0 ' 1-<- 0@ #1=& 1' D1' 1<01' <-A' E <- '
&=' DA ' 0<'A' 0 < 10' '-' D1' <--1 ' <-A' ! & >' <#&+10<'A@'
K1 1' C?-'0D<#@1' &=' F<0 1@ <-A' <@0& KD1 1' <= 1 ' D1'
0<'A' E <- ' <-A' 1<01' D1' 0<'A' =' 0 ' 1-<- 0' &=' D1' 0<'A'
<-A0' <-A' 1-1>1- 0' <a1' D1' &=' 0' < ' D1' ' >1' &='
D1' F<0 1' A&-1@' &' D1' ' &K-' C &C1 ' 01G' -A' D< '
D'0' A><-B1' 0DC@@' 1L 1-A' <0' K1@@' &' F<0 1' # ' 0?BD'
1-<- 0' A&-1' #1=& 1' D'0' A'-<-B1@' <0 <= 1

@ ? ' & A' D1' , 'C.' B&-0'A1 '-.' D1' . 1< '
&0010' <-A' " <>< .10' KD'BD' &= 1- ' >10' D<+1' 1C>1@ <-A'
#1' @'a1@ ' &' B&>1' D1 1<= 1 @ <0' K1@@' &' D'>01@=' <0' &'
><- ' &=' D'0' '1.10@ =& ' D< ' KD1 1' <0' K1@@' A'+1 0' -8'
A'= >1- 0' <-A' i ?@ :' =& ' &? ' & A' D1' '-.@ <0' & D1 '
?' 0' #1 K11-' < '<CA' < @ D<+1' #11-' <a1-' #1=& 1'
A'+1 0' ?0 'B10' &=' D1' 1<B1@ <00'.-1A' # ' 01+1 <@ &>8'
>'0<&-0' &=' &? ' 0<'A' & A' D1' 'C.' '-' A'+1 0' &?- '10'
&=' -.@<CA@ <-A¢ A'+1 0' @1<0' C-A' &B10010' ?C&-' D&01'
-A'= >B=' 0' D<+1' &= 1-' #11-' ><A1@ <-A' D<-.'-.' #1=& 1'
D1' <>1' ?0 'B10' -& ' A1 1 >'-1A@ D1' KD'BD' @1<0' <-A'
&B10010' D<+1' #11-' &= 1-' A'0B&- '-?1A@ # ' ><a'-.' &='
-1K' &>>'00'&-0' &=' D1' 1<B1' '-' D&01' &?- '10@ &'
D1' . 1<' &00' &=' &? ' 0<'A' & A' D1' , '-.@ <-A' &=' D'0'
?# 1B 0@)' '-' " 1@< ' &=' D1' <>1' @1<0' <-A' ?' 0@ <-A'
&=' D1' " 1@'+1 <-B1' &=' D'0' i<'A' ?# 1= 0';' -A' C&-' D<'
&? ' & A' D1' , '-.' K'@@'-.' &' C &+'A1' 1>1A @ C=' D1'
001-' <-A' ? D& ' ' 10<'A@ D< D' & A<'-1A' <-A'
10 <#@'0D1A@ D<' '-' <@@' ?BD' ` @1< @ ?' 0' <-A' &j
B10010' 'C' D1>'V P' &' #1' <a1-' <-A' &' #1' ><A1' #1= K1'
?0 'B10' &=' D1' 1<B1' '-' <' ' &?- '#=' -.@<CA@ D1'0<'A'
C@1<0' <-A' &B10010' '-' 0?BD' ?' 0' C'#1' A& - 10D<@@'-& '
=)1' A'0B&- '-?1A' # ' 0?BD' -1K' &>>'00'&-0' &=' D1' 1<B1'
&' #1' ><A1@ #?' D&01' @1<0' <-A' &B10010' 0D<@@ 0 <-A'
'C' D1' ' !& B1' G <-A' D1' ?0 'B10' '-' D1' 0<>1' -1K' &>j
>'00'&-0' 0C' <00'.-1A@ <= 1 ' D<' D1 ' 0D<@@ D<+1' D1' 1j
B& A0' &=' D1' 0<>1' @1C0' <-A' &B10010' #1=& 1' D1>@
0D<@@ D<+1' &K1 ' <-A' ? D& ' ' &' B&- '-?1' D1' 0<'A'
@1<0' <-A' &B10010@ <-A' D1' 0<>1' @1<0' <-A' &B10010@
@<-A' <@@ DC ' A1C1-A' ?C&-' D1>@ &' D1<' <-A' ='-<@@ ' (
A1 1 >'-1@ <0' D1' & D1 ' ?0 'B10' >'.D ' <-A' &?.D ' &'
D<+1' A&-1' &=8<-A' '-' D1' 0<>1@ '=' -&' C1K' &>>'00'&-'
D<A' #11-' ><A1

! F D1 1<0' '-' D1' < @'<>1- ' D&@A1-' < ' F 10 G
>'-0 1 ' D1' ! 'A< ' -1L ' #1=& 1' D1' ! 1<0 ' &=' <'- '
' < @ D1' '- D' 1< ' &=' &? ' & 1 <.-' & A' D1'
,'-.' D< 8-&K' '0@ W' ! & ' D1' . 1< ' '0BD'1=0' <-A' '- &8
@1=<#@1' CC 100'&-0' A&-1' &' D'0' '1.10' &=' D1' &?- '&='
1 1=& A@ # ' Q -B &<BD' .0' $ ' <-A' L & '&-0' A&-1' # '
D1' D1 '==0' &=' D1' 0<'A' &?- '=& ' D1' '>1' #1'-.@ @< 1'
#1.?-' <-A' K &-.=?@@ ' B&- '-?1A@=& ' D< ' D1' 0<'A' D1j
'==0' '-' D1' ' ? -0@ C-A' '-' & D1 ' @<B10' <= 1 ' D1' '
? -0' D&@A1-' <-A' 1-A1A@ '-' D1' KD'BD' & #K' @<C10'
D1 ' D<+1' -&' ? D& ' ' -& ' &KC ' # ' D1' ' ==' B1'
&' <a1' <- ' -H?' ' & ' -H?10 @ D<+1' <a1-' A'+1 0'
-H?' '10@ -H?10 0' &=' ==' B1@ <-A' -A'= >1- 0' &=' <j
#&? 1 0@ <= 0>1-@ <-A' & D1 ' A'+1 0' D'-.0' & A<'-1A'
' < ? 1' &' #1' '-H?' 1A' #1=& 1' ?0 'B10' <-A' &>>'0j
0'&-1 0' &=' 1<B1@ <-A' D<' '-' -&' <--1 ' #1@&-.' -& ' C1 j
<'-' &' #1' '-H?' 1A' # ' 0?BD D1 @==" '-' D1' ' ? -0@ -& '
0)' '-' <- ' & D1 ' @<B1' #1=& 1' D1>' ' <CA' D1' KD'BD'
D1 '==0@ # ' ! & B1' &=' 0?BD' -H?' '10' -H?10 0' &=' ==' B1'
<-A' -A'A@>1C 0' `-& ' A?@ ' -& ' @<K= '@@ '\' P' <a1-' #1=& 1'
D1' 0<' @ D1 '==0' '-' D1' ' ? C0' <-A' `KaD&? 9/' 5' <-A' =&

' %
)' 0@ !Z' Y -/H +!!Z' -/' ".#!22!Z' &-' !' 2 1 !' ' ! '
Z' 1 /!'.'" /.-!' ' ! '5
< -#". # 1!-2'). !"7&2!' -.'"
' 0-/0!+@' -/' 0-+ 7 0++@' f ! +2! 7 !"!

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D1' -& ' A&>' - .' &=' D1' 0<'A' @'1 .1' 1&C@1' &' D1' 0<'A' ? -0' ')' D1' 0<'A' D1 '==0@ A'A' <a1' K &- .=?@@ ' &' D1' ' C &C1 ' 01' &=' A'+1 0' &=' D1' <'A' @'1 .1' 1&C@1' ! ' -10' <-A' >1 B'<>1- 0' &=' L'@' ' <-A' & D1 ' . 1<' ?>0@ ' -' . 1<' CC 100'&-' ?-A&' - .' <-A' " 10 ?A , &-' &=' ><- ' C&& ' 1&C@1' &=' D1' 0<'A' D'1 .10@ '=' 1>1A ' 0D&?@A' -& ' #1' D<0 '@ ' C &+'A1A' ' -' D< ' 1D<@=G' # ' ' &-0'A1 < '&-'&=' KD'BD' '0BD'1=@ ' K<0' & A<' -1A' # ' D1' ? D& ' '&=' D1' 0<'A' < @'<>1- @ D< ' -&' D1 '==' -& ' -A1 ' D1 '==' &=' D1' 0<'A' &?- @ = &>' D1' 0<'A' ! 'A< ' D1-' =& K< A@ # ' &@&? ' &=' D'0' ==' B1@ 0D&?@A' <a1' <- ' -H?' @ -H?10 ' &=' ==' B1@ & ' -A' >1- ' '-' D'0' ? -@ D< ' &?. D ' -& ' # ' D1' <K' &' #1' <a1-' '-' D'0' ? -@ -& ' D< ' D1' # ' &@&? ' &=' D'0' ==' B1@ 0D&?@A' <a1' <- ' -H?' @ -H?1 ' &=' ==' B1@ & ' -A' =@>1- ' '-' <- ' & D1 ' @<B1' <= 1 ' `D '0 (' ? -' D&@A1-' <-A' 1-A1A' G -& ' D< ' D1' 0D&?@A' <a1' &=' <- ' &=' D1' 0<'A' '1 .10' &=' &? ' &+1 1' . -' & A' D1' , '- .' <- ' !' -10' & ' >1 B'<>1- 0' =& ' <- ' D' - .' & ' <?01' D< ' C1 <'-@ 1 D' -& ' &' D'0' ? -' ' ==' B1@ -& ' <- ' 0?BD' D1' -&?0' & ' . '1+&?0' >1 B'<><' ' &=' <- ' &=' D1' 0<'A' '1 .10' <.<'-0 ' 1<0&-@ =& ' " 1=<?@ ' &=' D&>' - .@ &' D1@ 0<'A' ? -' & ' &' & D1 ' @<B1@ & ' =& ' & D1 ' <?01' # ' &@&? ' &=' D'0' ==' B1@ ?C&-' <'-' &=' ! & ' &?-A0' # ' D' >' &' #1' C<'A' &' &? ' &+1 1' . -' & A' D1' , '- .@ D'0' H' 0' <-A' ?BB100& 0@ <0' &= 1-' <0' 0?BD' D1 '==' & ' -A1 8 D1 '==' D1 1&=' & ' &=' <- ' 'B@1' D1 1&=' #1' A?@ ' B&-+'= @ < ' D1' ?' ' &=' ?' &+1 1' . -' & A' D1' , '- .@ & ' &=' D1' < ' . '1+1A' D<' K'@@ 0?1' <0' K1@@ =& ' D1' , '- .' <0' =& ' D' > 01@=' -A' D<' D1' < ' D<' K'@@ 0?1' '-' 0?BD' <01' D<+1' D1' <@=' &=' D1' 0<'A' ?>@ &.1 D1 ' K' D' D'0' " &?#@1' <><.10' &' D'0' C &C1 ' 01G' <-A' D<' D1' < ' '-' D'0' <01' . '1+1A' D<+1' &K1 ' # ' D1' ? D& ' '&=' D1' 0<'A' < @'<>1- ' & 0?1' '-' D'0' 1D<@=' <.<'-0 ' 0?BD' D1 '==0@ <-A' -A1 ' D1 '==0@ <0' K1@@ =& ' D1' , '- .' <0' =& ' D' > 01@=@ <0' #1=& 1' '0' 0<'AG <-A' D<' D1' ?0 'B10' C=' 1<B1' &=' D1' 0<>1' &?- ' =& ' D1' ' >1' #1' - .@ D<+1' &K1 ' <-A' ? D& ' ' &' '-H?' 1@ D1< @ <-A' A1 1 - '-1' 0?HD' '0C '0'&-0' <-A' ==1-B10@ <0' K1@@ < ' D1' ?' ' &=' &? ' &+1 1' . -' & A' D1' , '- .' <0' &=' D1' < ' D< ' K'@@ 0?1' =& ' D1' , '- .' <-A' =& ' D' > 01@=G -A' D< ' D'0' A'-<-B1' '-A?B1' =& ' D 11' 1< 0' D1-' -1L ' 1-0?' - .' ¦ J' ?' &+1 1' . -' & A' D1' , '- .@ B&-0'A1 '- .' D1' 0<'A' A'-<-B1' &' #1' C &=' <#@1' =& ' D' >' <-A' D'0' 1&C@1' &=' D1' 0<'A' &?- @ D< D' & j A<' -1A' # ' ? D& ' '&=' D'0' C 101- ' < @'<>1- @ D< ' D1' 0<'A' A'-<-B1' 0D<@@ 0 <-A' '- D'0' ! & B1' <-A' ==1=@ =& ' D 11' 1< 0' -1L ' 1-0?' - .

V @ F D1 1<0' '-' D1' < @'<>1- ' D&@A1-' < ' F 10 j >' -0 1 ' D1' ! ' 0 ' 1< ' &=' , '- .' 1- @ ! < D1 ' &=' &? ' & A' D1' , > . D< ' -&K' '0@ ' ' K<0' & A<' -1A@ W' D< ' <@@ D1' < ? 10' <-A' A'-<-B10' > <A1' &=' 1<0? 10' &=' & -' 0D&?@A' #1' =' > @ ' D&@A1-' <-A' a1C ' <= 1 ' D1' ==1= ' &=' D1' 0<>1' G <-A' D< ' $-&' ? +1 & 0' &=' D1' , '- .@ -& ' `&=' & D1 @[ ' 0D&?@A' -& ' <= 1 ' D< ' ' >1' =& D' #? ' -& ' <a1' <- ' & -' `& '04' & D1 ' 1<0? 1@ #? ' # ' '. D ' ?0D1@0' 0 'a1-' =& ' D1' ^?< 1 @ <-A' D< ' -& -1' 0D&?@A' #1' #&?-A' & D1 K'01' &' A1@' +1 ' =& ' D1' ^?< 1 @ #? ' '. D ' ?0D1@0' 0 'a1-' =& ' D1' ^?< 1 @ <0' #1=& 1' '0' 0<'AG <-A' <@0&' D< ' < >1- ' 0D<@@ #1' > <A1' C 101- @ ' =& ' D1' < '<.1' &=' D1' 0<>1G <-A' D< ' '=' <- ' ? +1 & ' &=' ?' & A' D1' , '- .@ & ' `&=' & D1 U ' 1 0& -@ = &>' D< ' '>1' =& K< A' `A&U ' #? ' & ' C? +1 ' <- ' &> & D1 K'01@ & ' # ' & D1 ' 1<0? 1@ D<-' # ' '. D ' ?0D1@0' 0 'a1-' =& ' D1' ^?< 1 @ <0' #1=& 1' '0' 0<'A@ <-A' &=' D< ' `#1 ' < <'- 1A@ D1`0D<@@) ' D<+1' -1' 1< /0' >C '0&- >1- @ <-A`0D<e@)

@ W -' /' D1' 0<'A'
@ -@' . !" ¦ # 83#1#
0 0D&?@A

@'1 .10' <0' A' \' ? >10' @10' A' \' '0B&?- \@ . - 1 - ' & B18' -&?01>1- ' < @&? ' CC 1' &C01' A1\' A'C01\' ')' <10>10' @1\' @'1 .10' = -10' I ' < B'<>1- \' A1' L' @'' I ' <?R0' ./?-A10' 0&>10@ 1-' ./?-A1' &C '& -' <-'1- '0>1- ' I ' A10 ?BB'&-' A1\' C@?0& 0' C& , 1\' .1 - \' `A1' A'C01\'0 ' 1.10@ 0'' 1 1A'1' -1' (M &' ' D<0 1>1- ' C 1?' 1-' B10 1' C A ;' ' B -0'A1 <B'&-' A1\' H?1?L' /')' & A1C1' =?'0 ' C' <?=@& ' 1' A1' A' ' C@1>1- @ ' -?@@ '0B&D ' -1' &?#+'0B&?- ' A1@ A' ' &?- 11@ A1@ A' ' 1-A 1A ' 1D' < D' ' C' B&@&? ' A1' 0&-' &==' B1' . - 1 1- ' <0B?-1' 1-H?1 1' 1-H?10 ' A&==' B1' & -' <0B?-1' 1-A' 1>1- ' 1-' 0&-' ? > 1@ H' -1' `A' ' [' A&' ' C' @<' @1 ' A10 1' C '\' 1-' 0&-' ? -1@ -1' H?'@ C' B&@&? ' A1' 0&-' A' ' ==' B1' C' . - 1' <0B?-1' 1-H?1 '=' -H?10 ' A&==' B1' &-' 1-A' 1>1- ' 1-' <0B?-1' <-R' @'1?' <C0' ' ß) ? -1' 1-?\' I ' =' -11@ -1' H'@ d , . -1' A1\' <0B?-1' A1\' A' \' @'1 .10' A1' &'' <0B?-0' =' -10' &?' <=' B' <8' >1- \' C? ' <0B?-1' BD&01@ &?' B<?01' H?1' -1' <CC '1- ' <' 0&-' & ' 1' &?' &==' B1@ -1' <0B?-1' '1@ D1 -&?0' I ' . 1 &?0' <'' B' <>1- \' A<0B?-1' A1\' A' \' @'1 .10' 1-B&?- 1' 10&-1@ C? ' -&?-' +1 -?1' <' ==' ' &? -1' &?' <' <? 1' ='1?' &?' C? ' <? 1' B<?01' C' B&@&? ' A1' 0&-' &==' B1@ 0? ' @<' C1' -1' A1' L@' '' C' @? ' <CC<'1 0' <?' &'' 01\' D1' 10' I ' 0?BB100&? 10@ <' <?- ' A1\' =&' \' H' '1@ '0B&?- ' &?' &?#+'0B&?- ' 1- ' &?' N)' <0B?-1' <' B@1' A'B1@@ 0&' ' A?1>1- ' B&-+@= @ <@ 0?' ' A1' &'' &?' A1' C 1' . 1+1' H?1' 0?1' 0'#-' C? ' @1' &'' B&>1' C? ' @? ' >10>10G 1 ' H' @<' C 1' H?1' 0?1' 1-' '1@ B<?01' 1=' @<' >&' 1' ' A1@ A' ' &>1' 1?01>#@1>1- ' &+10H@ 01\' A<><.10' <?' A&?#@1' <' 0&-' CC 1' &1C0@ 1 ' H' @<' C 1' 1-' B10 ' B<0' . 1+1' 1' ' C&<' ' A1' >10>1' @<?=@& ' 1' A&' 0?1 ' 1-' 1@@1' C 1' 1- 0' '1@L' '0B&?D ' I ' &?#+'0B&?- 1' 0'=1-' C? ' @1' &'' B >1' C? ' @? ' >10>1' B&>1' A1+W- ' 10 1' A ' G' ' H' @1\' ?0 'B10' A?' @<' C11 0' A1' >1 >1' @1' &?- 1' C? ' @1' 1>C0' 10 1<- \' 1'1- ' C&'<' ' /)' A1-H?1 1 ' &'1 ' I ' R>' -1 ' ' @L' >10 ' C 100'&-0' I ' &==1-010@ 0'#'1-' <@ 0?' 1' A1' &'' B&>1' A&' C 1' H?'' +&1 ' 0?1 ' C? ' @1' &'' I ' C? ' @? ' >10>1;' ' A? 1 &' ' B10 ' & A1 =-B1' C? ' &'0' <-0' @&? 0' C0BD1' ' 1-0?<- \G' @1' &'' B&-0'A1 <D ' @<' A' ' C A1-W-B1' A10 &' CCD' <#@1' C? ' @? ' I ' 0&-' C&1C@1' A1@ A' ' &?- 1@ <A' & 8' A1-1' C' <?= & ' 1' A ' B10 ' C@1>1- @ H' @<' A' ' & A1-/-B1' &'01' &-' 0<' =& B1' 4' 1==1=@ I ' 1-A? 1' C? ' &'0' <-\' C0BD1' -' 1-0?<- \

1>' B&>1' 1-' @1' C@1>1- ' =&- \' <' F 10 'D' <-' C2' ' +D ' A1' &'' 1- '' C' 1 ' A1' -=1' 5?' @1' &'' H'' & 10 @ & A1-1' =?'0 ' H' &-0' @1\' 10 < ?' \' I ' & A1-/-B10' A%&\' >10? 10' A1\' #@110' A1?001- ' 10 1' =1 >1>1- ' 1-?\' I ' .< A?\' 0&@&-H@ @1-8' =1 ' A'B1@@0G' ' H' -? ' A1\' C? +&'&? ' A1' &'' -<? 1' -1' A?'001- ' 1-' <C0' -1' A1' B1@@1' 1>C0' 1-<+3- ' <BD< 1 ' -1' C0-A 1' <0B?-0' #@110' C' <? 1' >10? 1' 0' -&-' C' +'' ' #?001@L' <01\' C? ' @1' H?< R@ 1 ' H' -?@@ M &' ' 1-?\' <? '-1- ' <' A1@ , 1 ' C ' @1' H?< R' 0' -&-' +'' ' #?001' L' <01\' C? ' @1' H?< R' B&>1' A1+D' ' 10 ' A ' G' ' <?L' - ' H' C<'1-'1- ' M &' ' =<' ' C 10 1>1- ' C? ' @1' B< '<.1' A'B1@@10G' ' H' 0'' <0B?<' C? +1'&D ')' &?' <? 1' C0&-1' A'B1@@1' 1>C0' 1-< <?-' < BD< 1 &' ' &?' C +1 &' ' <0B?-0' #@110' <? 1>1- ' &?' C' <? 1' >10? 1' 0' -&-' +'' ' #?001@<' /)' C? ' @1' H?< R' B&>1' <+W- ' 10 ' A' ' I ' A1' B1&' M &' ' < 1' - @ < &' ' @1-C '0&-1>1- ' A?-' <-@

' / !' Z' / ! j' / & j'
' 1 &2 # 1 !&2' ' :
Z Y ' , ' 4 L' ' I ' . 1 & 2

(D ' 0 . - !'
; - ! +! 6 . @' +' 1 ' 7' Q' R3
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&!' 2 &/' 0 !' , $@' 7' #.-&-0!/' ." "!!' A! "2

6!#& ' . ' ' ' # & . ' 2' .' !' ! 20"!' . ' . 1 >

I 'H'@ C<'1 &' ' <?' &" '0' I ' <' C 1' H?1' 1' 01- 1' . 1+1' <?R' '0' I ' B1&' < <- ' A1\' =&' \' H' <0B?-1' A1' 1?L' A1' B1&' , &' ' < 1'- G ' H' @<' C 1' H?1' +&?A &' ' 0?1 ' <, &' ' 1- ' <BB'&-' =&?-A?\' 0? ' @<' B<0G ' H' @1\' ?0 'B1Ø A1' @<' C11Ø A?'001- ' <+&' ' C&<' ' A1-H?1 1 ' 5:' C@11' 1 1' A1\' &?Ø' @1Ø BD&01Ø <+ - A' \' I ' 0? ' B1&' A1' =1' 1' C?-'00D18' >1- ' 0'#-' <@ 0?' ' A1' &" B&>1' A1' C 1G ' H' B1@@1' 1>CØ 1-<+0- ' '1-0' M &' ' C '\' C? ' @1' >10? <.1' A1' A1@Ø #@11Ø 1-' < B?-1' >< 18;' ' C'1- ' &#0 <- ' <0B?-Ø & A18' -3-B1Ø 5' 10 < ?' \' 0'#-' \' C'0 &? Ø I ' &?Ø' <?RØ' >< 8' BD<C \' I ' < BD<? &? ' A1'-Ø @1' <-BD'010' I ' ' 1' A1' &-A 0@ B&>1' @1\' C &'&? Ø @1' &" A1Ø #@110@ I ' &?Ø' <?RØ' >< BD<?- \' I ' B&10' < BD< & Ø A1' #@110' 1-' C@?0& Ø ' 110' '@@10' ? .#10' I ' &?- 1100' " 1- .@1R 1@ B&- '8' -?1@1>1- ' A1' ? ' 1D' <? 1' < BD< 1- ' I ' C2-. -&- ' -&1=' #?001@L' C? ' @1' H?< RØ B10 <00<+&' ' @1\' C'0 & Ø < B#< & Ø I ' ='BD<- \' A1'-Ø @1' ! <?-BD'010' I ' ' 1' A1' &-A Ø C' ?-1'+1001@' <CCC@@1' @1' ! < @ H?1' B&- 1'1- ' +"' ' #?001@L' A1\' #@110' ?' ? -' <?R' #?001@@' > Ø <' B1= ' C ' -1' H?< RØ I ' =&?- ' @1\' +1-A& 08A1C' A' \' F 110' 1-B&?- 1' @&? ' +&@?- 1' A1' C<'1 ' ?-1' > <'@1' C? ' @1' >10? <.1' A1' BD10 '>' H?< 09 I ' &?Ø' @10' <? Ø C? +1&? 10-BD< &/0 I ' ' BD<- \' A1\' A' \' #@110' -&1=' #?001@L' <01" C? ' @1' H?< CØ -B&?- 1' @<' =& '1' A1\' A' \' & A1 =-B10' 5' 10 < ?' \' I ' 1-' B&- 1>C ' A?' &'G' <' <?01' H' @1\' A' \' 10 < ?' \' 4' & A1- 'B10' -1' 0&?- ' > ' CB@< >1\' -1' > \' 1-' 1L1B?B'&-@ -1' @1\' A' \' C1 -10' I ' =& =1' ? 10' C' @1' A' ' 10 < ?' ' @' >' 1\' @1+1\' 0&@&-H@ @1-=1A ' A1' >10>1' @10 < ? G =1' A' ' B@ @1' &" +&'@@<- ' >10 <10' @10 < ?' ' I ' & A1-/-B10' 10 1' A?1>R- ' 1-?\' I ' .< A?\@ h'<001- ' I ' <?A@& ' 1' 0-'0A' \' <A' & 8' A1-1@ H' 0'#-' @10' A' \' 10 < ?' Ø B&>1' @10 < ?' ' A10@C&'10' I ' >10& Ø =<' \' <?' C@1>1- ' - 1' A' ' K@' @1' &" H?& 10 ' <-' A1' 0&-' 1. -1' +'' @ 0&'1- ' CB@< >1\' 0'#- ' 1-' @<' A' ' ' 1' A1' &-A Ø B&>1' 1-' &?Ø' <?RØ' ' 1 1' ? .D10' I ' &?- 1R' " 1- .@1 1@ I ' > \' 1-' A?1' 1L1B?B'A-' 0&@&-H@ @<' =& >1' I ' @1-=1=@;' A'B1@@10G A &?0 <- ' <' A' ' 10 < ?' ' =<' ' @1' A' ' <-' +'' [' H1-' 1D10B?-' ' 1' ? .@ ' &?' !'@@1' A?' &'<@>1' 0&'@ ?-1' B&1' #?0 1 ' 1-01<@1' I ' <BB& A<-' <' @10 <-A< ' A1' @10BD1aa1 @ 1H' >10>1' @<' >< 1' I ' =& >1' 4 ' 0? ' >10>10' @1\@C1'-10' B&>1' 1-' >10>1' @10 < ?' ' 10 ' 0C1B1='1' A1' ?-1' B&1' #<@<?-B1' <' 10 1' 1-' BD10B?-1' '1@ ' 1' ? .#' &?' '@@1' ' H' @1' <' ' A1' A' ' ' 1' A1' &-A 0@ I ' &?Ø' <? Ø <' Ø A1\' &?\' <?RØ' ' 110' I ' ? .#R' 1-. 1 1' &?' '=' ' <A' <' @ I ' &?Ø' #<'@@'=Ø' A1\' ' 10' I ' ? .#10' &?' <' ' -10 @ I ' &?Ø' ?0 'B10' A?' C110' A1' BD10B?-' &?- 1' " 1- .@1 1' C? ' @1' 1>CØ 10 1<- @ 1 ' ' 4 ' 1'1- ' C@1'-' C&<' ' A1' >1 1' &?Ø' @1\' 0 < ?' \' I ' & A18' - -B10' <+W- A' \' 1-' A'1?' 1L1B?B'&-@ I ' A1' &' 1' I ' >' 1' &?Ø' @1\' A =' > 10' >10C'0'&-Ø &==1-010' I ' 0C<Ø 1-B&?- 1' @<' =& >1' 4 ' @1 - =1= ' A1\' A' \' 10 < ?' \' 4 ' & A1-#'B10' =<' \' &?' <==<' 10' &?' CC1 1\@ 0'#-' <@ 0?' ' A?' &" B&>1' A1' C 1' H1-' B1&' B<0' 01' 01- ' .+1@ 1 ' A1' B#?-' <?R' @'1.10' A?' &" H1-' B1@@1' C 1' +&' '0? ' C? ' @1' &'@ 1 ' B1&' 0'#-' C' 1L<>'-<B'&-' A1\' C '10' &-1' <0B?-1' A1?L' 0&@&-H' @<' A'0@ B 1B'&-' A1\' A' \' <' Ø <'@'=Ø I ' ?0 'B10' A1' C1<0@ B&>1' C' '00?1Ø <' '1 ' B&>1' C' '00?1Ø \@ P' A?1>1- ' <CC@-A 1' I ' < R' C@110')' CB10010' A1' @<' @1 ' A1' @<' 1G ' H' 0'#-' @<' C 1' . 1+1' B&>1' BD10B?-' @1 . 1' A1' &" H?" 0?1 ' +&'@=' C? ' @1 C<' ' &' D1' , '-.' <-' ?-A 1A' D'@@'-.Ø <-A' &' D1' < ' D<' =11@1 D' D'>' . '1+1A' <-& D1 ' ?-A 1A' D'@@'-.0@ <-A' D< @ <Ø &= 1-' <Ø <- ' &=' D1>' `0D<@@ 'P' #1' D1 1&=' < j <'- 1A' G <-A' D<' D1' < ' D<' `K'@@ W P' 0?1' `0D<@@ 'P' D<+1' D1 1&=' <-' A '&-' . &?-A1A' ?C&-' D1' <01' G <-A' D<' D1' ?0 'B1Ø &=' 1<B1' `0D<@@' D<+1' &K1 ' &' -H?' 1' <-A' &' D&@A' @1<' &='<@@ D1' D'-.Ø <=& 10<'A@ <-A' D1 1j ?C&-' &'<00'. -' ?-'0D>1- @<Ø K1@@ < ' D1' ?' '&=' D1' , '-.' <Ø &=' D1' < G <-A' D<' = &>' D1' 0<>1' '>1' =& K< A' -& D'-.' 0D&?@A' #1' <a1-' =& ' D1' >1<0? '-.' &=' 0?BD' & >' '-'<- ' <- - 1 - A' -& K' D0 <-A'-.' ` D1' 0<'AO P' A'j -<-B10' <-A' < ? 10@ <Ø K1@@ D1' <aH Ø <-A' <@@ & D1 ' 1 BD<- Ø <-A' ? 1 Ø K' D'-' D1' ! <-BD'01' <-A' ' '&=' & -A&-@ <Ø D1' , '- ./Ø ? +1 & Ø &=' & <@ <-A' <@@ & D1 ' 1 BD<- Ø <-A' &>>&-' ? 1 Ø &=' &>' '-' >< - ' & D1 ' ' '10@ &K-0@ & &?.D0@ <-A' &?- '10' &=' -.@<-A@ B&-j '-?<@@ ' = &>' A< ' &' A< ' A&' #? ' <-A' <a1' -'-1' ?0D1@Ø =& ' D1' ^?< 1 @ D<' 'Ø &'0< @ D1' <a1=0@ ? 1 0@ <-A' 1 BD<- Ø +' D'-' D1' ' '<-A' ! <-BD'010' &=' &-A&-@ # ' \' 1001@ <@@1A' D1' `! < 90' P' KD'BD' B&- <'-1 D' '. D ' ?0D1@Ø &=' & -' K' D' <-& D1 ' ?0D1@ &=' & -' C? ' &' D<' =& ' <' ^?< 1 @ <-A' > <a1' D1' 1@@1 0' &=' D1' 0<>1' & -' <.<'-0 ' D1' ' F '@@ &' C< ' -1' <@=C1- - ' =& ' D1' >1<0< '-.' &=' 1+1 ' ^?< 1 @ <-A' <@@ D1' C D1 ' ? +1 j & 0@ ? 1 0@ <-A' 1 BD<- Ø &=' & -@ -'-1' ?0D1@Ø 0= 'a1?' =& ' D1' ^?< 1 @ <.<'-0 ' D1' ! & >' &=' D1' 0<'A' ` A'-<-B1' <-A' < ? 1@O P' <-A' '-' &- 1>C ' &=' &? ' & A' D1' , '- .G =& ' D<' D1' 0<'A' A'-<-B10' <-A' < ? 10' #1' -& ' C &j B@<' >1A' -& ' C? ' '-' L1B? '&-@ -& ' D1' 0<'A' 1-<@ '10' <-A' ! & =1' ? 10@ @' >' 1A' # ' D1' 0<'A' < ? 1@ @1 1A' <Bj B& A'-.' &' D1' ==1=@' &=' D1'0<>1' < ? 1G ? '0<'A' & A' D1' , '- .@ K'@@'-.' D1' 0<>1' `' < ' 1' <-A' A'-<-B1' O P' &' #&' A?@ ' D&@A1-' <-A' a1C @ # ' D1' 001- ' <-A' ? D&j ' '<#& 10<'A@ D< D' & A<'-1A@ D<' <Ø K1@@ D1' 0<'A' ` <j ? 1@O P' <Ø D1' < ? 1' &=' F 1' .D Ø <-A' 1<0? 10@ ><A1' <' D1' < @'<>1- ' &=' ?' & A' D1' , '-.' D<' -&K' '0@ D1' '.D D' 1< ' &=' D'Ø 1' .-@ #1' C &B@<' >1A@ <Ø K1@@ '-' D1' 0)' ' '&=' &-A&-Ø <Ø'-G <@@ & D1 ' '10@ & &?.D0@ <-A' &?- '10' &=' -.@<-A3@ <-A' C?' '-' A?1' L1B? '&-' <= 1' D1' ! & >' <-A' ==1^' &=' D1' 0<>1G &'-'-.' &' D1' 0<'A' < ? 1' ><A1' D1' 0<'A' '.D D' 1< @ D<' '-' 1+1 ' ' @ & &?.D@ <-A' &K-' &=' D1' 1<@>' D1 1' 0D<@@ #1' <' B&>>&-' ?0D1@@ 01<@1A' <-A' <BB& A'-.' &' D1' <-Aj < A' &=' D1' LBD1H?1 @ '-' D1' 0<>1' <--1' <-A' ! & >@ <-A' ?C&-' D1' 0<>1' `' <'-@O P' <Ø'-' C1' 0<>1' < ? 1' 'Ø 0C1B'='1A@ `<-A'/[P' <' & >>&-' <@<-B1' &' #1' '-' 1+1 '0?BD' ' @ & &?.D@ <-A' &K-' -A' D<' D1' < & ' &=' D1' 0<'A' ' '&=' &-A&-@ <-A' <@@ & D1 ' < & Ø &=' <@@ & D1 ' ' '10 <-A' & &?.DØ &=' -.@<-A' KD1 1' D1 1' 'Ø' <' < & @ <-A' <@@ <'@'@' Ø &=' ' '10' <-A' & &?.DØ' KD1 1' D1 1' 'Ø -&' < & @ <-A' <@@ ?0 'B1Ø &=' 1<B1' '-' 1+1 ' &?- '&=' -.@<-A' =& ' D1' '>1' C1'-.@ 0D<@@ D<+1' =&'@ &K1 ' &' C?' <@@ D1' < ? 10' <-A' A'-<-B10' <=& 10<'A' '-' A?1' L1B? '&-@ <-A' &' D1< ' <-A' A1 1 >'-1' <@@ D1' " 1=<?@ 0@ '0C '0'&-0@ ==1-B10@ <-A' 10C<0010' <.<'-0 ' D1' ! & >' <-A' @!1 ' &=' D1' 0<'A' < ? 10' <-A' A'-<-B10@ A&-1' & ' &' #1' A&-1' & ' B&>>' 1A@ <Ø K1@@ < ' D1' ?' ' &=' D1' , '-.' <Ø &=' D1' < ' KD'BD' '-' 0?BD' <01' =11@1 D' D' >j 01@=' . '1+1A@ <-A' &=' <- ' & D1 ' &=' D1 , '- ./Ø 1.1' 1&C@1' KD'BD' '-' D'Ø 1D<@=' K'@@ 0?1' =& ' D1' , '- .G <-A' D< @ <Ø K1@@ # ' L<>'-< '&-' &=' D1' < '10@ & ' <- ' &=' D1>@ <BB& A'-.' &' D1' " '0B 1 '&-' &=' D1' 0<'A' < & 0@ <'@'==0@ <-A' ?0 'B1Ø &=' 1<B1@ <0D ' =&0?1Ø &' #1' '1A@ # ' -H?'@ @ 0' '&-Ø A?@ ' &'#1' <a1-@ <-A' & D1 ' @1<Ø <-A' &B10010' &=' D1' <K'&=' D1' <-A' <-A' D< ' <Ø K1@@ D1' < ' . '1+1A@ <Ø <- ' & D1 ' @'1.1' <-' &=' D1' , '-.' D< ' K'@@ 0?1' =&

)' $"'%' '0$"'%' ' '
j % ' %' " ' ' 2 0 &Z' -/' ."/@- 0-#!2' *% <! '#
' 0 !2')'2 &/!' '! ' 'V
'3!@-!Z' '! ' 5' ' .

!' 2!' !" +' 0 !2' -. ' /0+@' !%!#0 !/=

+'+&!' 0 !' ' 3 '#' . ' ' J !!' .0# &-*' V !&* 2' -/' ! 20"!2' 2 +' ;!' ".#+ &1!/' -/'!%!#0 !/>' '#. 1 1 .-' 402 !+' ;!'&-' !' !"@' . 7 - ' 0-/!' 3!- + @'&-' ' ';$' '# @ ' 2 .4 + -#!2

@."2' -/' 02 &#!2' . ' !'3! #!'1 @' /! !"1&-!' &B!-#!Z' * &-2' !2!' 0 !2

B."1' . ' !' 3".#!!/&-*

D1' , '- .ℊ 0D<@@ D<+1' D1' ?' ' '-' D< ' <0 i' < ' D'0' F '@@G <-A' D< ' D1' D< ' '0 0&' < <'- 1A' &=' <- ' "1=<?@ ℊ '0C 'j 0'&-ℊ @=1-B1ℊ& ' 10C<00' A&-1' <.<'-0 ' D1' 0<'A' < ? 1' ><A1' D1' 0<'A' ! ' 0 ' 1< ℊ 0D<@@ C< ' &' D' >' < ' KD&01' ?' ' D1' '0 D1 1&=' < <'- 1Aℊ ' 0 ' <-A' D'0' 1<0&-<#@1' &0 0' &=' D1' 0<'A' ?' ℊ <-A' &' D1' , '- .' <-& D1 ' 0 ' -A' D< ' <0' K1@@' D1' < & ' &=' &-A&-' =& ' D1' '>1' #1'- .ℊ <= 1 ' D< ' #1' '0' BD&01-' < & ' <-A' K -' K' D'-' D1' 0<'A' ' ℊ < ' D'0' =' 0 ' B&>' - .' &' D1' LBD1H?1 ' #1j =& 1' D1' 1<0? 1 ' &=' -.@<-A' <-A' D1' < &-0' = D1' , '- ./0] BD1H?1 ℊ <0' 1+1 ' &=' D1' 0<'A' & D1 ' < & 0' <-A' <'@'==0ℊ '-' D1' ' < D0' &' #1' ><A1' =& ' D1' ' 0<'A' &=='B10ℊ 0D<@@ #1' BD< .1A' <-A' 0K& -' &' AC ℊ a11C' <-A' 1L1B? 1' <@@ D1' < ? 10' <#&+10<'A' <-A' D< ' <@@ D1' < & 0' <-A' <'@'==0' &=' ' '10' <-A' & &?.D0' &=' D1' 1<@>ℊ <BB&>C <#@1' '-' D1' 0<'A' LBD1H?1 ℊ A&' 1< @ ' <BB&>C ' '-' D1' 0<'A' LBD1H?1 ' &=' D1' &=' 0' <-A' ! & j =1' ? 10' D< ' >< ' & ' &?.D ' &' C1 <'-' &' &? ' & A' D1' , '- .' # ' D1' ! & >' &=' D1' 0<'A' < ? 10' ; <+'- .' <@K< ' &' L A0ℊ ' '10ℊ <-A' & &?.D0ℊ D1' ' '#1 '10' <-A' ! <-BD'010' . <- 1A' &' D1>' # ' &? ' 0<'A' & A' D1' , '- .ℊ & ' <- ' &=' D'0' &.1-' & 0ℊ -& ' 1+&a1A' 1C1<@1A' & ' <A-? @1AG <-A' 0<+'- .' <@K< 0ℊ D< ' D1' 0<'A' < ? 1' ><A1' D1' 0<'A' ! ' 0 ' 1< ' &=' , '- .' 1- ' D1' ! '= Dℊ <-A' <@@ & D1 ' < ? 10' &=' 1<0? 10' <-A' F 1' .D 0' <=& 1' ><A1ℊ 0 <-A' '-' D1' ' ! & B1

ℊ F D1 1<0' '-' <' < ? 1' ><A1' '-' D1' 1+1-j 11- D' 1< ' &=' , '- .' 'BD< A' D1' 1B&-A' <= 1 ' D1' &-H?10 ℊ ' K<0' & A<'-1Aℊ D< ' 1+1 ' <-' &=' D1' 1<@> -'.D ' ><a1' <-A' 01 ' &' 0<@1' <-A' 01@@ @& D0ℊ <0' K1@@ ,1 0'10' <0' & D1 ℊ &=' 0?BD' 1- . D' <-A' 1<A D' <0' D'>' C@1<01Aℊ C< '- .' D1' ?@-<.1ℊ ?#0'A ℊ <-A' & D1 ' "1+&' 0ℊ D< ' '0' &' 0< ℊ&=' 1+1 ' '1B1' &=' @& D' <= 1 ' D1' < 1ℊ -& K' D0 <-A'-.' <- ' < ? 1ℊ A'-<-B1ℊ &B@<j >< '&-ℊ 10 <'- ℊ & ' "1=1-B1' ><A1' & D1' B&- < G <-A' D< ' -&-1' 01@@ -& ' C? ' &' 0<@1'<- ' @& D0' #1=& 1' D1 ' #1' >1<0? 1A' # ' D1' , '- ./0' ?@-1.1 ℊ <-A' 1-01<@1A' K' D' D1' 1<@ D1 1?- &' & A<'-1Aℊ ?C&-' D1' <'-' B&- <'-1A' '-' D1' < ? 10' D1 1&=' ><A1;' -A' <= 1 ' '-' < ' ? 1')' ><A1' '-' D1' 1+1- D' 1< ' &=' , '- .' 1- ' D1' !&? Dℊ E <-A=< D1 ' &=' D1' & A' D1' , '- .' D<' -&K' '0ℊ ' K<0' <@0&' & A<'-1Aℊ D<' D1' @& D' &=' &@&? ' 0D&?@A' B&- <'-' '-' 1-. D'1'.D ' <-A' K1- ' < A0' >1<0? 1A' # ' D1' ABaℊ <-A' '-' 1<A D' 'L' ^?< 1 0' <-A' < <@=G <-A' '=' ''1' @& D' ><a1 0' 0D&?@A' ><a1' D1' ' @& D0' &=' @100' 1-. D' ' 1<A Dℊ D1 'OD&?@A'#'1'=& =1' ' &' D1' , '- .G -A' <= 1 ' # ' <-& D1 ' < ? 1' ><A1' '-' D1' @1+1- D' 1< ' &=' D1' 1'.-' = /')' , '- .' 1- ' D1' !&? Dℊ ' K<0' & A<'-1Aℊ D<' AB@<>< '&-' 0D&?@A' #1' ><A1' &C1-@ ' D &?.D' D1' 1<@>ℊ D< ' -&' 1 0&-' ><a'-.' 0?BD' <- -1 ' &=' @& D0' & ' "&\1-0' K' D'-' D1' 1<@>ℊ 0D&?@A' #1' 0&' D< A ' &' <Ba' <-A' =&@A' &.1 D1 '0?BD' <- -1 ' &=' @& D0ℊ#1=& 1' D< ' D1' ?@-1.1 ' D< D' ><A1' D'0' 1< BD' <-A'0? +1 ' -.' A?@ ' &=' D1' 0<>1' @& D0ℊ D< ' D1 ' D&@A' D1' ' 1- . D' <-A' 1<A Dℊ & A<'-1A' # ' D1' 0<'A' @<0 ' < ? 1' ><A1' D1' 0<'A' 1+1- D' 1< ℊ <0' '-' D1' 0<>1' < ? 1' '0' > & 1' =?@@ ' B&- <'-1AG C&-' KD'BD' < ? 10' ><A1' '-' D1' '>1' &=' D1' 0<'A' , '- .' 1- ' D1' !&? Dℊ A'+1 0' C'-'&-0' D<+1' #11-' D&@A1-' '-' D1' , '- ./0' LBD1H?1 ℊ <0' D1' 0<>1' &? ' & A' D1' , '- .' D< D' B&-B1'+1A' # ' D1' &>C@<'-' &=' D1' &> >&-0' &=' D'0' 1<@>G ? ' & A' D1' , '- .' K' @'-.' &' 1C 100' 0?BD' C'-'&-0ℊ &=' D1' 001-' <-A' ? D& ' '<#&+10<'Aℊ D< D' A1B@< 1Aℊ D< ' D'0 F & Aϑ @& ϑ'- D10<'A' < ? 10' #1=& 1' 1D1< 01Aℊ 0D<@@ D<+1' 1@< '&-ℊ <-A' 0D<@@ #1' ?-A1 0 &&A' &=' KD&@1' ` @& DOP' B<@@1A' &<A' @& D0' <-A' &<A' " &\1-0ϑ

&" 1' ' @<' 0?' ' 1-' B1&' B<0' <' 0<' +&@' > 1G ' H' B1@@ ' H?" '00'- ' 0&=' <' 1'- ' A<0B?-1' A1= '? 1' >10C '0'&-' &==1-B10' &?' R0C<0ℊ ==''' 1-B&?- 1' @1' A' ' 10 < ?' ' =1' ' @1' A=' <-' C2' ℊ C<'1' <' B1@ ' <' H?" 0? 1' 'ℊ 0&=' <' 1'- ' '08 I ' @1\' B&0 <'.10' 10&-<#@1\' A1' 0<' A' ' 0?' ℊ I ' <?' &" <?R0' ' 0 ' ' H' 0'#-' @1' <' ' A1' &?-A=0' C? ' @1' 1>C0' 1= =1<- ℊ <C0' B1&' H'ℊ 0&=' 1 ?\' <' ' I ' ? 1' A1'-0' @<' A' ' ' 11' <' 0 -' +1-?1' <' @10BD1D1 ' A1+/- ' @1' 10& 1 ' "1-.@1R 1' I ' @1\' < &-0' A1' @10BD1aa1 ' -=1' 5 ' @1' &'ℊ B&>' BD10B?-1' A1\' A' \' <? 0' < 0' I ' <'@'=0' 1-' @&? ' 01 1>1- \' <==<' 1\' C? ' @&? 0' A' \' &=='B10ℊ 0&=' BD< .1' I ' ? 1' A1' =1' 1' .< A1 ' I ' 1L1B? 1' ' &-0' @10 < ?= \' 0?'0A' \G ' H' &?0' @1\' <' 0' I ' <'=' =0' A10' ' '10' I ' ? .D0' A?' &'<@>1ℊ <B8' B&?>C <- \' 1-' A' ' 0BD1H?1 ℊ =<B1-' <--?@>1-' <BB&>C ' 1=' >10>1' @10BD1aa1 ' A1\' C=1 10' I ' =& =1' ? 10' H?1' <CC 1@. ' C?'00&-' &?' A?=001-' <' &" C' =<' =& >1' A1\' A' \' 10 < ?' =\G 0<+<-' &? ' =&' \@ <0' 0' ' 10' I ' ? .D0' @&? 10' =' # 110' I ' = <?-BD'010' .=?- 1\' <' 1?L' C' --=1' =' ' @1' &" &?' < B?-1' '1\' 01\' C.1-' &//0' -'1-' 1+&a1\' 1C1@@1\' & ' <-'1- \G ' 0<+<-' &?0' =&' \' H' @1' A' ' 10 < ' ' =1' ' @1' A' ' <-' A1' &" 1- ' H?'-' I ' &?0' <? 0' 10 < ?' \' A1\' >10? 10' I ' C&@10' <+<C ' =1' \' 10 &'1-' 1@@ @&? ' =& B1

1>' B&>1' 1-' @10 < ?' ' =<' ' <-' L+' ' A1' &" 'BD< A' @1' 01B?-A1' C '0' @1' B&-H?10 ℊ & A1-1' 0&=' H' BD10B?-1' D&>1' A?' &'<@>1' C? <' =<' 1' I ' >1 1 1' <' +1-A1' I ' +1-A 1' A <C0ℊ 0'=1-' A1\' ,1 01 10' B&>1' <?R0ℊ A1\' '1@0' @&-.? 1' I ' @< 1?=1' B&>1' @? ' C@1 <'ℊ C<'<- ' @<?-<.1' I ' 0?#0'A1' I ' &?0' <?R0' A1+&' 0ℊ B10 <00<+&' ' A1' BD10B?-1' C110' A1' A <C1' 0&@&-H' =1=1 <- ℊ -'1-' B&?- 10 1< ' ' <0@ B?-1' 0 < ?' ' & A1D/-B1' CB@<>< A&-' 10 1'-' &?' A1=1-B1' =1' ' <' B&- < '1G ' H' -?@@ +1-A1' &?' >1 1' <' +1CA 1' <0B?-0' A <C0' <+ - ' H= 0' 0&'1-' <?-1\' C' @<@-&? ' A?' &" I ' 1-01<@1\' A1' 01<@' <' B1&' & A1'.-1ℊ 0? ' '1' C1'-1' B&- 1-?1' 1-' @10 < ?' 0' 1-' =<' ' <-' 01C '0>1' @1' &" 1- ' H?< ' <'1@ -=1' ' @1' &" H?& 10 ℊ & A1'-1' =?'0 ' <?L" H' @1' A <C' A1' B&@&? ' B&- 1D1' 1-' @&-j .? 1' LL+'' ' <?@-10' >10? 1\' C' @1' A& B1' I ' @<? 1' + ' H?< 0' I ' A1 > ' ' ' 0" @1\' =<'0&? 0' A1\' A <C0' =1 &'1-' @&? 0' A < ' A1' >1'-A 1' @&-.1? 1' &?' @<1? 1' '@0' M &?- ' =& =<' \' <?' &' ; ' C?'0' C' ?-1' <? 1' 10 < ?' ' =1@ ' <-' ?-\'0>1' @1' A=' &" 1- J@1' H?< ℊ & A1'-1' =?'0 ' H' CB@<>< A&-' &' ' =<' ' & 1>1-' C> 1' @1' &'<@>1ℊ H' -?@@ C0&-1' =1'8 0<-' '1@L' ><50' A1\' A <C0' &?' A?0\1-10' A1'-0' @1' &'<@>1' M &' ' B ' D< A ' A1' <aa1 ' I ' C@' 1 ' 1-01>#@1' '1@0' >< 0' A1\' A <C0ℊ A1+/-' H' @<@-1&? ' <A' =<' ' 0&-' 01 BD1' I ' 0? +1?1' A?B>1-' A'B1@@10' A <C0' H'@0' 1'. 1-' @&? ' @&-.1? 1' I ' @< ? 1ℊ & A1'-1' C' @1' A' ' 10 < ?' ' A< 1'-' =1' ' @1' A' ' <-' 01C '0>1ℊ 0'B&-'1' 1-' >10>1' @10 < ?' ' 10' B&- 1-?' C@?'0' <?' C@1' -;' ? ' H?1L' 10 < ?' \' =<' \' @1' 1>C0' A1' A' ' &" 1- " H?< ' A' 01\' &CC'-'&-0' &?-' 10 1' 1-?\' 1-' @10j BD1aa1 ' -=1' ' @1' &'ℊ 0'B&>1' >10>1' -=1' ' <A' B&-B1?' C' @<' B&C@1'-' A1\' &10' A1\' 0&-' &'<@>1;' =1' '@1' &" +&'@@<-' '1@L' &CC'-'&-0' B1001 ℊ A1' @<001-' I ' <?^& ' 1' 0?'0A' \' <A' A1B@< 1ℊ H' B10 ' C&@1' " <C' 1-' @1\' A' \' 10 <j ?' \' A1+/-' 1D1 01\' 1' ' 1@<B'&-' I ' 0&=' 1- 1-A?' < @1\' `<? 0 P' A <C0' <CC1@@1\' # &A1' B@& D10' I ' # &A1' A?0<--10ϑ

R ! 1 &!"2' %' .$-

Ⓤ ' ' !' 2 &/

L' * 5 ' # 'Ⓤ' & ; ,

ˡ ' '1 > ' <0ʼ <?R0ʼ A <C' ˡ ' C1B10ʼ A1\' A <C0ʼ <CC1@@1\' <' 10ʼ)' &?ʼ <=1' 1\G 1 ' &? 1' <Aʻ & A1'-1' ˡ ' 1< <#@1' Hʻ BD10B?-1' D&-'1' C&1 ' =1' 1' -'1 1' <+1-A1' ˡ ' +1-A 1' &-0ʼ >< 0ʼ A1\'A <C ' <CC1@@1\' <' 10ʼ B&@' 1- - \' 1-' @&-.1? 1' <?@-10ʼ ˡ ' 1-' @1? 1' ?-' <?@ '1' '1- 1-1K1\ʻ &?' <?R>1@' 'L' ' <?@-10ʼ 1?K1\ʻ 0<-\' 1 'C1BD1>1- ' A<0B?-1' >'-'0 1'A1' &'G C<'<?-' <' &" @<?C<.1'0?#0'A10ʼ ˡ 'B?08ʻ &>10ʼ ˡ ' <?R0ʼ A1+&' 0ʻ B10 1<00<+&' ' A1' BD10B?-' A <C1' ˡ 'A1' 1D10B?-1' C1B1' A1' A <C1' 0&'&-Hʻ @<' < 1' 1' ' '1\' A' \' 10 < ?' \' B&- 1-?m' ' 0" @1\' =<'0&? 0ʼ A1\' '1@0ʼ A <C0ʼ <CC1@@1\' <' 10ʼ =<B1-' <0A?' 10ʼ A <C0ʼ <' +1-A 1' A1' '1'-A 1' @&-.1? 1' ˡ ' @1? 1' Hʻ C0BD'1-'>1-' A10?'0ʼ 10 ' A1B@< 1ʻ H<AC-H0ʼ 8#'1-' ''01' <ʻ <@@1-&? ' A1' B&?C1 ' @<' @'0 ' <' @?-1' = -' A1' &?0ʼ A1@0ʼ <' 10ʼ C <C0ʼ -1 1' B(-1fʻ -[- \' @<' A' ' @&-.1? 1ʻ ˡ ' >10>1' @1' A <.'<' 10 1' +1-A?' C? ' ?-1' 1>H<?-' &?' ?-1' C1B1' ' '*' -1> ' C? ' ? 1' " <C;' 'Hʻ -? ' '1@0ʼ A <C0ʼ &'1 ' ' > \' <' +1-A 1' <-Hʻ @<@-&? ' @10ʼ <A' >10? 1\' ˡ ' =1' ' C' 0&-' 01 BD1' ˡ ' & 0ʼ <' 1?L' @1' 01<ʻ A?' &" <' B1&' & A1'-1ʻ ? ' C1'-1' A1' =& =<'ʻ ? 1' A'B1@@1' ' 0" <0B?-1 ?@-1&? '1-01<@1' <0B?-' A1@\' A <C0ʼ <CC1@@1\' <' 10ʼ -'1-' B&- 1'. @<-\' @<' @&-.1? 1' ˡ '@<1& 1' A1\' =<' 10ʼ 0 '0A'=\ʻ ˡ ' -1' B&?C1' @<' @'0 1' A1\' &?0ʼ '1@\G A <C0ʼ H?" -1' 1'.-1-'@1\' Aa\'@&-.? 1 ˡ '@<1? 1' A1\' 0 <' 10ʻ H<A&-H0ʼ @1' A' ' @<@-1&? ' C<'1' <?' &" C? ' 1D10B?-1' C1B1' A 1' A <C1' $ 0) &+1' A1=1A@'=1' + '0 ' +'' ' A ' =& 0C '0ʼ &?0ʼ =&' \' Hʻ &?0ʼ A <C0ʼ <CC1@@1\' <' 10ʼ =<' \' ? <==<' 0ʼ <-Hʻ <@ &? ' A1' < '+' 1' A1' 1'-' &D-' <C8' '0 1' C0BD1'-' <+1 1' 1'1-' @'B1-B1' A10 1' +1-A?\' ˡ ' ,1' <-Hʻ <@ =10 ' A1' &K1@@ @& 0ʼ CBD1'-' 1-0?< ʻ A1' H''18' &' H0ʼ @&-.1? 1' &?' @< ? 1' H'@0ʼ 0&'1-

1>⅋C? B1&' Hˡ A' 1Rʻ C0&-10ʼ A1'-\' B10 ' &@<@>1' A1+0-' B1\' D1? 10ʼ 0&+1- ' =&' \' &?- ' 10 1'C '\' ˡ ' < 10@1\' Cˡ A'1010ʼ '0B&?- 10ʼ ˡ '<?R0ʼ ' ''0R0ʼ A1' &'ʻ Cˡ #=10ʼ '00<- \' 0'#-\' D& 0ʼ A1' D<?-B1 ' A1' &" B&>1' A1' 01\' C.1-' & 0ʻ C? ' 1L1C?B'&-' <+&' ' A1' A'+ 01\' 1B&-?0<?-B10ʼ =<' \' A1 - ' @1\' <' 0ʼ A1'@10 <C@10ʼ A1' A' 01\' 0&>10ʻ A1\' H 1]' 0&>10ʼ 'B1@@0ʼ C0& 10ʼ <0ʼ H?1L' @<' A?' 1' <CC1-' -&?-' 1>1A'1' B&+1-<#@1' <? 1' Hˡ @1\' A' \' 1L1B? '&-0ʻ @1\' H?1L' C0 -10ʼ 1-0" C '01\' ˡ ' < 10 ?\' C? ' @1]1B?B'&-' A1' >10>10ʼ @1\' 1B&-?0<?-B10ʼ 0&?-" 0&+1- ' =<' \' +1 '' ' Cˡ A',01\' #=10ʼ A1' & C?0ʼ B?>' B<?0<' A1+3- ' @1' &" 1-' 0<' D<?-B1 ʻ D& 0ʼ A1\' C00&-10ʼ 10ʼ H?1L' '@0ʼ 0&?-' 00'-' A1 1-?\' < B<?01' A1' A1@ 1L1B?B'&-ʻ ˡ ' '@@& ' 0?1-' 1-' >&-0 <-\' A 01Rʻ 1-A1- ? 10ʼ ˡ ' <? 0ʼ BD&010ʼ 1-' A1=<'8' 0<?-B10ʼ A1' '1@ 1B&-?0<-B10ʼ `1-C '0<-\/4' D 0ʼ A1' B' 1' =<1' A1' .<>'1 ' @<' C 1' &?' @1\' C '10ʼ <' H?" C 0?' ' '@0ʼ 0&?-' 1-0" C '01\' ˡ ' < 10 ?\' <' 0C&?-A 1' ?' 'B1'@10G '0? ' B1&' Cˡ 0?1 1' &+1' <?' &" 1-' 0<' D<?-B1 ' ?-' 1 1' A1@' 1\' D& 0ʼ A-' C '0&-1ʻ -'1-' '\'X' @&? ' A' ' < 10 1' C? ' @1L1B?B'&-0ʼ A1\' A1@L' 1B&-?0<?-B10ʼ B&>1' A10?'0ʼ 10 ' A' ʻ -?@@1' k/)' &+1\' <0ʼ 1B&-?01\' <0ʼ H?1L' '@0ʼ 0&?-' '00'-' &#@'.1\ʻ A1' 1?L' 0< 1=1' ' A1\' @&? ' A?1 110ʻ 1-' B<0ʼ Hˡ @1\' ><Rʻ B&>C \' A1'-0ʼ @1\' A' \' # ' ' A1' B' 1' =< ' -1' 0&'1-' &+1\' -1' <A ?..1\' C ' @1\' 1B&-?00&0ʼ 1-0" &#@'.1\G C&?-' @1\' A' \' 1B&-?011\' &?-' <0B?-' =&' \' ./?-A1'-1-' 10 1' A1@<'1\' A1' @&?' 1L1B?B'&-ʻ ˡ ' <0B?-0ʼ =&' \' @&?' 1L1B?B'&-' 1-' &?' <? 1>1-' CA?\

' =<' \' # ? !J D<' #1-' ><A1'= ' ' E;' :8()' 0L'''' = ' ' ' ˡ ' # ? !' $01-0 ' # ? !' ᴺ 1-' C '<- \' /' 0? 11 &#0 <?- ' << L+'' ' :7)

<-Aˡ -&' &=' & D1 ' @& D0ʼ <-Aˡ '1B10ʼ &=' @& D0ʼ B<@@1Aˡ 1' 0ʻ -&K' ><A1ʻ &' &' #1' ><A1G -A' >& 1&+1 ' D< Dˡ & A<'-1Aˡ <-Aˡ 0 <#@'0D1A ' D< ' 1+1 ' ><-' ><' ><a1ʻ 01 ' &' 0<@1ʻ <-Aˡ 01@@ <@@ <--1 ' &=' @& D0ʼ B<@@1Aˡ 1' 0ʻ B&- <'-'-.' '-' 1-. Dˡ !&? 11-' < A0ʻ <-Aˡ '-' D1' 1<A Dˡ -1' < Aʻ ?-K< 1 1Aʻ & '1@01' K1@+1' < A0' K< 1 1Aʻ K' D&? ' >C1<BD>1-' &=' <-' ='B1 ' &=' D1' '-./0G C< '-.' &' D1' ,'-.' D1' ?@-<.1ʻ ?#0'A'10ʻ ?0j &>0ʼ <-Aˡ & D1 ' " 1+&' 0ʻ D< ' '0ʼ &' 0< ʻ &=' 1+1 ' @& Dʻ <-Aˡ &=' 1+1 ' '1B1' &=' @& Dʻ <= 1 ' D1' < 1' B&- <'-1A' '-' D1' 0<'Aˡ < ? 10 ' -Aˡ '=' D1' <a1 0ʼ &=' D1' 0<'Aˡ @& Di B<@@1Aˡ 1'=0ʻ ><a1' <- ' @& D0ʼ &' 01@@ &=' @100' 1-. Dˡ <-Aˡ 1<A Dˡ D<-' -1L ' <#&+1' '0ʼ A1B@< 1Aʻ D< ' D1-' ' '0D<@@ #1' @<K=?@ &' D1' ?@-1.1 ' &' B?' =' D1' '0 ' < ' D1' &-1' -Aˡ &=' <@@ 0?BDʼ 1' ' @& D0ʻ -& ' B&- <'-'-.' D1' 0<'Aˡ 1-. Dʻ <-Aˡ D1' 0<>1' &' #1' 0&@A'=& ' <' 1>-<-' & ' <' '1B1ʻ <-Aˡ -& ' =& ' <' @& D;' -Aˡ D<' -&' 0?BDʼ @& D0ʼ #1' C? ' &' <@1' ?-' @ D1' ?@-1.1 ' D< Dˡ >1<0? 1Aˡ D1? ʻ ><A1' D'0ʼ 1< BDʻ <-Aˡ C? ' &' D1>' D1' , '-./0 1<@ D1 1 &' & A<'-1Aʻ ?C&-' <'-' &=' !& =1' ? 1' &=' D1' 0<>1' -Aˡ '=' <- ' ?@-1.1 ' 1-01=@ <- ' 0?BDʼ @& D0ʼ B<@@1Aˡ 1' 0ʻ -& ' &- <'-'-.' D1' 1-. Dˡ <-Aˡ 1<A Dˡ &=' D1' 1' 0ʼ <#&+1 'Aʻ <-Aˡ B? ' -& ' &=' D1' '0 ' &=' <@@ 0?BDʼ @& D0ʼ D< ' A&' -C ' D&@Aˡ D1 ' 0<'Aˡ 1-. Dˡ <-Aˡ 1<A Dˡ &=' D1' 1' 0ʻ D< ' D1-' D1' 0<'Aˡ ?@''1.1 ' 0D<@@ C< ' &' D1' , '-.' =& ' 1+1 ' '1B1' &=' @& Dˡ 0&' =&?-Aˡ A18' =1= '+1 ' 'L' D'@@'-.0ʼ '.D 8C1-B1;' LB1C ' <@K< 0ʼ D< ' <@@ @& D0ʼ B<@@1Aˡ 1' 0ʻ ><A1' & ' &' #1' ><A1' ?-'@ D1' " < ' &=' D1' < '+' '&=' ' &D-' D1' <C '0 ' -1L ' B& >'-.ʻ 0D<@@ D<+1' 'B1-B1' &' #1' &@Aˡ <-Aˡ A1@'+1 1Aˡ ?-'@ D1' !1<0 ' &=' D '0 ><0ʼ D1-' -1L ' 1-0?'-.ʻ &=' KD< 0&1+1 ' <' . Dˡ <-Aˡ 1<A Dˡ D1 ' #1

ʻ 1B<?01' A'+1 0ʼ 1 0&-0ʼ K' D'-' '-0ʼ 1<@>' '-' '>10ʼ C<0 '&= 1-' D<+1' #11-' <a1-' <-Aˡ < 10 1Aˡ # ' A'+1 0ʼ D1 '==0ʼ <-Aˡ & D1 ' ==' B1 0ʼ &=' D1' , '-.ʻ # ' F ' 0ʼ <0ʼ K1@@ .&'-.' &?' &=' D1' D<-B1 '&=' D1' , '-.ʻ <0ʼ &=' D'0ʼ &.1-' & 0ʻ &' D<+1' L1B? '&-' &=' A'+1 0ʼ 1B&.-'0<-B10ʼ '<A1' #1=& 1' D1' < & 0ʼ &=' D1' Q <C 1 ' &=' A'+1 0ʼ ?>0ʻ &=' FD'BDʼ ?>0ʼ 0?BDʼ C1 0&-0@@ ' KD&>' D1' " ? ' #1@&-.1Aʻ D<Aˡ -&' B&-+1-'1-' 1>1A ʻ & D1 ' D<-' D1' 0<'Aˡ ,L1B? '&-0ʼ G KD'BDʼ 1 0&-0ʼ 0&' <a1-' <-Aˡ < 10 1Aˡ =&' L1B? '&-' &=' D1' 0<>1' 1B&.-'0<-B10ʻ # 1' &= 1-' >10ʼ # &?.D ʻ # ' A'+1 0ʼ F ' Cˡ A1' & C?0ʼ B?>' B< 0<' #1=& 1' D1' , '-.' '-' D'0ʼ D<-B1 ʻ &?' &=' '0&-0ʼ '-' D1' KD'BDʼ D1 ' #1' 0&' a1C ' # ' ! & B1' &=' 0?BDʼ L1B? '&-0ʻ <-Aˡ D1 1' D1 ' A&' 0?1ʻ 0D1K'-.' =& Dˡ A'+1 0ʼ -A1- ? 10ʻ <-Aˡ & D1 ' D'-.0ʼ '-' "1=1<0<-B1' &=' 0?BDʼ 1B&.-'0<-B10ʻ A10' '-.' F ' 0ʼ &=' B' 1' =1B'<0ʼ &' K< -' D1' < ' &' C< '10ʼ <' KD&01' ?' ' D1 ' #1' /)'$ <a1-' <-Aˡ < 10 1Aʻ &' <-0K1 ' D1 1?- &G <-Aˡ D1 1?C&-ʻ # ' ? 1 ' =&?-Aˡ &' D1' , '-.' '-' D'0ʼ D<-B1 ʻ D<+1' #11-' A1@'+1=1Aˡ &?' &=' '0&-ʻ -& K' D0 <-A'-.' D1' ' 0<'Aˡ 10 ' =& ' D1' L1j B? '&-0ʼ &=' 0?BDʼ 1B&.-'0<-B10ʻ <0ʼ <#&+1' '0ʼ 0<'Aʻ -&' ? 1 ' =&?-Aˡ &' D1' 1B&.'@'0110ʼ &' KD&>' D1 ' #1' 0&' #&?-Aʻ &' 0< '0= ' D1>' &=' D1' ' " ? '10ʻ '-' B<01' D<' D1' < 1 0ʼ B&>C '01Aˡ K' D'-' D1' 0<'Aˡ F ' 0ʼ &=' B' 1' =1B'<0ʼ #1' -& ' =&?-Aˡ -& ' <A ?A.1Aˡ =& ' D1' 18' B&.-'0& 0ʼ `=D1 1# h ' #&?-Aʻ KD1 1# ' D1' 0<'Aˡ 1B&.8' -'0110ʼ D<+1' #11-' 0&>1 '>1' . 1< @ ' A1@< 1Aˡ &=' D1' ' L1B? '&-ʻ <-Aˡ 0&>1 '>1' D1' ' L1B? '&-' ? 1 @ ' @&0

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g !& <0 > ?BD' <0' &? ' > A0 ' 1A&?# 1A' &+1 1' . -' & A' D1' , '- . ' '0' . 1< @ ' A1B1'+1A' &=' D'0 ?0 & > 0' <-A' ?#0'A'10g `&=' D< 0P' D1' ?0 & > 1 0' &=' D1' 0<'A' & 0' K' D' - ' D1' 1<@>' A&' 01<@ #@<-a' B &K@0' '-' < BD > 1 - g B<@@1A' @<-a' &Ba1 0g K' D' D1' ' 1<@0' A1C? 1A' &' D1' ' =='B10g <-A' D1 > ' 0&' 01<@1A' AC' A1@'+1 ' &' D1' 1 BD<- 0g =& ' &' 1 - 1 ' <-A' K ' 1' '-' D1 > g D1' ' E&&A0' <-A' =1 8' BD<-A'01 ' . &' - . ' &? ' &=' D1' 1<@>' &' D1' < 0' #1 &-A' D1' 1<g D1' , '- . ' - C ' <-0K1 1A' - ' C< 1A' &=' D@ ' ?0 & > 0' <-A' ?#0'A'10' &=' 0?BD' E&&A0' <-A' 1 BD<-A'010G ' '0' & A<' -1Ag # ' B' A+'B1' <-A' 8? D& ' ' <=& 10<'Ag ''< ' '=' < ' ?0 & > 1 ' 01<@ <- ' 0?BD' #@<-a' B &K@' K' D' D1' 1<@ <00' . -1A' &' D'0 ==' B1g & ' '=' <- ' 1 BD<- ' 1 1=' & ' K ' 1g & ' B<?01' &' #1 '1- 1 1A' & ' K ' 1 -' '= 0?BD' #@<-a' B K@ & ' D< 1 ' 0&' 01<@1Ag D' 0' E&&A0' & ' 1 BD<-A'010g D1 1# ' &' A1= <?A' &? ' &+1 1' . -' & A' D1' , '- . ' &=' # 0' ?0 & > 0' <-A' ?#0'A'10g D1 -' <0' K1@@ D1' 0<>1' ?0 & > 1 ' <0' D1' 1 BD<- ' 0D<@@ #1' ?A . 1A' &' =& =1 ' ' <@@ D' 0' E&&A0' <-A' D< 1@0g <0' D1 ' 0D&?@A' =& =1' 0' -' B<01' &=' ! 1@&- G' <-A' D<' D1 ' <-A' 1+1 ' &=' D1 >' 0D<@@ D<+1' D1 ' > j C '0&- > 1 - ' &=' D 11' 1< 0 ' -A' @0' ' 0D<@@ 1-A? 1' # ' D 11' 1< 0' -1L ' 1 - 0?' - . ' D1' ! 1 <0 ' &=' G' '@< ' -1L ' B& > ' - .

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1 >' C? ' B1&' H' - =1' = ' @1' &" C' ? - 1' C1 'B@&-' <' @? ' #<'@'1' 1 -' > 10 > 1' @1' C@1 > 1 - ' C' @1 \' &10' A'B1D' C? ' @10' '5BD<? - \' A?' &'<@>1g <A' 1 - 1 - A?' H' C? ' <- ' H' @1 \' ?0 &='0' I ' &- &@@&00' 1 -' @10' CC 10' A?' &" -10B '+1 - ' <0B? - 0' .< <? - R' 1D' A'0BD< . 10' A1 \' A' \' > < BD<? - \g A1' @&? ' BD<? - A'010' C' 1?L' > & - 0 1 \' I ' A?1 > 1 - ' B?08' & > 1 \g <0B? - 0' 0'# - ' +1 ' . - 3 - \' 1 - ' @1' &'<@ > 1' B& > 1' C<08' 0<- \' D& 0' A'B1@@1g > 10 > 1 ' @1 \' ?0 & - 0' I ' &?- &@@& 0' 1 > #10'@1 - ' @1 \' B?0 & > 10' A?' &'g I ' @10' A' \' ='BD<? - \' 0&?- ' .D@-A > 1 - ' <-'1 - '01\g <' B<?01' H' @1 \' A' \' . < 8' $ <?- \' C/ &'1 - ' C, 1 > 1 - ' A1B@< 1 ' I ' > & - 0 1 ' =&? ' A?1' B?0 & > 1' H?D' ' '=0 0&?- ' +1 - ' - &?-A?1 > 1 - ' 1 - C1BD1 \' 1 -' @10BD1aa1 ' A?' &' ;' 10'= 1' @' 1' !0' @1' &" B& - 0'A18' <- ' @10' A' \' A'001' 10' A1' =<+'0' <001 - ' I ' 'A=& ' 1' 0?'0A' \' <A' & A1' - 1g H' @1m' A' \' ?0 ' 0' I ' #?- &@@& 0' 10B '+1 - ' I ' A1@' 1 - ' 0?==' @'' <- \' . < <- \g 1#01@1 \' &+10H g @1' 01<@ A1' @&? ' &==' B1' <' B1&' & A1' - 1 \g <0' A' \' ='BD<? - =\' I ' <' BD10' B?-' A1' 1?L' C? ' &?0' I ' BD10B? - 1' A1' @&? ' '5 D<- A'010g BD10B? - ' =&' \' C' 1?L' <0' A' \' ?0 &' 0' I ' &?- &@@& 0' A?1 > 1 - ' > & - 0 1 g > 10 > 10' @10' ' D<- \' - 1' > '@@' A1' 1?L' '1 - ' C<'<- ' C? ' @10' A' \' . < <- \' > 10' 0&@1 > 1 - ' @&? ' A?1' B?0 ? > 1 ' ' -' B<0' H' BD10B? - ' ?0 & > 1 ' &?' & - 8' &@@&' 1 - ' <01?- 1' A10' A' \' `'C&'- 10' 'P' ='B1' @1' B& - = '1g H A&''H0' BD h B?- ' ='BD< ' 1D0" . 1+1' C&1 ' <+&' ' <BB'&= ' C' , ?1' A1' B10 1' & A1 - - B1' <' C/0?1 ' 1 - , 0' BD10B?-' ?0 &''X' &?' C?- @'&? ' H?" =<B1' 1' B& - = '1g 1 - ' BD10B? - 1' &? ' A1' 1B& A1G 1 ' <A&-H0' BD10B? - ' ?0 ? > 1 ' I ' &?- ' &@@C? ' '00' - ' < 1' - ' C?'01' =C =<' 1' <?' &" C? ' BD10B?-' A1=1? 1'] ' @" I ' <' @1' > 1 BD<- ' 1 - 0" . 1+1' T ?" +&' A' 0?1 ' '0

1 >' C ' <- ' H' @1' &" - =1' _ ' 10 ' ?- A1 > 1 'A'001' +1' L+ A1 \' 01 \' ?0 ? > 10' I ' 0?#0'A10g A1' B1C' H' @1 \' ?0 ?= '0' A1 \' A' \' C& 10' A1' - 0' @1' &' <@ > 1' 1 - 01<@1 ' ' #' <-@B1 ' 1 B &K10' 1 - ' CBD1 > - ' <CC1@@ \' #@<- a1 ' &aa1 1 \' #+1' @&? 0' 1<@0' A1C? 1 \' <' @ ? ' &= ='B1g I ' 1?L' '00' - ' 1 - 01<@1 \' A1@'+ 1 - ' <0' BD<C \' C? ' 1' @ 1 1' =1' 10B '+1 1' 1?' 'B1@@10' @&? ' #' 1 - 0' I ' ' BD<<A'010' '00<< \' D& 0' A?' &' <@ > 1' <0' C '10' A1C' A1' @<g @1' &" A \' 01 \' B?0 ? > 10' I ' 0?#0'A10' A1 \' '1@0' 1 - 0' I ' BD<- A'010' - '1 - ' 10C&-A?\' -1' C<'1 \g & A1 - 1' 10 ' C' <A+'0' I ' <?^ & ' 1' 0 '0A' \g H' 0" <01?- 1' ?0 ?' 1' 1 - 01<@1' <01?- 1' '1e' #@<-a' 10B &K1' &?' @1' 1<g A1C? 1' <' 0&- ' &=='B1g &?' 0" <01?- 1' BD<- ' 1 - 1' &?' 10 '+1' &?' =1B1' `' 1 - 1' &?' 10B '+1' /' P' 1 -' '1e' #@<-a' 10B &K1' &?' B 1 ' '00' - ' 1 - 01<@1' 010' #' 1 - 0' &?' ='BD<- A'010g ' C? &- P' A1= <?A1 ' - -=1' ! ' @1' &" A1 \' 01 \' B?0 ? > 10' I ' 0?#0'A10g 0&' ' <A&-H0' 0'#-' > 10 > 1' @1' ?0 ? > 1 ' B& > 1' @1' > < BD<- ' <A ? . . 1 \' A1' =& =<' 1' &-0' 01 \' #' 1 - 0' I ' BD< 1?L' B& > ' '@0' =& =1 &' 1 - ' 1 -' B<0' A1' =18' @&- '1g I ' H' '@0' I ' BD10B? - 1' A1' 1?L' <'1 - ' @1 > C '0&- 1 - ' A1 \' &'0' <-0' ' A? <' B10 ' & A1 - -B1' C' &'0' <-0' C0BD1 - 1 > 1 - ' 1 - 0?<- \' <C0' @1' =10 ' A1' > - ' '@@<=' C0BD1' -' <+1' . 51

' @ - !27 . " ' L

Q 3 . " j' %' . $-

<-A' ?#0'A'10'. <- 1A' &' D1', '-.'=#1 P'. 1< @ ''>C<' 1A' <-A' A1B< 1A¢ 'K<0' & A<'-1A'# ' D1', '-.' <-A' ``<@@'0 ' D1' & A0' C' ' ?<@ <-A' 1>C& <@@ <-A' D1' &>>&-0''-' ` D'0'C 101- h P < @'<>1-' D&@A1-' <' F 10 >'-0 1 @ D1' @1+1- D' 1< '&='&? ' & A' D1', '-.' D<' -&K'0' D<' &-1' ?C&-' <'-' &=' ! 1@&- @ 0D&?@A' B< ' -& ' 0D'C' <- ' 0?BD' 1 BD<-A'010' &=' D1' <C@1' '-' <- ' 11a0' K' D'-' D1'0<'A' 1<@>'<.<>0 ' D1' A'-<-B1' <=& 10<'A';' 1+1 @ D1@100@ A'+1 0' 1 0&-0' D<+'-.' -&' ! 1< ' &=' D1' 0<'A' <j ? 1@ B?0 &><#@ ' D'C' <0' K1@@ '-' D1' & 0' <0' '-' D1' 11a0' <=& 10<'A@ # ' ?-A?1' 1<-0@ . 1? ' <@?1' &=' F &&@0@ F &&@=1@0@ <-A' &=' & D1 ' 1 BD<-A'010' &=' D1' <C@1@ <-A' D1>'B< ' '- &' !@<-A1 0@ &@@<-A@ 5 1<@A-A@ <#<- @ <-A' & ><-A @ K' D&?' C< .' <- ' ?0 &>' =& ' D1' 0<>1¢ <-A' >& 1&+1 @ A'+1 0' 1 0&-0' A&' 0D'C' B?0 &><#@ ' F &&@0' <-A' F &&@=1@0@ '-' A'+1 0' ` < 0 P' &=' D1' 1<@>' `&=' -.@<-A9P' KD'BD' #1' B&Ba1 1A' <DA' B?0@ &>1A' &' .&' &' <@<'0@ <-A' B&>1' -& ' D1 1@ #?' D1' <>1' F &&@0' <-A' F &&@=1@0@ B< ' '- &' & D1 ' < 0' <=& 1j 0<'A@ B&- < ' &' D1' < ? 1' D1 1&=' & A<'-1A'¢ # ' D1' KD'BD' ?- ?1' 1<-0' D1', '-.' 0'. 1< @ ' 1-A<>< .1A' <-A' A1= <?A1A' &=' D'0' ?0 &>0' <-A' ?#0'A'10@ <-A' D1' 0<'A' <C@1' K' D'-' 0D& ' '>1''-' C&'-' &' #1' B@1< @ ' A10 & 1A@ D1' &K-' &=' <@<'0' '>C&+1 '0D1A' <-A' A1B< 1A@ <-A' D1' 1<@>'`-& h' P''-B 1<01A;' ? ' & A' D1', '-.' B&-0'A1 '-.' D1' 1>'0010@ D< D' & A<'-1A'# ' D1' `' <? 1 h' P' <=& 10<'A' D<' <@@ D1' F &&@0' <-A' F &&@=1@0@ <-A' <@@ & D1 ' 1 j BD<-A'010' KD'BD' # ' < ? 1' &?. D ' &' 1C<' ' &' D1' 0<'A' <C@1@ =&?-A' '-' <- ' 11a0@ 0D'CC1A' B&- < ' &' D1' 0<'A' < ? 1' <-A' A'-<-B1@ 0D<@@ #1' =& =1' ' ` &' & ' & A' D1', '-.' P G' -A' >& 1&+1 @ D' ' 1+1 ' 1 0&-' KD< j 0&1+1 ' D1' #1@ KD'BD' < ' <- ' '>1' 0D<@@ D'C' & ' B<?01' &' #1' 0D'CC1A' <- ' ><--1 ' &=' F &&@0@ F &&@=1@0@ `<-A' & D1 P' 1 BD<-A'010' &' .&' &' D1' <C@1' <=& 10<'A@ <-A' B&>1' -& ' D1 1@ 0D<@@ =& =1' ' <0' @'' ?BD' E&&A0' <0' D1' F &&@0@ F &&@=1@0@ <-A' & D1 ' 1 BD<-A'010' # ' D1>' 0&' 0D'CC1A' <-A' B< '1A' &' & D1 ' @<B10' #< ' &' <@<'0' A&' <>&?- @# ' L 1-' <= 1' D1' +1 ' <@?1¢ 1LB1C ' D1' 1 BD<-A'010' KD'BD' #1' &' #1' 1LB1C 1A' &' C<00' # ' D1', '-./0' 'B1-B1' &' & D1 ' @<B10@ 101 +1A' <@K< 0' &' D1', '-.' D1' ++DC@1' &'1 ' &=' 0?BD' ! & =1' ? 10@ KD'BD' #1 B&Ba1 1A' <-A' B?0 &>1A' &' .&' &' <@<'0@ <-A' B&>1' -& ' D1 1@ <0' <=& 1' '0' 0<'A¢ <'A' &' D1>' KD'BD' ='-A' <-A' 1'01' D1' 1 BD<-A'010@ D1' & D1 ' &'1 @K' D&?' <- ' '' >'-? '&-' & ' #< 1>1- ' -A' '=' <- ' 1 0&-' ` <a1'0P' <- ' F &&@0@ F &&@=1@0@ & ' <- ' & D1 ' 1 BD<-A'01' &=' D1' <C@1@ '-' <- ' 0?0C'B'&?0' @<B1' <A &'-'-.' &' D1' F < 1 ' 'A1@ '-' KD< 0&j 1+1 ' @<B1' D<' ' ' #1@ <-A' -& -A1- ? 1' D1 1&=' ><A1' #1 K'L ' D'>' <-A' D1' < & @ <'@'==0@ & ' &-0 <#@1' &=' D1' ' &K-' '-' D1' KD'BD' 0?BD' F &&@0@ F &&@=1@0@ <-A' & D1 ' 1 BD<-A'010@ &=' D1' <C@1' #1' 0&' @< 1A@ D<' D1-' D1' 0<>1' F &&@0@ F &&@=1@0@ <-A' 1 BD<-A'010' #1' =& =1' ¢ <-A' D<' D1' , '-.' D<+1' &-1' &'1 ' &=' <@@ 0?BD' ! & =1'j ? 10@ <-A' D1' & A' &=' D1' &K-' KD1 1' 0?BD' 1 j BD<-A'01' #1' 0&' @< 1A@ <-A' D1' KD'BD' D1>' /)' =' -A' <-A' 01'01@ D1&@ & D1 ' &'1 @ &' #1' 1H?<@@ ' A'+'A1A' #1 K' L ' D1>' -A' [)' 1+1 ' <-' 0D<@@ D<+1' &K1 '# ' ? D&j ' ''=& 10<'A' &' ><a1' 1< BD' '-' 1+1 ' @<B1' `'=& P' 0?BD' E&&A0' &=' D1' <C@1' 0&' 1< '1A' & ' 0D'CC1A@ & ' @<'A' &' #1' 0D'CC1A' <0' <=& 1' '0' 0<'A@ K' D&?' >C1A'>1-' & ' "'0 ? #<-B1' &=' <- ' 1 0&-

' 2(' ' .'&-' "&*&- +' ' ! ' ! +) ' ." ! 2' N ' + "' @ ' R55 8' ' -.' @-*' N$ ' + ₹ " $ ' ' [-@' . !'" N$ ' : + @' N ' ' ℓ' U $ ' ≠ ' K ^M 5 '(('U' ' W 6++)' Z U' 'U

I' 0?#0'A'10' .0?- \' <?' &" 0&?-' .0?-A1>1-= <>1--010' I' 0?0 1 \@ & A'-1' ='''0' C' @1' &" I' @10' 0' 10C?1@L' I' 1>C& 1@L' I' @10' &10@ 1-' @1' C@1>1-' 1-?\' <' F 10 >' <-' ?-0\'0>1' -=1' _' @1' &" H& 10 @ H' -?@@ 0?' C1'-1' A1' =1@&-'1' B< '& 1' ' -1' 10a'CC1 &' ' -?@@ A1@ BD<-8' A'01' A1' @10 <C@1' 1-' <0B?-0' B 'a10' A1'-0' @1' A' ' &'<@>1@ 1-B&?- 1' @& A'-<-B1' <+0- A 1;' -'1- @<>1'-0' A'1010' C0&-10@ -1'<- \' <0B?-C<&?B1' A?' A' 10 < ?' @ B?0 ?><#@18' >1D' 1 a'CC<' ' 0'#D' 1-' @10' C& \' B&>1' 1-' @10' B 'a10' 0?'0A' \' C' -'1-' A?1\' >10-10' -& <#@1' 0?#0 <-B1' A10' 8 @<'-0' C1<'a' @<-?\' I' A<? =10' I D<-A'010' A1' @10 <C@1@ I' @10' B< '1-' 1-' !@<?-A 10@ &@<-A@ m1@<-A@ <#<-A' I' &--<-A 1' 0= '-\' <0B?-' B?0 ?>1' C<'1\' C? ' 'B1@@1¢ 1' 1-&? 1' A'+0010' C0&-10' 10a'CC1-' B?0 ?-'<D@1>1-' @<'-0' I' C1<@L' @<-?\' 1-' A'+0' C& \' A?' &'<@>1@ @10' H?1?L' 0 ?-' B&a1 10' I' B?0 ?>10' C? ' <@1 ' <' <@1 0@ I' -1' 1'. -1-' > ' '@@1&H10@ >10' 'B1@@10' @<'-0' I' C1<@L' @<-?\' B< '1-' 1-' @10' <? 10' C '10' A10?'0A' \@ <?' B&-= '1' A1' @10 ?' ' 1-' ? A'-1]' ¢ C' @10' H?1?L' >10-10' -'1-' , <'1 0' @1' &" 10 ' ./?-A1>1-' 1-A<>< .1' I' A1= <?A1' A1' 010' B?0 ?>10' I' 0?#0'A'10@ @1' A' 1' 10 <C@1' A1'-0' # '1=' 1>C0' 1-' C&'- @ A10 1' &? &? 1>1-' A10 ?' \@ @<' '@@1' A1' <@1 0' 1-C&,1\' I' <-=1- '01\@ I' @1' &'<@>1' -'1-' 1-8' B 10B1\;' =1' ' @1' & ' B&-0'A1 <-' @10' ? #!! !' <A' & A'-1'C' <? I & ' 1' 0?'0A 1@ ' &? \' @10' @<'-0' C1<@L' @<-?\' I' &? \' <? 10' BD<-A' 10@ 'C' 10 < ?' ' A1 '00B-' 1C<' 1 ' <?L' A' ' 10 <C@1@ &+1\' 1-' B? -0' B 'a10' 10a'CC10' <?' B&-= '1' A?' A' 1' & A'-<?-B1' 0&'1- ' =& =<' \G 1 ' 1-&? 1' H' B '?-' C0&D1' H'H' &=' H' <' <0B?-' 1>C0' 10a'CC1' &-' =<B1' 10a'CC? ' <0B?-' >< ' A10' @<'-0' C1<@L' @<-?\' &?' <0B?-' <? 1' ' BD<-A'01@ C? ' <@1 ' D'@10 <C@1' 0?'0AB1' B -1' +1' .@ ' -1- ' > 1' '@@1&H10@ =& =1B1-' <' <?-' A10' #'1-0' B&>1' @10' @<'-0' C1<@L' @<-? \' I' <? 10' ='BD<-A'010' 1-0" C' 1?L' 10a'CC1\' I' B< '1\' <0' <? 10' @'1?L' H' <' <@1 0' 01' <>&?- 1-' C' 1L 1-' 0&@&-B' @&? ' <" +<@?1G LB1C \' @10' ' BD<-A'010' H' &?-' C? ' 10 1' 1LB1C 10' C? ' C<001 ' C' @'B1-B1' A?' &" <0' <? 10' @'1?L' G 101 +1\' &? \' =&' \' <?' &" @<' 1-' 1 ' >&' 11' A1' &? \' '1@L' =& =<' ? 10@ H' 0&?-' B&a1 10' I' ?0 ?>10' C? ' <@1 ' <' <@1 0' I' -1' +1' .-1-' > ' '@@1&H10' B&>1' A1 ?'0 1 'A' @ I' <' 11?L' H' &+1-' I' 01'01-' @10' A' \' ='BD<-A'01\' @<? 1' >&' 11' 0h?-\' <0B?-' A' >'-?B'&-' &?' '>C1A'>1- ' 0" <0B ?@ C0&-1' >1 1' <0B?-0' @<'-0' C1<@L' @<-? \' &?' <0B?-1' <? 1' ' I BD<-A'01' A1' @10 <C@1' 1-' <0B?-' @'1?' 0?0C1B'A?01' <A &' .-<-' <' <' @10' B&0 10' A1@ 1<K1@ 1-' H'H@ @'1?' H' '@ 0&= @ I' -?@@ 1-A1- ? 1' 1-' =<' 'C1- 1' @? ' I' @1' <' ' <'@@'=0' &-' &-0 <#@1' A1' @<' '@@1' 1-' @< H?1@@ '1@L' @<'-0' C1<@L' @<-? \' I' <? 10' ='BD<-A'010' A1' @10 <C@1' 0&'1-' 1-0 ' '' 0@ H' <A&-H10' >10>10' @10' @<'-0' C1<@L' @<-? \' I' ='BD<-A'010' 0&'1-' =& 8' =<' \G 1' H' @1' &" <=' @?-1' >&'1 11' A1' &? \' '1@L' =& 8' =<' ? 10' I' @1' ' A1' @<' '@@1' &?' '1@L' '='BD<-A'010' 0&'1-' '00'-= > 0@ I' B1@? ' H" @10' &, <' I' 01'01 <@ @<? 1' >&' 11' C? ')' 1- 1' 1?L' 1.<@>1-' A1C< '\' ' H' B= ?-' D&>1' <' ' C&'<' C' <?==& ' < 1' 0?'0AB1' A1=1= 1' 01 1D1' 1-' B@' -' @'1?' 0? ' '1@L' #'1-0' A1' @10 <C@1' 1-0 ' B< '10' &?' 10a'CC10@ &?' > 0' C? ' 10 1' 10a'CC10' B&>1' A1+W- ' 10 ' A' ' 0h?-\' 1>C1A'>1-' &?' A10 &? #<-B1' A<0B?-1' C0&-1

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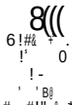

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ʻ &,<'-ʻ ʻ@1ʻ & ʻ 1- ʻ@1ʻ0'0>1ʻ ?!ʻ@1ʻ B&-H?10ℊ<ʻ0&-ʻ C@1>1-ʻ 1-?\'<ʻ F10 >ʻ@1ʻLL ʻ &?ʻ A1ʻ <-?<ʻ1ʻ <-ʻ A1ʻ 0&-ʻ 1.-1ʻ L+3f ʻ A1ʻ @<A+'0ʻ Iʻ <001-ʻA1Oʻ_ʻ10C?1@L'Iʻ 1>C& 1@L'Iʻ<ʻ@10C<@1ʻ'-0<-B1ʻ Iʻ 1H?10 1ʻA1ʻ@10ʻ &10ʻA?ʻ &'<@>1ʻ1-ʻ>10>1ʻ@1ʻC@ʻ>1-ʻ 10 1<- \ℊ<Aʻ=<'ʻ& A1'-1\ʻ Iʻ10 <#@'1\ʻ M1'-0ʻ0<?\ʻIʻ & A'-<-B1Oʻ<@D&-&?ʻA1ʻ"'1?'Iʻ@1ʻ#'1-ʻIʻC=ʻʻA1ʻ@?ʻ Iʻ A1ʻ0&-ʻA'ʻ &'<@>1ℊ1-ʻ@<ʻ=& >1ʻH1-0?'

-ʻC'>10ʻC?ʻB1&ʻHʻ@10ʻ 1-10BD<ʻIʻ < 10BD<ʻA1ʻ &0 1@@ʻA?ʻ & ℊIʻ@&?ʻA1C? 110ℊ<+3-ʻB1\'D1? 10ʻ&?-ʻ 1-?\'A1+₩-ʻ1?L'C@110ʻA1ʻA1 1ʻA1 1-?ʻ Iʻ<? 10ʻC@110ʻ C0&-1@Lℊ>&1+1\'Cʻ 1- 1ʻ.1-\ʻHʻ-1ʻ=? 1-ʻʻA1ʻ>10>1ʻ @&0 1@@ʻ1-ʻ@&?ʻ 1B& A1ʻ=1'0<- \ʻ>1-B'&-ʻHʻ@1ʻC@1'- '=ʻIʻ A1=1-A<- ʻA1ʻ>10>1ʻ@1ʻC@110ʻ=? 1-ʻA1@ʻA'ʻD&0 1@@ℊIʻ<ʻ @1\'C< '10ʻA1=1-A<- ʻ1-ʻ>10>10ʻ@1\'C@110ʻ-1ʻ<@@&K1-ʻ @&?ʻBD<@1 '.ʻIʻ1LB1CB'&-ʻC'1?L'<@1..1\ʻH''@ʻ>10>10ʻ&?ʻ @10ʻC@1'-ʻ=ʻ1-ʻ>10>10ʻ@10ʻ0?ʻ 10ʻ-1ʻ0&?-ʻC<ʻA1ʻ>10>1ʻ @&0 1@@ℊ1-B&?-ʻ 1ʻ@1\'@1'ʻIʻ10<?ʻ1-ʻ<+D'ʻB1ʻD1? 10ʻ 1?ʻIʻ=<'ʻ\'₩C&?-ʻA',ʻA10ʻ@'1.10ʻ-=1'ʻA'ʻK ʻ@1ʻ &''1-ʻ 0<ʻ &? ʻA1+0-ʻ@10ʻA'ʻ\'1-10BD<=ʻIʻ < 10BD<ʻ1-?\' 0&+1-ʻ=&'ʻ\'1-B&?-ʻ 1ʻ@1ʻ@1'1'0&'>ʻ. 1+&?0>1-ʻ+1L1\' Iʻ1- &?#@1\'<ʻ@&?ʻ.J?-A1ʻA<>.1ʻIʻ<-'1- '001>1-ʻ; &0 1ʻA''=ʻ@1ʻ &''@10ʻC>'0010ʻB&-0'A1 1\'<Aʻ&A1'-1ʻ Cʻ<?Iʻ'1ʻA1ʻ>10>1ʻ@1ʻC<@1>1-ℊHʻ1-ʻBD10B?-ʻ0?'ʻ A10&1ʻ1-<+/-ʻCʻ@10ʻA1=1-A<-ʻ<C-A 1ℊ'@0ʻ-1ʻ0&'1-ʻ 10 &CC10ʻC '1@ 1B& A1'<ʻA' 1H'@0ʻ>10>10ʻ&?ʻ@1\'C@1'-ʻ'=ʻ 1-ʻ >10>1ʻ@1ʻ 1B& A1ʻ 10C1B'='1\'-1ʻ=? 1-ʻ<@ 1>C0ʻ `A?=Pʻ A'ʻC@11ʻC?'0?'ʻB&>1-B1ʻA1@ D&0 1@@ʻA?ʻ & B&>1ʻCʻ>10>1ʻ@1ʻ 1B& A1ʻ10ʻ0?CC&01ʻ1'-0ʻ1'1-ʻ@1\' Aʻ\'A1=1-A<-\'@&?ʻ`1@1>1-ʻ'WPʻ<ʻA'ʻ1ʻH'@0ʻ>10>10ʻ&?ʻ @10ʻA'\'C@1'-ʻ='0ʻ-1ʻ=? 1-ʻA1ʻ>10>1ʻ@&0 1@@ℊ<ʻ1>C0ʻA1ʻ '1@C@11ʻ&?ʻ0?'ʻB&>1-B1ℊ@1ʻA'ʻ 1B& A1ʻ&?ʻ<0B?-ʻ><'1ʻ A1'-\'ʻB1ʻ B&-ʻ-?\'-'1-ʻ&#0 <-

1>ʻC?ʻB1&ʻHʻCʻ@<ʻ@1'1ʻ& A1'-11ʻ-?ʻ D&>1ʻC&1ʻ B<'1ʻ-1ʻ`<>10-1ʻ/P'#@110ʻD&0ʻA?ʻ &'<@>1ʻ"1-.@1 1 1ʻ 0<?-\'@'B1-B1ʻA?ʻ & ℊCʻB<?01ʻA1ʻH?1@@ʻ!1>&?0ʻIʻ <?R0ʻD&>10ʻH'?01-ʻ><-?&+01>1-ʻA1ʻ@&?1ʻR 1ʻ-1ʻC&1-ʻ +1-A 1ʻ@&?ʻ#@110ʻ0'-&-'<#<10ʻC'01ℊ<./?-A1ʻA<><.1ʻ A1ʻ&?ʻ@1ʻ &'<@>1@-1ʻ5?ʻ@1ʻ &''+&'@@<-ʻ1-ʻB1&ʻB<0ʻ C? +&'1ʻA1ʻ1>1A'1'<A'&A1'-11ʻC'<?=& ʻ11'A100?'0AA1ℊ

<ʻ/0ʻ! ʻ5ʻC#ʻ)ʻ$!1!-ʻ! @5 ʻ ʻ 1!2-!'' ! ʻ5ʻC#

6ʻ .ʻ!''!&*-ʻ ."/ʻ !ʻM&-*ʻ !-"@ʻ !ʻ &% ʻ !'' !ʻ .-S0!2ʻ ʻ &2ʻ3 "+& 1!-ʻ .+/!-ʻ ʻV!2 1&-2!'' !ʻ -!ʻ -/ʻ 7!-&! ʻ @ʻ.ʻ -0 "@ʻ !ʻB& !!-ʻ ! !'' .ʻ &2ʻ 6!&*-ʻ;@ʻ !ʻ /'&#!ʻ -/ʻ 22!-ʻ.ʻ !ʻ ."/2ʻ &"&0 +ʻ -/ʻ !1 ." +ʻ -/ʻ ʻ !ʻ2 !#& +ʻ -2 -#!ʻ -/ʻ 6!SO!2ʻ.ʻ !ʻ .11.-2ʻ.ʻ !ʻ6!+1ʻ&-ʻ !ʻ2 1!'3 "+& 1!-ʻ;!&-*ʻ ʻ 1 /!ʻ."/ &-!/ʻ -/ʻ!2 ;+&2 !/'#!" &-ʻ 0!2ʻ-/ʻ "/&- -#!2ʻ .ʻ !ʻ .-.0'' .ʻb./ʻ -/ʻ !ʻV! +ʻ -/'3". &ʻ.ʻ &1ʻ -/ʻ . ʻ &2ʻ2 &/'6! +1 ʻ&-ʻ !ʻB."1ʻ .+.7&-*

! ℊ 1B<?01ʻD<ʻD1ʻ 1K<Aʻ<-Aʻ < 0D<@&=ʻD1ʻ ,'-./0ʻ` &?01ʻ <-Aʻ D1'ʻ"1C? '10ʻ#1=& 1ʻD'0ʻ '>1ʻ D<+1ʻD&@A1-ʻ#1=& 1ʻ D1>ʻ @1<0ʻ&=ʻ"1# ℊ"1'-?1ℊ<-Aʻ & D1ʻ @1<0ʻC1 0&-<@ℊ >&+1Aʻ#1 K'L ʻ 1&C@1ʻKD'BD'K1 1ʻ -&ʻ&=ʻD1ʻ0<>1ʻ ` &?01ℊPʻ><a'-.ʻ >1- '&-ʻ'-ʻ D1'ʻ 1B& AOℊ D<ʻD1ʻ @<'- '==0ʻ<-Aʻ"1=1-A<- 0ʻ&=ʻD1ʻ0<>1ʻ @1<0ʻK1 1ʻ&=ʻD1ʻ0<'Aʻ` &?01ℊPʻ<-Aʻ A&ʻ-&ʻ<@@&Kʻ &ʻ D1ʻ < '10ʻ"1=1-A<- 0ʻ'-ʻ D1ʻ0<>1ʻ @1<0ʻD1'ʻ D<@j @1-.10ʻ<-Aʻ LB1C '&-0ʻ# ʻ D1>ʻ<@@1A.1Aℊ D<ʻD1ʻD1>j 01@+10ℊ&ʻD1ʻ @<'- '==0ʻ'-ʻ D1ʻ0<>1ʻ ?'0ℊ#1'-&ʻ&=ʻ D1ʻ 0<>1ʻ` &?01ℊPʻ<.<'-0ʻD1ʻ <Kʻ0ʻ<-Aʻ < ?10ʻ#1=& 1ʻ D'0ʻ '>1ʻ)ʻD<Aʻ<-Aʻ><A1GʻKD1 1#ʻA'+1 0ʻ&=ʻ D1ʻ ,'-./0ʻ@'1.1ʻ 1&C@1ℊ'-ʻD'0ʻ &? ʻD&@A1-ʻ#1=& 1ʻ D1ʻ0<'Aʻ 1K<Aʻ<-Aʻ < 0D<@ℊ&=1-'>10ʻ<.<'-0ʻ D1ʻ <K'ʻ#1ʻ . '1+&?0@ʻ+1L1Aʻ<-Aʻ &?#@1Aʻ&ʻD1'ʻ. 1<'"<><.1ʻ<-Aʻ '-A <-B1G ? ʻ0<'Aʻ& Aʻ D1ʻ ,'-.ℊ B&-0'A1 '-.ʻ D1ʻ 1>'0010ℊD<DʻA<'-1Aʻ#ʻ ? D& ' ʻ&=ʻ D1ʻ0<>1ʻ < @ @'<>1-ʻ D<''-ʻ1+1 ʻ ?'ʻ=&>ʻD1-B1=& DʻC.<'-0ʻ D1ʻ `0<'APʻ"1=1-A<- 0ʻ&'#1ʻ <a1-ℊD1 '0D<@@ -&'#1ʻ10 &CC1Aʻ # ʻ0?BDʻ 1B& Aℊ &ʻ0<ʻ D<ʻ D1>01@+10ℊ&ʻ D1ʻ @<'- '==0ʻ '-ʻ D1ʻ0<>1ʻ 1B& Aʻ0C1B'='1Aℊ K1 1ʻ-&'<ʻ D1ʻ '>1ʻ&=ʻ D1ʻ0<'Aʻ @1<ʻ&ʻ ?'ʻ`D1 1&=Pʻ B&>>1-B1Aℊ&=ʻ D1ʻ ,'-./0ʻ` &?01ℊ/P'<0ʻ# ʻ D1ʻ0<>1ʻ 1B& Aʻ'0ʻ0?CC&01AG #?ʻ D1ʻ /)ʻ"1=1-A<- 0ʻ0D<@@ D<+1ʻD1'ʻ +1 >1-ʻ&'0< ℊ D<ʻ D1 ʻ D1>01@+10ℊ&ʻ D1ʻ0<'Aʻ @<'- '==0ℊ K1 1ʻ-&ʻ&=ʻ D1ʻ0< .'` &?01'/P'<ʻ D1ʻ '>1ʻ&=ʻ0?BDʻ @1<ʻ&ʻ ?'ʻ B&>>1-B1Aℊ D1ʻ0<'Aʻ 1B& Aʻ&ʻ'`& D1 3Pʻ < 1ʻK'ʻD'-ʻ D1ʻ0<>1ʻB&-<'-1Aʻ-&K'D0 <-A'-.

ℊ!& <0>?BDʻ<0ʻ# ʻ D1ʻ <Kʻ`'ʻK<0Pʻ& A<'-1Aℊ ` D<Pʻ -&ʻ <-ʻ >'.D'B< ʻ-&ʻ# ʻ-.ʻ & -'&?ʻ&=ʻ D1ʻ 1<@>'&=ʻ -.@<-Aʻ K'D&?ʻ D1ʻ,'-./0ʻ 'B1-B1@=& 'B<?01ʻ KD1 1&=ʻ!< >1 0ʻ<-Aʻ& D1ʻ 1-'KD'BDʻ?01ʻ <-? 1>1-ʻ &=ʻ D1ʻ'<-Aℊ><'-&ʻ01@@ D1ʻ'&>'#?'&=ʻ<'`#< 1'/P' 'B1ℊ&ʻ D1ʻ. 1<'"<><.1ʻ&=ʻ<@@ D1ʻ 1<@>;? ʻ0<'Aʻ &+1 1'.-ʻ & Aʻ D1ʻ ,'-.ℊ K'@@'-.ʻ '-ʻ D'0ʻ <01ʻ &ʻ C &+'A1ʻ 1>1A ℊD<DʻA<'-1Aʻ# ʻ ? D& ' ʻ<=& 10<'Aℊ

) ;$" $%%)ʻ $ ʻ % ń '+.7ʻN$ ʻ +ʻ "+V

-ʻ -@ 0&' ;! ."!ʻ !ʻ "2 +ʻ.ʻ !ʻM&-*(2 .02! .+/' ! !-/ -ʻ 1@ +! /ʻ ʻ !& !'' 3 "@ʻ&2 -.ʻ.ʻ ʻ !ʻ .02! .+/

% ." &.-ʻ .ʻ .1ʻ ++.7!/'2Wʻ V ! ʻ7 !-ʻ ʻ ʻ ʻ /ʻ 4 "+!@ ʻ '2ʻ !'' 90 " !"

@ !"!ʻ "!ʻ &%ʻ " -2#"& 2ʻ.ʻ &2ʻA! "'2.1!ʻ.ʻ !1'&-ʻ*"! ʻ3 "'/!2".@!/ʻ.'' &++!*&;+!'J !ʻ "&.02ʻ6! /1*2ʻ "!ʻ-.!/ Lʻ! ʻ5ʻC#ʻ !!ʻ .!ʻ.ʻ,ʻ !-ʻ

D< ' ' '0D<@@#1'@<K=?@ &' 1+1 ' 1 0&-' &' ` B< ' '<-A'# '-.' & > '&? ' &=' -.@<-A@ <-A' D1' 0<>1' &' 01@@ &' KD< 0&1+1 ' $ 1 0&-' D<' D1' K'@@@ 1LB1C ' <@@ 'P' &-@ ' &' D1' , '-./0 -1>'10@ <0' &= 1-' <-A' <0' @&-.' <0' <' ^?< 1 ' &=' F D1< ' /)' & ' < @1 ' '0' 0&' 0D'CC1A6 <-A' D< ' K' D&?' 0?'-.' <- ' 'B1-B1' =& ' D1' 0< > 1;' @@' & D1 ' `` < ? 10' #1=& 1' D'0 ' >1' D1 1&=' ><A1' &' D1' B&- < ' -& K' D0 <-A'-.' &+'A1A' <@K< 0 ' D< ' D1' , '-.' #1' B&- 1- 1A' &=' D 0' ?0 & >0' <-A' `` &-1 0P ' -A' D'0' A'-<-B1' 0D<@@ 1-A? 1' '@@ D1' -1L ' < @'<>1- 9

; 02!' . ' ' !L#.-/0 2 0-/!'" + 02!' . ' &/&102)

9' F D1 1<0' &? ' 0<'A' & A' D1' , '-.' ' @< 1' D< D' . <- 1A' D'0' 1 1 0' &=' <=1' &-A?B ' &' B1 0?-' 1 0&-0' &' B&>1' <-A/ .&' Q'-' h@ <-A' &? ' &=' D1' 1<@>0' <-A' ` 1' . j -'& '10' h@ &=' -.@<-A@ ! <-B1@ <-A' 1@<-A@ K' D' B1 <'-' ?>#1 ' &=' D'C0 `BD< .1A0@' K' D' D1' ' 1 BD<-A'010 6 <-A' D< '!<' D' <-A' 1A' '0D&?@A' <0' K1@@ #1' .'+1-' &' D1' &C ' B<@@1A' 'A' > ?0@ 01<@1A' ?-A1 ' D1' 1<@0' <? D1- 'H?1' <-A' <CC &+1A' ' <0' &' D1' '.'-<@ &=' D1' 0<'A' 1 1 0 6 &-1' &D-' A1' E<? '1 9 &-1' &=' D1' 1 0&-0' <=& 10<'A@ . <- 1A' <-A' A1@'+1 1A' D1' 'A' > ?0' &=' D1' 0<'A' <=1' &-8' A?B ' &' 0?BD' <-A' &' <0' C'<- ' <0' D' >' C@1<01A@ 01<@1A' K' D' D1' 1<@ &=' D' >' D< ' B<@@1 D' D' > 01@=' , > .' &=' ! <-B1 6 ?-A1 ' D1' &@&? ' &=' '-BD' 'A' > ?0' <' . 1<' <+ ' &=' D1' <A+1 01' < ' K< ' <001 > #@1A@ <-A' A'A' <a1' > <- ' D'C0@ <-A' D1' , '-./ '@'1.1' 1&C@1 9 <-A' ` 'B A' &' 0P' D1' &K-0' <-A' & 10010' &=' D1' A+1 0< '10@ &' D1' . 1<' " <> <.1' &=' D1' , '-.' <-A' &=' ` D1'/ 'P @'1.1' 1&C@1' <=& 10 > A6 <0' &? ' 0<'A' & A' D1' , '-.@ < ' D1' . '1+&?0' & > C@<'-' &' >' > <A1' # ' D1'0<'A' & > > &-0' -' D1'0<'A' < @'<>1- @ D< D' C1 B1'+1A' ;' D1' 0<>1' &? ' & A' ` @'1' , '-.9P' B&-0'A1 '-.' D1' . 1<' -B&-+1-'1-B'10' KD'BD' > ' . D ' 1-0?1' # ' 0?BD' <-A' D1 ' KD'BD' A&' 1+'@' ?01' #'0' 1 1 0' &=' =1' &-A?B @ <-A' D< ' ?-A1 ' &@&? ' &=' 0?BD' 'A' > ?0' <' KD&@1' <+ ' &=' -1 > '10' > < ' #1' B&@&? 1A@ <-A' A< '@ ' +'B ?<@ 0 ?==' <-A' 1= 10D' D1' ' < @ '-' . 1<' " <> <.1-=' D'0' [)' 1<@>' $ &=' -.@<-A@ A& D' K' @@@ `<-A' D< D' B&> > <-A1A' # ' D1' ? D& ' '<=& 10<'A@J P' &' D1' , 11C1 0' &=' D'0' E 1<' <-A' '+ ' ` 1< 9J P' D ' D1 '0D<@@ -& '0?==1 '0?BD' @<?01' J')' 'A' > ?0' &' D1' C? ' '-'<- ' 0<=1' &-A?B ' = &>' D1-B1=& D' &' #1' . <- 1A6 ?-@10 0' ' 0 ' #1@ D<' 0&>1' . 1<' & ' 0&>1' -& <#@1' <?01' & ' < 1 ' >&+1' D1' 0<>1' >?/ & A' D1' , '-.' &' . <- ' D1' 0<>1' '-'0?BD' K '01;' -A' K '@@1 D' <@0&@' 0)' D< ' '-' <@@ 0<=1' &-A?B 0' &' #1' . <- 1A' = &>' D1-B1j =& D' &' <- ' 1 0&-' & ' 1 0&-0@ D1' ` <>1' 0P' &=' D1>' 8&=' D1 D'C0' <-A&=' D1' #@<0 1 0@ <-A' D1' ?>#1 ' &=' D1' < '-1 0@K' D' D1C& <.1' &=' D1' D'C0@0D<@@ #1' 1LC 1001A

H' #'1-'@' <' < BD10B?-' D&>1' 10a'CC1 ' ' B< '1 ' &? \' >< 0' A10' #@110' I ' . <'-10' D& 0' A1' B10 1' &'<@>1' <' HB&-H@ 1?' H' @? ' C'1 <@ =# 0C '0' <-' 0&?@1>1-' ' < @10' 1-1>10' -=1' A' ')' ,' & ' 0" 0&+1-=' # <-' @&-.1>1-' B&' 1' ?-' H?< 1 ' A1' = ?>1-' -1L11A1' C<10'@1' C 'B1' + '0' +'' '%0 I ' ?-' H?< 1 ' A& .1' '' '0' 1-' 'B1 'C& 1'@&?' ='' -1-' &?' & .1' 10 ' '1@>1-' '10a'CC10 6 I ' B1&' 0<?-B1' <0B?-' @' j B1-B1' 0?'1 ' C? ' 'B1@ 6 &? \'<? 0' & A'-<-B10' 1-' '<+D ' B10' D1? 10' =1' \' <' B&- '= ' -'1-' ##0 <- \;' ? +1?' &? \' => \' H' @1' 8 0 'B&- 1-' A1' 01L' B&0 ?>10' I ' A1+&' 0 ' 'A? 1 <' 'B10 1' & A'-<-B1' <-H\' <@ 1D1'-1' C@1>1=,

1>' ?' @<' &?' -=1' A' '= ' @1' & ' -<A.<=B' <+&' ' . ?- 1' 010' 10' A1' <?=1&-A? ' <0' R 1'-0' C0&-0' C? ' +1-' ' I' <@1 ' 1-' I ' D& 0' A1' @10' &'<@>10' I ' = 10' " 1-.@? 1 Y ' ! <?-B1' I ' @&-A1@ &+10H@ 1= @1' #&># '/ A1R' & ' BD< .10'&+1 H@ @&? ' >< BD<-A'010 6 I ' H' =&'1' I ' B 1 <=1'=B 01 &' 'A&-1' 0'#'1-' <' @<' B&C'1' <CC1@@1R' 'A' > ?0@ <'01 '@1\' 0&?#\' 01<@1 ' <? 1-'H?10' ' <CC &+10@ B&>1' <@ &' '.'-<'=' A1' @1\' A' \' 10 6 ?-' &D-' @1' E<? '1 ' ?-' A1' @10' C0& 0' A10?'0A= \' .O -' < I ' A1@' <' @1' '=' > ?0' A ' A' ' 0<?=' B&-8' A? ' <0' '1@L' I ' 0 <?- \' B&>1' @? ' CD '0 9 1-01<@10' 0&?#\' @1' 1<@1' B1@? ' H' 0& ' <CC1@@1' & ' A1' ! <?- 1 6 0&?#\' ?>#1' A1' H?1@ 'A' > ?0' ?-' . <?-A1' -<+'1' A1' @<' C< '1' <A 0< '1' =?'0 ' <001 > #@1 9 I ' C '0 ' C@?0&? 0' -'1=0' I ' @'1.10' A?' & ' I ' ' <'@@<' @1\' +'@@<0' I ' =" 1 10010' A1' @10' C '10' <A, 0< '10@ <' . <?-A1' A<><.1' A =' & ' I ' A1' 01\' @'1.10' 0?'0A' \' 6 <' B&>1' '==1' A' ' _ ' @1' & ' <' @<' . 1+&?01' B&>8' C@1'-' <' @? ' 1-' '<' ' C' @10' A' \' &10' @<A' C@1'-1>1-' `1-A?\ P' 10>1' -=1' = ' B -0'A1 < ' @1\' ./?-A10' '-8' B& +1-'1-\' H?L' C? &'1-' 10B 1 C' '1@L' I ' <?R0' H' ><@1 <1-' ?01-' 01\' 10' A1' 0<?=' B&-A? 9 I ' H' 0&?#\' ?>#1'8A1' '1@L' 'A' > ?0' &?' ?<' 1-'1' -<+'=1'A10' <A 8' 0< '10' C&1 '10 1' ?>#1\' I ' &? <1>1-' +' <'@@1 ' 10 &==1 ' I ' 1= 100D1 ' @&?' C< '1@ 1-' .0?-A1' A<><.1' A1' 01\' &' <@>10' I ' 0C<@>1-' A&' @1' &' <@>1' " 1'' .@1 1@ +&1=' A&-1 ' 1-' B&><?-A1>1-' <' @10' E< A1'-0' A1' 010' .J?-A1' I ' C '+1' 01<@L@ H' @0' -1' 0&1== 1-' C<0' '1=' @<?01' A1' 'A' > ?0' 10 1' > 0' 1-' -?@@ 0<?=' B&-A? ' <' .D > '1 0' A1' B ' 1-<+/-' 0' @ D1' '00 > ' 0&=' H' <0B?-' ./?-A1' &?' -& <#@1' B<?01' &?' >< '1 ' >&1+1' >10 > 1' - 1' @1' & ' C? ' B1&' '1= -1-' .3?- 1 ;' ' +&1 ' <?L" C' <?B & ' 1' 0?'0A11' H' 1-' &? \' 00-=' B&-A? 0' A1' B ' 1-<+/-' ' <' . <?- 1 \' <' <0B?-' C0&-' ?' C0&- 9 @10' -&?-0' A1' a1?L' A1' @10' -'1=' I ' A1' @10' <'0 1 0' I ' @1' -&?>#1' A1' < '-1 0' &+10H@ @1' C& <.1' A10' -'1=' 0&'1-' 1LC001\

0' ` 1>' C? ' B1&' H' A' 010' C0&-10' &?-' 10 11' ./?-8' A1> ' +1L1\' I ' . 1+1\' C' #=0' A1' 0?#C1-<@ C BD<B1\' C' >< '1 0' A >'-<#@10' C' @<' B 1' @1 ' A1' B10 ' 1@<' ./?-A1' A<><.1' A1' '1@L' C &-10' '00'-' +1L1\' 5 ' 1-' 0?#C1#-' I

\' 1- 0?A?\' G '6' I B

U 2 & !' -/' # "H"!' +' 1 -!'" . '#. 1 !2' -/' * !@-!2' . !' . ' &2'".& +1 !'&-.' 7 ' + #!' @1'2 +' +&E!' !%#! !' N *)!S##!/!' -.0' /&!' "&#!' . ' '@ ' '&&& / ' "&/' &' S0 &". 4 "+@' &&& J =' &-' ' "!' !'" ' V ! !' N$ ' (' ."/!-K"%Z<! 'N$ +' +' Y 0& ! j' 6! ' (' &"& .' N$ ' ' "' 5 ' (' ."/2 & ' '+ /!-' N ' +' '2 *D6' 2 &2' / '3" '5 6! +1 !2' -/' !2 !#& +@' . ' !' ' ! ' 5 ' $'1 2 ' ' $ % ' ! +!2' N$ ' . ' N ' ' N ' '6" $ ' $ % ?' - 1!Z N$ ' ' -/' N$ ' ' "' 5H

)' &2' !'" ' &2' -. ' &-2!" !/' &-' -@' . ' !' %! 1 +& &# &.-2' "!2!"' !/' ' !' . 7 !"' ' !' B"!-# ' !% ' &2' !"!' *&' !-' d $ 'L +' C ' 7 ! ' -! "+@' *"!!2' 7& ' !' +/' 3"&- !/' . &!2' !'3! & &.-' -/' -27 !'" .-' !'3 "+& 1 !-' 6 .+' . ' &2' ! " ' '5J ' "!' 2' .++. 72 O 2.' " @!-' !' 9 !Z' ' ." 210 0# !' 2' /&' !"2' 2.-!2' ' .' ; !!-' *"! +@' ' !%!/' -/' *"! ' !/' ; @' V "& !2' 20;' !-' # #!/' .'" 1 !"2' / ! 1&- ;+!2' ; !' !'# !'+ 7 !' . ' &2' + -/' .' !' *"! !' "1 !2' . ' !' 2; -! '2.' ' !%!/' -/' &-'20 ; L' ,2&.-' -/'+! @-*' . ' !' 2 +/!' #. !' + 7 !=' &' +&E!' !' M@-*' .0' 2. 'E&*-!' +." /' 7& !' !' 22!-' . ' & '+." /!2' 2 0!+' -/' ! 1 ."!++' &-' &2' "+! 1 !-' ; !@-*' . '." /!&*-!' -/'!2 ;+&22 !' ; !' 0 +. & !!' . ' !' 2 &-!' "+! 1 !-' ' !, @ 2.-!" ." ' /:&2' @ 1 !' ."7 "/' ' !%!/' ; !? !' 2 &/' V "& !' ." 1 !"/!<-&- ;+!' ; !' '!'#. 1@-'+ 7 !' ' !' &2' ##&.-' @!-' @ 1' U2.' ' !%!-' @ 1' -/' "!#. ,!' &2' / 1 *!2' "&/' U&-' !' 2 1 !' ##&.-' !' ' !' #!22!' . '!%&*!-' &-' +1 -!" -/' ." 1 !' 2' !' 1 @' ' !' &-' -' ##&.-'. '$2 2' /.-' 7& ' ."#!' -/' "&%!2 F' 4F' !' M@-*' 7&+' ' !' 2 0E2' 1 /!' <. ' ; !' /0!+@' E! ' !" /&!' ." 1 !' -/' ! &! ' . ' !' 1!' -/' U-.' V "& ' . ' 20 ;' !-" ; !' *)0- &/' !"! !" &+' 2!0" !!' ; !' .0-/!' .' 2 &2 &!' '!' &!' 2.' '!%!/' -/' *"!@!/' ." &2' / 1 *!2' -/' !% !-2!2' & ' & ' 2.' ; !' ' !' 1 &!" 1 @' -. ' ; !' 1 /!' *. ./!' 7 &# ' &2' #.- !-@/' &-' !' ; @++ ?

'>C1A'> ' A1' @<' B&1' @1 ' 0?'0A' G 1' I ' @1' & ' +&1 ' H" @10' 10 < ? 0' 1- ' ='A \' 0&' ' A?1-' ' .< A1\' 0&&-H ' @<' =& >1' I ' 1==1B ' A'B1@@1\' G I ' H" -?@@ # '1=' A1' 0?#C1-<' 0&' ' .0?- 1' A1' B ' 1-<+3- 9 <- f ' 1? 1' 0&' ' &+1' C? ' 0< '0='1 ' @<' C< '1 ' 1-0" . 1+1' I ' +1L1' C? ' 010' A<>' I ' 1LC1-01\9 0" '00' ' ' 0&' ' H" @<' >< '1 ' -1' C&1 ' C<0' 10 1' =<' ' #&-' H?1@ 10 ' B&- 1-?\' 1-' @<' #'@@19P

1>' -=1' A' ' = ' @1' & ' B&-0'A1 <- ' H' @1' '<@ A1' +'1' I ' A1' >& 9 R 10' I ' 1- \' #'1-0' I ' BD< 1?L' A1' D108 B?-' C0&-' A1' 010' @'1.10' A'B10 1' &'<@>1@ &?BD<- ' >< '1 ' 1-'=<' ' C' @1' @1'1' A1' >10>1' @1' &'<@>1' 1><'. -1' I ' 10 << I ' A1' &? ' 1-' &? ' '01>#@<#@1>1- ' 10 ' C ' 10 1' 1?1' I ' =<' ' C' @10' 01? 1'#1- \' A10' 1-H?10 10' A1' L' ' D&>10' A?1>1- ' 0?>&-1 ' 1-' 01\' &? , 10 1 ' <?L" H @10' . <?-A10 C&#' 1001' I ' '-D&-? 10<1' C ? '1' H' & '#@1>1- ' B&- '-?1' I ' &?>1>1C ' 1d'B 1001' 1-' @10' &10' ? &? 0' A?' A' ' &'<@>1@<' @<' C@?0' ./@>A1' +1 '01>#@<#@1' >10B#'1=' H' C?'0' BD1'1 ' <@ A' ' &'<@>1G 1 ' H'@ 0' < ?CC&01 ' C' 10&-' H' @1' C@?'0' 0?==' A<- \' H' D&>10' 0&'1- ' A10' R 10' I ' 1'' ';@ @1' C@?'0' -&?-01>#@<#@1>1- ' '@0' 0&?- ' < 10 1' 1 1\' &?' >&1+10' < ? 1' C' # &B<.1' C&? 1' &?' B& ?CB'&-' I ' H 1-' BD1 B?-' <BB'&C' I ' # '1=' A< 1'- ' <?' >1 -0' '=<? ' 0 1' L'' ' A1=1-A<- \9 0 ' -1' 0&' ' H' >& ' A<0B?- ' A1' 1?L' B<?01' @1' B&- < '1@ A10' H?1?L' L'' ' A1=1-A<- \' BD10B?-' C0 -' C' @<' @1'1' C&' ' <+&' ' 01,<@@' C@11' I ' 10C&-01' '<#@1' 1-' HB&?-H@ & - 11' H' @?' ' C@1<0 ' A1@ &'<@ C1' <+W- A' @ I ' BD10B?-' A1' 'B1@@10' L'' ' C@110' I ' 10C&-010' '<) 10' D& 0' A1@ &?- 11' 1-' H?1@ @<BB'&-' I ' # '1=' A< 1'- ' 10 ' C'? 0?1' B<?01 <' @<' A1@<'1' A1' @<' C '01' A1' .3?-A1' ? 1' A< 1'- @ 10H?10' <?' 1>C0' ' BD10B?-' A10' A' \' =& 1'-0' 01 <@L' 10C&-010' 0C' ' '1G ' &?' 0&' ' H' &? \' 'B1?L' L'' ' =& 1'-0' 01 <@L' 10C&-010' I ' C@110@ BD10B?-' <C0' <? 1 ' CA ' B<?01 ' C@?0&? 0' A1@<'10@ &'1-' C@1A10' '10' I ' +1\' B&?- 1' 'B1?L' L'' ' A1=1-A<- R@ '@0' -&?-' <0B?-' C ?A'B1' C' 'B1@0@ 1' @10' C@1'- '=0' 1-' @10' A' \' <BB'&-0' I ' # '1=1' A< 1'- \' -?D' <? 1' <+/- <.1' >10' H' @1' &? ' A?' & ' <A&-H?10' A1' CB1A1 ' <' @<' C '01' A?' A' ' ./?-A1' ? '1' @<' H?1@@ C'0?# '@ 11' H'==' 1' &? '1-' &? ' 1-B 1011' C & ' B<?01 ' @<' A1@<'1' A10' C@1'- '=0' 1-' @10' A' \' <BB'&-0' I ' # '1=0' A< 1'- ' C' L' <D0' &?' C@?'0' C' B&1' 10 ' >< B'&'@G <A' & A1'-1' C' @<?B@& ' 1' <+D' AB1' C? ' C< '1' A1' 1>1A'1' A1' @<' >10BD11=' 0?'0A' 9 H' -?@@ '0B&?- ' <'@'==' A?' ! <-BD'01' -1' & 1 9 1 ' <BB'&-0' H?' # '1=0' A< 1- ' A?' C@11' A<' H' A<--?1 ' +<@?1' A1' L@ 0 ' &?' C@?'0@ -1' A<BB'&-' A1' A1 1-?1' A10' =<' \' B - '<- 0' R 10' I ' 1- 0' A1' 01 #@<#@1' +<@?1' &?' C@?'0Z -1' A1' C@11' C0&-1@@ A&?- ' @1' ?. .1>1- ' A1' 1B&+1 ' 1L 1-A1' <' @<' 0J>1' A1' L@@ ' ' &?' C@?'0@ 1 & ''1' ' 1>C<-1@@ 1-' -?-' '-H?'0'QI -' D1' 1-H?10 ' -?@@10' C0&-10' >10' B1?L' 1-8 D' <- \' A1A1'-0' 0<' #<'@@'1@ H?1 L' <' B1@@ 1C'C0' 1'1- ' 10 < 1' <' @&? ' CC 1' C1C0@ &?' B1?L' <0' H?1?L' &C10' <?=0' C0&-0' &?- ' 10 < 1@ A1' =11' 0' >C@11' =11' <'=' &?' = <-a' 1-1j >1- ' 1-' 10' I ' 1- \' A<--?1=' +<@? ' A1' LL' @' &?' C@?'0@ A1A1'-0' 0<' #<'@'1' D& 0' A1@ <?-B'1-' A1H'10-'1' @10' B -a' C& 10' I ' 1-? 1' A1' E<+1@a -A1'G -1' >1'-A 10' '00?10' 1-' @10' A' \' <BB&-0' A< 1'- ' 1 &? -1' 1-' @<' &? 'A?' & ' H' L@ 0 ' <' @1' C ' >1 ' # '1=' A1' A10 1001@ I ' 1- ' 0&?@\' <' @1' 01B?-A1' # '1=' A1' A'0 1001@ I ' @1' A&?#@1' <' BD10B?-' <? 1' # '1=' A1' A'0 1001@ 1-, 0

>C1A'>1- ' &=' D1' &>>&-' <K' <=& 10<'A' ; ? ' & A' D1' , '-.' A& D' B&>><-A' D<' D1' < ? 10' D1 1&=' ><A1' 0D<@@ #1' A?@ ' &#01 +1A' <BB& A'-.' &' D1' !& >' <-A' ==1B ' &=' D1' 0<>1G <-A' D<' -&' F ' ' &=' ?#C&1-<' #1' . <- 1A' = &>' D1-B1=& D@ ?- '@ ? 1 ' #1' =&?-A' &' 0< '0= ' D1' < '0&' . '1+1A' <-A' +1L1A@ =& ' D'0' " <>< .10' <-A' LC1-B10@ '=' 0&' #1' D<' D1' < 1 ' B<--& ' #1' ><A1' .&&A@ KD'BD' '0' B&- <'-1A' '-' D1' '@@

!' ? ' ')' & A' D1' , '-.' B&-0'A1 '-.' D<' D1' '<@ &=' '=1' <-A' " 1< D@ &=' <-A0' <-A' 1-1>1- 0 ' E&&A0' <-A' D< 1@0' &=' 1+1 ' 1 0&-' &=' D'0' @'1.1' 1&C@1' &=' D'0' 1<@>9 &?BD'-.' < 1 0' '-' " 11A@ # ' D1' <K' &=' D1' 0<>1' 1<@>' ` 1><'-' <-A' 0 <-A90P' <-A' A<'@ ' '0' 1 '@'a1@ ' &' #1' D<A' <-A' ><A1@ # ' D1' < D0' &=' -H?10 0' &=' K1@+1' 1-' A?@ ' ?>>&-1A' '-' D'0' &? 0G <-A' <@0&' ` D<' 0P' D1' . 1<' 0)' 1 ? 9 KD'BD' D& '#@ ' B&- '-?1 D@ <-A' A<'@ ' '' B 1<01 D' '-' D1' B&>>&-' ? & 0' &=' D1' 0<'A' 1<@>9 `'0' >&0 ' @'a1@ ' &' 1-A' &' D1' . 1< 10 ' 0P' '0BD'1=' KD'BD' >< ' =<@@' &' D1' 0<'A' 1<@>G <DA' D<' ' ' '0' &' #1' 0?CC&01A@ # ' C<0&-' D<' D1' > 1' 0?=='B'1-' D<' 1-' #1' &=' <-A0' <-A' 1-1>1- 0@ D1' >& 1' ?D@'a1@ ' D1 ' < 1' &' #1' A <K'@ &' >&+1A' &' 1 ? ' # ' ` &B<.1@ &K1 9 &' & ?C '&-G <-A' D<' ' -' 1+1 ' = &-' <-A' F ' ' =' <'-' <' D1' @1<0' D1 1' >?0' #1' D' 11-' @1=1-A<- 0@ ?-@100' D<' D1' " 1< D' &=' <- ' B<?01' D1' B&- < 9 &=' KD'BD' D' 11-' " 1=1-A<- 0' 1+1 ' 1 0&-' # ' D1' <K' >< 'D<+1' <'01+1 <@ @1<' <-A' -0K1 9 '<#@1' '-' KD< 0&1+1 ' &?- ' D<' D'>' C@1<01 D' &=' D1' 0<'A' 1<@>9 <-A' 1 1 ' &=' D1' 0<>1' D' 11-' @1<0' <-A' -0K1 0@ '<#@1' &?' &=' D1' &?- ' '-' KD'BD' D1' B '&-' <-A' F ' ' &=' <'-' '0' 0?1A@ `A& D' /P' B<?01' D1' " 1@< ' &=' D1' <a'-.' &=' D1' E <-A' ? ' (=' <'- 9 ?- '@ D1' '>1' D<' 1+1 ' &=' D1' <'A' =& 1'.-' 01+1 <@ -0K1 0' #1' '1AG <-A' <@ D&?.D' D<' <@@ D101' D' 11-' 01+1 <@ -0K1 0' <-A' @1<0@ 1+1 ' &-1' <= 1 ' & D1 ' & B<?01' >& 1' @1@< 0@ #1' C@1<A1A@ '1A@ <-A' =&?-A' <.< -0' D101' D' 11-' " 1=1-A<- 0@ D1 ' ` D1>01@+10P' D<+1' -& 1 ?A'B1' # ' D1' 0<>1@ -& ' D1' @<'- '==0' '-' D1' 0<'A' B '&-0' <-A' F ' 0' &=' <'-' -&' & D1 ' A+<- <.1@ #?' D<' D1' ,@-.00' &? ' D1-' 0D<@@ C &B11A' &' D1' <a'-.' &=' D1' 0<'A' E <-A' ? G KD'BD' # ' ?# '@ ' D<' A<'@ ' '-B 1<01 D' `'>< ' hP B<?01' D1' " 1@< ' &=' D1' @<'- '=0' '-' D1' <'A' B '&-0' <-A' F ' 0' &=' <'-' # ' 1-' 1< 0' & ' >& 1@ # ' B&>>&-' 0 '>< '&-' G D< D' & A<'-1A' # ' ? D& ' ' <=& 10<'A)' =& ' < ' &=' D1' 1>1A ' &=' D1' 0<'A' '0BD'1=@ D<' -&' D1 '==@ <'@'==' &=' ! <-BD'01@ -& ' & &-1 @ '-' B '&-0' & ' F ' 0' &=' <'-' &=' @1<' &=' <-A@ &=' D1' 1< @ ' <@?1' &=' L@ 0' & ' >& 1@ -& ' ` B '& -' &=' <'- /P' &=' " 11A0' B&-B1 -'-.' <-A0' & ' 1-1>1- 0' &=' @'a1' <@?1@ & ' >& 1@ -& ' 3)' C1 0&-<@@ KD1 1&=' D1' ?A.1 '1-' &=' `' D1' 1B&+1 '3' P' 0D<@@ 1L 1-A' & D1' ?>' &=' ! & ' &?-A0@ & ' >& 1@ 0D<@@ 1 ? -' -& ' '>C<-1@ '-' <# ' -H?'0' '&-' -& ' -H?10 @ <-' 1 0&-0' #?' 0?BD' <0' #1' '-D<#' '-.' K' D'-' D'0' <'@' K'Ba@ KD'BD' '/0)' D<+1' 0 < 1' & D1' ' &K-' 01@ & ' D1 ' & KD&01' 01' & D1 ' 1 0&-0' D<+1' 0 < 1@ &=' ! 1180' >C@1@ ! 118 <'@@ & ' ! 11D&@A@ '-' <-A0' <-A' 1-1>1- 0@ &=' D1' 1< @ ' <@?1' &=']]' @' ' & ' >& 1' `'-' 0P' D'0' <'@' K' Ba@ &?' & ' &=' -B'1-' "1>10-1@ D1' ! '+1' & 0@ <-A' D1' 1-? 1' &=' E<+1@@ a'-A G -& ' 0D<@@ 1 ? -' '-' D1' , '-./0' &? '@100' 00?10' '-' D1' 0<'A' = '&-0' &=' <'- 9 D<-' L@ 0' < ' D1' =' 0 ' F ' ' &=' " '0 100@ <-A' '0' < ' D1' 01B&-A' F ' ' &=' " '0 100@ <-A' D1' " &?#@1' ` & = 0 P' 1+1 ' & D1 ' F ' ' &=' " '0 100' <.<'-0

⇧2 &/!' ' ! W ' (1&' &Z V ."/
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D1' 1 0&-0' '>C<-1@@1A' <-A' 1 ? -1A' &' #1' 0K& -' '-' D1' 0<>1' =# &-0 ' -A' D<' -&' 1 0&-' &=' @100 ?==' B'1-B ' &=' ! 11D&@A' D<-' &=' D1' 1< @ ' <@?1' &=' LL' ' '-' D1' !& >' <=& 10<' A9 0D<@@ #1' 0K& -' '-' D1' , '-./0 &? ' ?C&-' <- ' 00?1' '-' D1' 0<' A' ^ '&-0' &=' <'- 9 '=' D1' #1' =& ' D1' <>1' # ' D1' @<'- '==0 '-' A?1' ! & >' BD<@@1-.1A ' -A' D<' <0 &=1D' <0 <- ' D1 '==9 <'@'==' C=' ! <-BD'019 & ' & &-1 9 A&' B&- < ' &' D'0 A'-<-B19 D1' 0D<@@ .< 9 <-A' # ' D'0 < ? 1' #1' #&?-A' &' C< ' &' D1' , '-.']' @' ' <-A' &' D1' @<'- '==0 '-' D1' 0<' A' =@'&-0' <-A' F ' 0' &=' <'- ' =& ' D1' ' " 1@< ' P' & D1 ' L' @' ' -A' '/)' '=' <- ' &=' D1' /)' =& 1'. -' -0K1 0' <-A' @1<0' #1' '1A' <-A' =&?-A' <.<'-0 ' <- ' &=' D1' 0<' A' "1=1-A<- 09 D<' D1-' D1' 0<>1' P ?A.1>1- P <.<'-0 ' D1' 0<>1' "1=1-A<- 09 <-A' =& ' D1' 0<' A' @<'- '==)' 0D<@@ #1' .'+1-' # ' D1' , '-./0 V ?0 'B109 <-A' &-0'A1 < '1-' &=' D'0' D? 09 <0' # ' D1' <K' 0D&?@A' #1' .'+1-' <.<'-0 ' D1' 0<>1' "1=1-A<- 09 '-' B<01' D<' D1' E <-A' ? ' '-' D1' 0<' A' = &-0' <-A' F ' 0' &=' <'- 9 ?C&-' D1' &'- 0' <-A' 'B@10' &=' D1' 0<>1' F ' 09 D<A' C<001A' <.<'-0 ' D1' 0<>1' "1=1-A<- 09 <-A' K' D' D1' 0<' A' @<'- '==0\' -A' D<' # ' D1' 0<>1' ?A.1>1- 09 -&' & D1 ' &=' D1' 0<' A' "1=1-A<- 09 #? ' D1 ' <.<'-0 ' KD&>' D1' <=& 10<' A' =& 1'. -' -0K1 0' <-A' @1<0' #1' =&?-A' <-A' '1A9 0D<@@ #1' C 1 ?A' B1A' & ' 1-A<><.1A' ; -A' D<' D'0' < ? 1' &?BD'-.' D1' ==' B1'&=' D1 '==9 <'@'==' &=' ! <-BD'019 <-A' & &-1 9 '-' 1 ? -'-.' &=' D1' 0<' A' 1 0&-0' &=' D1' ?==' B'1-B ' &=' ! 11D&@A' #1' 0K& -' '-' D1' 0<' A' = '&-0' <-A' F ' 0' &=' <'- 9 0D<@@ -& '1L 1-A' &' '10 <-A' & &?. D0`K' D'- P' D1' 0<' A' 1<@>9 -& ' &' D1' -D<#' <- 0' '-' D1' 0<>1' &+' A1A' <@K< 09 D<' '=' '-' <-' &=' D1' 0<' A' &?- '10' D1 1' #1' -& ' 1 0&-0' '-D<#' '-.9 ?-A1 ' D1' 0 < 1' &=' < < &-9 &=' &00100'&-' &=' <-A0' <-A' 1-1>1-0' &=' D1' 1< @ ' <@?1' &=' LL' @' ' '-' D1' 0<>1' &?- 9 '-' D1' ! & ' ' <=& 10<' A9 &' 0?==' B1' D1' ?>#1 ' &' D1' '>C<-1@@1A' <-A' 1 ? -1A' '-' D1' 0<' A' '&-0' <-A' F ' 0' &=' <'- 9 D<' D1-' D1' D1 '==9 <'@'==0' &=' ! <-BD'010 9 <-A' A &-1 0' &=' D1' 0<>1' &?- 9 0D<@@ '>C<-1@ <-A' 1 ? -' '-' D1' 0<>1' = '&-0' <-A' F ' 09 1 0&-0' D1 1' '-D<#' '-.9 &=' D1' >&0 ' 0?==' B'1-' `&=' &00100'&-#=' 1< @ ' <@?1' &=' <-A0' <-A' 1-1>1-0' K' D'-' D1' <@?1' &=' LL@' ' )' '-' D1' 0<>1' &?- ' '-' D1' ! & -' <=& 10<' A' C ' <-A' D<' &' 0?BD' 1 0&-0' D1' 0<' A' D<@@1-.1' 1L 1-A' -& 9 D<' `D1' '0 -& ' &=' &00100'&-' H' &=' <-A0' <-A' 1-1>1-0' &=' D1' 1< @ ' <@?1' &=' LL@' ' '-' D1' 0< ''1' &?- C <-A' D<' <0' &= 1-' <0' <- ' &=' @'1' 0<>1' D1 '==0' <'@'= 0' & ' & &-1 0' A&' B&-j < ' &' D'0 `C I '1-`' 'B@19 D1' 0D' @@ C< ' &' D1' , '-.'] '@' ' <-A' &' D1' ' [)' @<'- '==0' L' @' ' '-' D1' ! & >' <=& 10<' A 9 F D1 1<0' D1' <0 1 09 F < A1-09 <-A' 1&C@1' &=' `` D1J P' E?' @A0 9 ! <=1 -' '10 9 <-A' & D1 ' & >C<-'10' '-B& C& < 19 AK1@@'-.' '-' A'+1 0' < 0' &=' D1' 1<@>9 &= 1- '>10 # ' &@&? ' &=' ?@1' <-A' E&+1 -<-B1' <-A' & D1 ' 1 >0' '-' .1-1 <@ F & A0' &' D1>' . <- 1A' <-A' B&-=' >1A' # ' D< 1 0' <-A' 1 1 0' < 1- 0' &=' D1' , '-./0' C & .1j -' & 09 ><a1' 'J)' D1>01@+10' >R- ' ?-@<K=?@ <-A' ?-j 1<0&-<#@1' A'-<-B109 <0' K1@@ &=' `>< - 'J' '0?BD' D'- .09 KD1 1&=' D1' &. -'0<-B1' ?-'0D -1-' <-A' & 1 A&-' <@@ &-@ ' C1 <'-1 D' &' D1' , '-.9 & A0' =' ! <-BD'010 9 <-A' & D1 ' 1 0&-09 <-A' KD1 1# '&?' 3V)' &+1 1'. -' & A' D1' , '-.' <-A' & D1 ' #1' A'0D1 ' 1A' &=' D1' ' &=' 0' <-A' ! <-j BD'010 9 <0' &=' D'-.09 KD'BD' `&= 1- '>10' '-' &-=1A1 <B ' '0' ><A10/P' =& ' D1' ' 0'-.?@<' &=' 9 <-A' B&>>&-

' A1@< 10 0 '?.1>1- \' /' # ' 1 1 h@<0 00 : ' 0

)' ' ' 2#&/ j . ' ' + +. /!' ' ' Q)' !@' ; !' -. '. ' !' +. /!' ' 5 2 1&/!' ' . K' . '&-' "&*&- + 2' $" %' ' $ %

@10' C0&-10' 1>C<-1@a0' I ' 1 &?>10' C ' 10 1' ? 1\' 1-' >10>10' @10' <BB'&-0 ' ' H' -?@@ C0&-1' A1' >1'-A 1' 0?=='B'<- 1' A?' ='/<-a' 1-1>1-' H' A1@" <--?1=' +<@?1' A1' L L@' ' 1-' @<' =&? >1' A100?'0A' ' &'9 ? '1' 1-' @<' &? ' A?' &'9 0? ' -?-' '00?1' 1-' @10' A' \' <BB'&-0' A< 1'- 9 0'@ 0&=' C? ' 'B1@@ C' @10' C@1 - '=0' 1-' A? ' =&? >1' D<@<-.10 ' ' H' < L" 0&+1-' H' <0B'>' 'B&- 9 <'@@'=' A?' ! <-BD'01' &?' & &-1 ' =1B1' @1' B&- 0 '1' A1' B10 1' & A1' -<-B1' H'9 C<'19 I ' C' B10 ' 10 < ?' 0 '' 1-?\' < C<'1 9 <?' & ;a'' ' I ' <' @10' C@1'- '=0' 1-' @10' A' \' <BB'&-0' I ' # '1=0' A< 1'- ' &? ' @&? ' A1@<'10' <?R0' L' @' ' ' H' 0" <0B?-' `<0 ' ' A' \' =&" ' ' 10C&-010' I ' C@110' 0&=' '11' I ' &+1' 1-B&?- 1' A10' A' \' A1=1-A<- 09 H' A&-H?10' >10>10' @10' ?. d1>1- \9 B&?- 1' >10>10' @10' A1=1-A<- \' I ' C? ' @10' A' \' '1'- '@09 0&'1-' A&-109 C' @10' ?0 'B10' A?' & ' I ' B&- A@ 'A 8 80' A1' 010' &? 09 0" B&>1' C' @<' @1'1' , &' ' A&-1C -$' @10' >10>10' A1=1-A<- 09 1-' B<0' H' @1' ./?-A1' ? " ' D ' $' A' \' <BB'&-0' I ' # '1=0' A< 1'- ' ?' @10' C&'- 0' I ' < 'B@10' A1' >10>10' @1 ' # '1= ' C<001\' 1-B&?- 1' >1 >1' @10' A1=1-A<- 0' I ' &+10H9 @10' A' \' C@1'- '=0C 'H' C' >10>10' @10' ?. . 1>1- \' -?'@' <? 1' A10' A' \' A1=1-A<- 09 0'-&-' B1?L' 0' H?1?L' @10' <+W- A' \' =& 1'-0' 10C&-010' I ' C@110' 0&?- ' &+10' I ' '1\9 0&=' = @1001\' -1' 1-A<><.10 ' 'H' `0&= ' (' 10 < ?' ' &?BD<- ' @&=='B1' A1' '0B&?- ' <'@@'=' A1' ! <?-BD'01' I ' & &-1 9 1-' 1 &? -<-' A10' C0&-10' A1' @<' 0?==' B'<?- 11' A?' = <-a' 1-1>1-' A<D-?1@@ +<@?1' A1']] '=' 9 1 'H' -?=' C0&-1' A1' >1'-A 1' 0?==' B'<- 1' A?' = <-a' 1-1>1-' 0&=' ? '1' 1-' @10' A' \' <BB'&-0' iB # '1=0' A< 1'- 9 -' 1L 1-A1' C<0' <0' ' 110' I ' ? .D0' A1' @1' A' ' &'<@>1 9 -1' <' d` 1001/ 4' 1-D<#' <-\' 1-' B1@@10 ;' C? +1?' &? \' =&' \' H' 0" 1-' <0B?-' A1' @10' A' \' &?- 110' -1' 0&'1-' C0&-10' 1-D<j #' <-\ 9 A10&?#\' @1' 0 < 1' A1' < &-9 A1@ C&00100'&-' A1\' = C0' I ' 1-1>1>\' A<--?1 ' +<@?1' A1' LL' @' 9 1-' >10>1' @1' &?- 11' 1-' @<' =&? >1' <+ ' A' 9 <' 0?==' 1' '1' -&?># 1' C? ' 10 1' 1>C<-1@@10' I ' 1 &? -10' 1-' @10' A' \' <BB'&-0' I ' # '1= ' A< 1'- 9 H<A&-H?10' @1' 'B&?- ' <'@@'= ' A1' ! '<-BD101\' I ' & &-&? 0' A1' >10>1' @1' &?- 1' 1>C<-1' @ I ' 1 &? -1' 1-' >10>10' @10' <BB'&-0' I ' # '1= ' C0&1-10' @@&1H?10' 1-D<j #' <-\' A1' @<' C'- 0' 0?==' B'<- 1' A?' C&00100'&-' A<' @?1 ' +<@?1' A1' R 10' I ' 1- \' A<-\' @<' +<@?1' A1' LL' ' C' <-9 1 ' >10>1' @1' &?- 1' 1-' @<' =&? >1' <+/- A' 'H' <' B1?L' C0&-10' -1L 1-A1' C<0' @<+DL AB1' `B@<@<-.10' 04' H''0' -1' 0&?-' A1@ `0?==' B'<' @ 1 4' A10' 10' I ' 1? \' A<--?1@' +<@?1' A1' L]' ' 1-' >10>1' @1' &?- 1' @ I ' B1&' <?L" 0&+1-' H' <0B?-' A1' >10>10' @10' '0B&?- \' <' @ '=0' C?' & &-1 0' =<B1' @1' B&- <' 1' A1' B10 ' A< 1'-' < 'B@19 H' @' C<'1' <?' & ']' @' 9 I ' <?' A' \' C@1'- '=0' L' ='9 1-' @<' =&? >1' <+/- AB1

1>' B&>1' @10' <'0 10' E< A1'-0' I ' .1- \' A10' C@?8' 0? 0' E@' A10 9 ! < -= 110' I ' <? 10' B&>C<-'10' '-B& C& < \9 A1>/<- \' 10' A'+0010' C '10' A?' &'<@>19 0&+1-' C' B&@&? ' A1' 1?@1' I ' . & , <<'@@1' I ' <? 0' >10' 1-' .1 <@@ C&@@10' < 1?L' .W?- 10' I ' B&-=1 >10' C' BD 10' I ' 10' C< 1-' A10' C &.18' -' &? 0' -=1' B' @1' &'9 = B1- '1- 1' 1?L' >10>10' C@?0&? 0' A'0@&= @L' I ' >1>0' 10&-<#@10' & A1-<?-B10 9 <-' A10' '1'L' ' BD&010' A&?-' @< B&-?0<?-B1' C?-'001>1-' I ' B& 1B1K< 0&?@1>1-' C 1'. -1-' <?' &" = 0' A10' = <?-BD'010' I ' <? 0 ' C0&-10 9 I ' C&?-' -=1' A' ' B' @1' &" I ' <? 0' 0&?< ' A10D18 8 ' 1\' A1' @&?' = <-BD'01\' I ' C=' \9 B& >1' A10' BD&010' H' 0&- -1-' 1-' B&-=1A1 <B'1' C? ' @&? ' 0'-.?@1 ' C=' ' I ' B&-1

' Ai0 ! '6' I B 0B10 1' ! '6' 'BB' (@10' ! '6' I 1 BD<@<-.1' ! +& ' I B 0 C&00100'&-' *%' %' . $-

A<><.1' <-' C&1C@1;' >10>1' - 1' T ' a' & ' C' <A+'Ø I '
<001- ' A1Ø S5%ß 10C?1@L' Z' 1>C& 1@L' <+ - A' \' I '< @<
C K ' A1Ø E&?1Ø' A10?'0A' \ß <' & A1@-11' C' <?= & ' 1' A1'
>A0>1' @1' C< @1>1= ß H' @1Ø' 1'0 10' E< A1'-Ø' I ' .1- Ø
A1' BD10B?-' '1ß E@'A1ß ! < -' 11'&-' &>C<'-11' '-B& C&ß
< 1'C' 1- 1' B ' I '@1' =10 ' A1' 1'- ' 'BD1@ ' CBD1'-' +1-<- ß
C& 1- ' I ' =<B1- ' 1.@0 1 ' A1' 1B& A1' A1+ ' @1Ø' ?0 'B1Ø
A?' 1<Ø 1-' &?- 10ß &?' A1+W- ' @1Ø BD'1=' .& -&? Ø A1Ø
' 11Ø ? .DØ I ' +'@@1Ø &?' '1@L' E@'A1Ø' ! < -' 1Ø I '
&>C<'.-1Ø 0&?- ß &? \' @&? ' 10' C< 1- Ø I ' BD 10 '
' ? 1' <A' & A1@-11' I ' A1=1-A? ' C' @<?A@& ' 1' 0?'0A' ß H'
A10& 1' 1-<+ ' -? ' A1Ø '1@L' 1'0 1 ' E< A1'-Ø' -1'
S/@ .1- Ø' =<B1' -1' ?01' -?@@ & A1-<?-B1' H' 0&' ' 1-' A10D1 ' '8
'0&-' &?' A'>@-?B'&-' A1Ø = <?-BD'010' A?' & ' C?' A<? 10ß
-I01 B&?- 1' @<' B&?1' C=' ' A?' C&1C@1' -1' -? ' <? 1' & 8
A1-3-B1' A1' BD< .1ß 0'@ -1' 0&' ' C '' 1>1- ' A'0B?0011' I '
<CC &+11' C? ' #&-1' I ' 10&-<#@1' C' @1Ø' ?0 'B1Ø A?' 1<Ø
&?' @1Ø D'1=' E&, -&? Ø <+ - A' \ß I ' A1 - ' 1?L' 1- 11'
A1' 1B A1' I ' C' 1?L' 1+&H?11' I ' 1C1@@1' A1C?'Ø 0'@
0&a' &+11' I ' C &+1' C' 1?L' >1'-Ø @&'< ' ?' -&?=' 10&j
-<#@1' : 1 ' B1&' 0? ' C1'-1' A1' CA 1' I ' =& =1' 1' @1' =& B1' I '
1==1 1' A1Ø &? \' < 'B@1Ø 1-' @&? ' A' \' =1 ' I ' BD 1Ø B&@ 8
C '01\' C' H?1?L' '@Ø' C? &'1- ' =1' 1' 1- 1' 1?L' @10 -1Ø
<0B?-Ø & A, -<?-B1 '\@ ' &'' 1' A1' CA 1' I ' C<'=' ' U=''
<?' & 'C? ' BD10B?-' & A1'-<?-B1' ' <0B?-' A1' 1?L' =<B1'
&?' ?01' <?' 1&- '1ß <?L'' 0&?+1- ' H'@' 1 <' A1' B1&' C' A?1'
C &B1001' I ' @&'< ' ><-1 ' B&-+'= ' A1' 1B& Aß A1+ - ' <0B?-'
A1Ø A' \' ?0 'B1Ø A?' 1<Ø &?' D'1=' E& -&? Ø A1Ø ' 11Ø
? .DØ &?' +'@@10 ' ' A? 1 <' B10 ' & A1'-<?-B1' <- B&>1'
' C@1 <' < C10>1' ' 1' :' @1' &
1>' - 1' A@ ' =0 C ' <001- ' A1Ø _ Ø' I ' &-1Ø' <+ - A' \'
<A' AA-11' I ' 1< <#@1' C' <?= @ 1' 0?'0A11ß H' A10& 1' 1-<8
+0- ' &? \' @1Ø' ##10 '&? Ø' I ' <? 1Ø' 1 .'&01Ø' I ' @&?'
?BB100 ? Ø I ' BD10B?-' A1?L ß H' ?- ' <0B?-' R 1Ø' 1- Ø &?'
<?RØ' C&00100'&-Ø A1'-Ø' <0B?-' A1' @1Ø' F <C1- <a1Ø' A1'
< -B@ =' F <C1- <a1' I ' ! 1-A1@1Ø' F <C1- <a' 1-' <+1-'
1-' @1' &?- 1' " 1 K aß C? &- ' =<' 1' @& =' < &? -1Ø' &?'
< &-> 1' .1 <@L' &?' .1 <@@ß 1-' &? \' @1Ø' &C Ø' A1'?\'
@1Ø' A' \' F <C1- 0A 1Ø' I ' BD10B?-' A1' 1?L ß B10 ' <0 +&' 1'
BD10B?-' A1 ' A' \' ##1 ' @&? Ø' I ' 1'' .'& '010' 01C<@8
>1- ' A10&?#\' @1' B&1' 1<@1' A1' 0<' >1<0&-ß C? ' .< -1 ' B
CA 1' 1-' BD10B?-' ><-1 ' A1' C@11' C' D0B?-' &?' +1 Ø <0B?-'
A1?a' 1-' @1Ø' A' \' &? 1Ø' &?' <0B?-' A1?L' >&1+11' &?'
<>&1+1 \' ' I ' H' @1Ø' A' \' ##1Ø' I ' '&? Ø' B <? Ø 1@'8
.'&?010ß I ' =&? Ø' A'=\' < &? -1Ø' B BD10 -' A1?L ß C? j
&- ß C@1A1 ' 1-' @1Ø' A' \' &? Ø' B B#10B? ' A1' 1?L' &? \'
><50' A1Ø' =@110' H' 0&- ' 1-' @1 ' C@1A<#@1Ø' I ' 1-' @1 '
<@@&K<#@10C B H' BD10B?-' 1-10BD<@@' B <'@@'=' A1' &?' 1-'
<0B?-' A1' @1Ø' A' \' &? 1 ' C? ' @1' 1>CØ' 10 1<- ' 10B1'+1'
<?L'#'1-' BD10B?-' <&? -1 '1-' @1' >< 1' 0?'0AB1' A10= 1')'
B&>1' @1Ø' A' \' C@11Ø' C' @1Ø' A' \' ##1Ø' '&? Ø' B 1@'8
.'&010' B C' @&? ' A' \' < &? -1Ø' B C' BD10B?-' A1?L' A10 1'
C@1A10ß 0<?-B1' <= B'1 ' @1Ø' A' \' ##1Ø' '&? Ø' I ' 1,8
.'&01Ø' &?' <0B?-' A1' 1?L' 1-' @1' >< 1' A100?'0A' ' &?' <?. j
>1- ' H' C0&-1Ø 801B?@1 Ø 1-' 01>#@<#@1' B<i' 0<?-\' ='<?A1
1

' =<' ' Q ' # ?

"<><.1' &' D1' 1&C@1' G D1' 0<>1' &?' & A' D1' , '-.ß
' D1' A+'B1' <-A' 001-' &=' D1' & A0'$ C' ' ?<@ <-A'
1>C& <@ß <-A' <' D1' < 1' &=' D1' &>>&-Ø <=& 10<'Aß
D< D' & A<'-1A' # ' ? D& ' ' &=' D1' 0<>1' < @'<>1-ß
D<' D1' <0 1 Ø F< A1-Ø <-A' 1&C@1' &=' 1+1 ' 0?BD'
E?'@A' ! < 1 -' ' & ' &>C<- ' '-B& C& < 1ß #1 K'L '
D'Ø <-A' D1' !1<0 ' &=' <'- ' 'BD<1@ -1L ' B&>'-.ß
0D<@@ # '-.'<-A' `A& P' <@@ @'1' ' 1 1 Ø' < 1-Ø<-A' D< j
1 Ø' &' #1' 1.'0 1 1A' &=' 1B& A' #1=& 1' D1' ?0 'B1Ø' &=
1<B1' '-' D1' &?- '10ß & ' #1=& 1' D1' D'1=' E&+1 -& Ø' &=
D1' `0<'AP' ' '10ß & &?.DOß <-A' &K-Ø' KD1 1' 0?BD'
E?'@AOß < 1>' '10ß <-A' &>C<-'10' #1' -A' >& 1&+1 '
D< D' & A ?-1A' <-A' A1=1-A1Aß # ' D1' ? D& ' ' <=& 10<'Aß
D< ' = &>' D1-B1=& D' -&' 0?BD' <0 1 0ß F< A1-0ß -& '
1&C@1' ><a1' -& ' ?01' -& A'-<-B1' KD'BD' 0D<@@ #1' &' D1'
" '0D1 '0&-' & ' " '>' -? '&-' &=' D1' `, '-./Ø ! <-BD'010 P'
& '&=' & D1 ß -& ' <.<'-0 ' D1'B& > >&-' &=' '&=' D1' 1&C@1ß
-& ' -&-1' & D1 ' A'-<-B1' &=' D< .1ß '=' ' '#1' @& ' =' 0 '
A'0B?001A' <-A' <CC &+1A' =& ' .&&A' <-A' 1<0&-<#@1ß `<Aj
>' 1A'P' # ' D1' ?0 'B1Ø &=' 1<B1ß & ' D1' D'1=' E '+1 -& Ø'
<=& 10<'Aß <-A' #1=& 1' D1>' 1- 1 1A' &=' 1B& Aß <-A' <= 1 '
' D1>' 1+&a1A' <-A' 1C1<@1Aß '=' ' '#1' =&?-A' 0)' # '
D1>' -& '@<K=?@ & ' -& ' 1<0&-<#@1' ' <-A' D<' ?C&-' <'-'
&'@@01' <-A' =& =1' ' D1' ! & B1' <-A' D1' ==1= ' &=' <@@ D1'
'B@1Ø B&>C '01A' '-' D1' '0<'A' `' F ' 0 P' <-A' D< 1 0ß
'KD'BD' D1 ' >'. D ' `A&' D1' 0<>1' A'-<-B1Ø' &' #1'
1- 1 1A'/ G P' >'A' >& 1&+1 ' &' @&01' <-A' C< ' L '=' ' &' D1'
, '-.' =& ' 1+1 ' A'-<-B1' D<' <- ' &=' D1>' A& D' ><a1'
& ' ?01' &' D1' B&- < ß <Ø &= 1-' <Ø D1' 0D<@@ #1' &=' D< ß
# 'A?1' &B100' <-A' @<K=?@ <--1 ß B&-+'=:=' &=' 1B& A'
#1=& 1' <- ' &=' D1' 0<'A' ?0 'B1Ø &=' 1<B1ß ' D'1=' E&j
+1 -& Ø' &=' ' '10ß &K-0ß <-A' & &?.D0 ' 8?A' D'Ø
A'-<-B1' 0D<@@ 1-A? 1' <Ø @&-.' <Ø ' ' 0D<@@ C@1<01' &? '
0<'A' &+1 1'.-' & A' D1' , '-.
ß ? '0<'A' &+1 1'.-' & A' ` D1' , <-.9P' # ' D1'
001-' &=' D1' & AO' ` C' ' ?<@ <-A' 1>C& <@@P' <-A'
&>>&-Ø <=& 10<'Aß D< D' & A<'-1A' <-A' 0 <#@'0D1A' # '
? D& ' ' <=& 10<'A ' D< ' = &>' D1-B1=& D' <@@' D1'
##& 0ß '& 0ß <-A' & D1 ' 1D.'&?Ø 1 0&-0ß <-A'=D1' '
?BB100& 0ß <-A' 1+1 ' &=' D1>ß KD'BD' D<+1' <-AO' <-A'
1-1>1- Ø' & ' & D1 ' &00100'&-Ø K' D'-' <- ' &=' D1'
F <C1- <a1Ø' &=' <'-B@'=1' F <C1- <a1' <-A' ! '1-A@1001'
F <C1- <a1' '-' <+1-''-' D1' &?- '&=' & aß >< ' ><a1'
D1' ' &>'1 ' N)' E1-1 <@ '-' <@@ D1' &? Ø' K' D'-'
D1' 0<'A' F <C1- <a1Ø' <-A' 1+1 ' &=' D1>ß D< ' 'Ø' &' 0< '
1+1 ' &=' D1' /')' ##& 0ß '& 0ß <-A' 1@'.'&?Ø' 1 0&-Ø
1+1 <@@ ' ?-A1 ' D1' &>>&-' 1<@ &=' AO &?01ß &' K'-'
<-A'@&01' '-' 1+1 ' <--1 ' &=' @1<ß =&' <- ' & ' <.<'-0 ' <- '
&=' D1>ß '-' D1' 0<'A' &? Ø' & ' <- ' &=' D1>' >&+1A' & '
&' #1' >&+1A@ <-A' D<' D1' 0<'A' ##& Ø' <-A' '& Ø' <-A'
1@'.'&?Ø' 1 0&-0ß <-A' D1' ' 0<'A' & '1Ø' <-A' 1+1 ' &='
D1>ß >< ' C@1<A' '-' D1' 0<'A' &? Ø' <-A' 1+1 ' &=' D1>ß
<@@ <--1 ' &=' @1<0ß KD'BD' #1' C@1<A<#@1' '-' <K'
<-A' '-' D1' <K' <@@&K<#@1' G <-A' D<' ' 1+1 ' 1K< A' <-A'
<'@'=:=' &=' & ' '-' 1+1 ' &=' D1' 0<'A' &? Ø' =& ' D1' ' >' 1'
#1' -.ß 0D<@@ <Ø K1@@ 1B1'+1' <-' & -1 ' '-' D1' <-j
-1 ' <=& 10<'A' &' #1' ><A1ß <Ø D1' 0<'A' @1<Ø' # ' D1' 0<'A'
##& 0ß '& 0ß & ' 1@'.'&?Ø' 1 0&-0ß <-A' # ' D1' ' 0<'A'
& >'10ß <-A' # ' 1+1 ' &=' D1>' &' #1' C@1<A1Aß K' D&?'
<>1 B'-.' D1' 0<'A' ##& Ø' '& Ø' ' 1@'.'&?Ø' C1 0&-0ß
& ' <-' ' &=' D1>ß '-' D1' <--1 ' <=& 10<'Aß & ' D1 K'01'
D<-' 01B?@< ' 1 0&-Ø' '-' @'a1' <01' K' D&?' ! <?A

N' ' ''b $! ' '<!'R ,
' #'? ' #' "6 P !
2 D' ' % ' $ 1' *2 =
'$ ' .Ú-!' H'! '5' *' %

+' !&'"
"/&- -#!2'
2 +' ;!'
"-'!/' ,'
;@' Ø2 &#!2'. '
!' 3! #!' ."
;@' b . '!"-."2'
' ' &&!2' -/'
.7-2'
3!- +@' <+.

;' ;, 2'C#'
&-' !" &-'
V !- E!2'
&-' A."E2 &"!'
1 @ 1 E!'
.1&!2' -'
! '"&-' !'
.0" 2' !"!'H

-/' +! /' +'
+ 7 0' 3+! 2

!7 "/2'
2+& +&"!#!&'!'
+' 20#'
.1&!2'
-/'3+! 2

1-<@ 0D&?@A' #1' <>1 1#A' ; -A' D<' 1+1 '$&=' D1' 1K< A0' <-A' <'@'=0' <=& 10<'A@ < ' 1+1 ' '>1' D<' D1' A& D' B&-j < ' &' D'0' A'-<-B1@ 0D<@@ =& =1' ' <-A' C< ' &' D1' , '-.']'@'G W P' <-A' D<' 1+1 ' 1 0&-' KD'BD' K'@@ 0?1' =& ' D1' , '-.' '-' D'0' <01@ 0D<@@ D<+1' < F ' ' &=' C1# ' =&?-A1A' C&-' D'0' < ? 1@ <-A' 0D<@@ D<+1' D1' &-1' <@=' =& ' D'0' <#&? @ <-A' D1' , 'D.' D1' & D1 ' <@=' -A' D<' 'D' D1' 0<>1' <--1 ' <@@ & D1 ' ##& 0@ '& 0@ <-A' & D1 ' 1@'.'&?0' C1 0&-0' <-A' D1' ' ?BB100& 0@ <-A' <-' & D1 ' 1B?@< ' K0&-0' K' D'-' D'0' 1<@>@ '-' 1+1 ' ?-A 1A' <-A' F<C1- <a1' K' D'-' D1' 0<>1' 1<@>@ >< ' ><a1' D1' ' & -'10' 0)' .1-1 <@@ &' C@1<A' =& ' D1>' <-A' 1+1 ' &=' D1'-' '-' D1' !& >' <=& 10<'A@ D<' '0' &' 0< @ D1' <'A' ##& 0@ '& 0@ <@A' 1@'.'&?0' 1 0&-0' ?-A1 ' D1' B&>j >&-' 1<@@ <-A' D1' 1B?@< ' 1 0&='0' +>A1 ' D1' ' 1<@0' -A' '=' D1' 1K< A0@ <'@'==0@ & ' <-' '-'0 1 ' &=' <-' 0?BD' ?-A 1A' & ' F<C1- <a1' A&' &- < ' &' D1' 0<>1@ 1+1 ' &=' D1>' 0D<@@ =& =1' ' &' D1' , '-.'8L' ' <0' <=& 1' '0 0<'A@ <-A' D'0' < ? 1' <-A' <#@'0D>1-' 0D<@@ 1-A? 1' <0' @&-.' <0' ' ' 0D<@@ C@1<01' D1' , '-.

.' 3!"2.-' 2 +' 2 & ' -@' !"# -/&2!' . ' !' +!< ;0 ' ' !' + 7 0' M!@2' 7 !"!' !' ,'-.=/0@ V !&* 2' "!

@ ?' &+1 1'.-' & A' D1' , '-.@ &' 1>&+1' <-A' 10BD1K' D1' . 1<' -@<K=?@-100' <-A' "<><.1@ KD'BD' A<'@ ' '0' &' D'>' A&C1@ '-' K' DD&@A'-.' D1' ?0 &>R' <-A' ?#0'A'10@ <-A' ` >C1A'>1-' &' D1' <C@1' &=' <@<'0/P' &=' D1' <@1' &=' F &&@0' <-A' F &&@=1@0@ # '0?BD' KD'BD' A&' 0D'C' D1' ' F &&@0' <-A' F &&@=1@0' '-' A'+1 0' 01B 1 ' ` < 0 P' <-A' 11a0@ <-A' & D1 ' 0?0C1B ' @<B10' K' D'-' D'0' 1<@>@ 1<@'-.' # '-'-.' <-A' B< '-.' /)' D1' 0<>1@ -& ' B?0@ &>1A' &'A'+1 0' < 0' #1 &-A' D1' 1<@ <-A' -& ' &' <@<'0@ D< D' & A<'-1A' # ' D1' ? D& ' ' <=& 10<'A@ D<' = &>' D1-B1=& D' -&' <--1 '&=' 1 0&-' 0D<@@ 0D'C' -& ' A&' &' #1' 0D'CC1A' F &&@0@ F &&@=1@0@ -& ' & D1 ' 1 BD<-A'010' C1 j <'-'-.' &' D1' <C@1@ '-' -&' @<B1' K' D'-' D'0' 1<@>@ #? ' <@@' &-@ ' < ' D1' , 1 0' <-A' F D< =0' #1'-.' '-' D1' & 0' <0j 0'.-1A' `# ' D1' < ? 1@ P' KD1 1' D1' , '-./0' F 1'.D 0' <-A' D'0' `F &C@0 P' #1' 01 ' -A' D<' 1+1 ' <0 1 ' &=' h)' D'CO' <-A' 1001@0@ '-' D1' KD'BD'0?BD' F &&@0' <-A' F &&@=1@0' <-A' 1 BD<-A'010' #1' C? @ 0D<@@ ='-A' 0?='B'1-' ? 1 ' &' D1' ?0 &>1 0' &=' D1' &= 0@ KD1 1' D1 ' A&' 0D'C@ &' B< ' D1'0<'A' F &&@0' <-A' &&@=1@0' /)' &' D1' <C@1' &=' <@<'0@ <-A' &' # '^.' < 1 '='B< '&-'= &>' D1='B1@ D<' D1' D< D' 0&' A&-1' <+'-.' <@K< 0' &' D1' 1 BD<-0' &=' E1-&<@ 1-'B1@ ?0B<- @ &>#< A @ !@C 1-B1@ <-A' < <@&-'<@ <-A' &' D1' ? .1001 0' &=' 1 K'Ba@ D1' '#1 j '10' &' D1>' . <- 1A' # ' < ? 1' D 1 &=& 1

2 !"2' . ' & 2' 2 +' &-/' 0"! @' .'+ -/' 20# ' !"# -/&2!' ' + &2' -/' ;"&-*' ; #E' ' !" & &# !' !"!. ' '&-*' ." !' !"#- -2' . ' b!-. @ C#

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' D1 W <-A' ' BD<-A'

01 &-' <' B'1\;' 1' H' BD10B?-' A10' 1 '.0BD<@L' I ' <'@ =0' 0?'0A' \@' < BD10B?-' =&' \' H'@ = 11' @1' B&-= '1' A1' B10 ' & A1-0-B1@ =& =<B1' I ' 1-B&? .1' @< C1'-1' A1' L' ' ' <?' &'@ I ' H' BD10B?-' C0&-1' H' +&1 ' 0?1 ' C? ' @1' &" 1-' B1@@ B<0' 1' ' # '1=' A1' A1 1' =&?-A 1' 0? ' B10 ' 10 < ? @ I ' 1' ' @?-' >&' 1' C? ' 0&?-' @<#&? ' I ' @1' & ' @<? 1' >&' 11 ' ' H1-' > 1>1' @< C'< 1' &? \' <?R0' ##10' '&? 0' I ' <?R0' 1@'.'&010' I ' @&? ' ?BB100&? 0' I ' <?R0' 1B?@1 0' HB&-@ H?10' A1'-\' B10 ' &'<@>1@ 1-' BD10B?-' ?-A 1 D' I ' F <j C1- <a1' A1'-\' >10>1' @1' &'<@>1@ C&'1-' =<' 1' @&? ' < &? -10' .15<@L' &?' .1-<@= C? ' C@1A1 ' C? ' @ 1 '' ' BD10B?-' A1' 1?L' 1-' @< =&? >1' 0?'0A' @ B10 < 0 + ' ' ' A' \' ##10' '&? 0' I ' 1@'.'&01 ' A10&? \' @1@ &1' 1 1' I ' @10' 01B?@1 0' C0&-10' A10&?#\' @&? ' 01<@L ' !@ ' 0" @10 ' 1-10BD<@@ <'@@'=0' &?' <0B?-' '-'0 1' A1' <0B?-' '1 '' ' A 1 D' &+" F<C1- <a1' = 11' @1' B&-/ '1' A'B1@@1@ BD10B?-' A1?L' <?' & ' L' @' ' B&>1' A100?'0' 10 ' A'1;' ' A? 1 &-' 'B10 10' & A'-<?-B1' I ' 10 <#@1>1-' <-' B&>1' ' C@1 <' <?' &

1>' -=1' = ' @1' & @ C? ' 1>&1+1 ' I ' 10BD?1 ' @10' . <?-A1 ' A'0@&'<@ 110' I ' A<><.10' H?L' &? -1>1-' 0&-' <' @? ' ='? \@ 1-' 1 D<?-' @10' B?0 ?>10' I ' 0?#0'A'10@ I ' <' @10 <C@1' A1' <@1 0' 1-' '>C1A'>1-' A?' +1-A1' ADO' @<'-0' I ' C1<@L' @<-? \@ C' '1@L' H' 10a'CC1-' @<'-0' I ' C1R@L' 1-' A'1010' C '+11' C& 10@ B 'a10' I ' <? 0' 1?L' 0?0C11 \' A1'-\' 'B10 1' &'<@>1@ 'B1@@1\' 1d-#@1<- \' <>10-<- \' I ' B< '<- \' -'1-' B?0 ?>10' <0' A'1010' C< '10' A1' @<' I ' -1> ' <' <@1 0@ <A' & A1'-11' C' @<?B & ' 11' 0?'0A' @ H' A1' B ' &? ' 1-<+ ' -?@@ >\51' C0&-1' 10=1'CC1' -1' =1B1' 10a'CC1 ' @<'-0' C1<?@L' @<-? \' -<?R0' ' BD<-A'010' C 1'-<- \' <' @10 <C@1@ 1-' -?=' @'1?' A<-\' 'B10 1' &'<@>1' =& 0 X@ 0&?@18@ >1-' <' @10' , 1 0' I ' < D 0' 10 1<- \' 1-' @10' C& 0' <00'.-10' C' 0 < ?' ' &?' @10' C&'010' A?' &" I ' 0&?-' #11>' 0&-' <00'\' 1 ' H' BD10B?-' <'0 1' A1 ' -'1=0' I ' +1001<D0@ 10' H?1''L' '1@ @<'-0' C1<@L' @<-? \' I ' ' BD<-A'010' 0&?-' > 0@ &+1-' 0?=='B1<-' 01? ' < @10' B?0 ? 0' A1' 10' C& \' & ' '@0' 10a'CC1C ' C? ' B< '1 ' @1\' A' \' @<'-0' C1<@L' @<-? \' I ' 0 1D<-A'010' < @10 <C@1' A?' <@1 0@ I ' < C& 1 ' B1 A='B< &-' A'@@&H10' H'@ <A' '00'-' =<' ' <@+<-' &-\' =&' \' < @10' BD<-\' A1' 1<-1@ 1-'B1@ ?0a< -1@ ?>#< A'1@ !@& 1-B1' ' < 1@& -1' I ' < @10' ? .1 0' A1' 1 K a' @10' @'# 1='0' < 1?L' . ?- 1\' C' 10 < ?' ' CA1+=

L@0 ' `<- A ' >& 1 -& ' ` ' - / P' C1 0&-<@ ^ '&-@KD1 1&=' D1' ?A.1>1- ' &=' D1' 1B&+1 ' 1L 1-A@ &' L@ ' @' ' & ' >& 1 0D&?@A' 1 ? -' & ' ' >C<-1@ '-' <- ' -H?'0' '&-' & ' -HC10 @ <- ' 1 0&-0 #? ' D1>' D< ' #1' ' -D<#' ' -.' K' D'-' D'0 <'@' K'Ba@ KD'BD' D<+1' 0 < 1' & D1' ' 01@ & ' D1 ' & `KD&>'/' ' & D1 ' 1 0&-0 D<+1' 0 < 1' &=' ! 11' ' >C@1 ! 11' <'@@ & ' ! 11D&@A@ '-' <-A0 <-A' 1-1>1- 0 &=' D1' 1< @ ' <@?1' &=']]' ' & ' >& 1 K' D'-' ''0 <'@' K'Ba@ &? ' &=' <-A1- ' ' 1>1<-@ D1' ! '+1' & 0 <-A' D1' 1-? 1' &=' E< ' +1@a'-A -' 10C1^' &=' KD'BD' A'-<-B1 011'-.' K' D'-' D1' &?- ' &=' , 1- ' D1 1' #1' #? ' D' ' & ' ! & ' 1 @ 0&-0 < ' D1' >&0 @ KD'BD' D<+1' <- ' <-A0 & ' 1-1>1- 0 &? ' &=' D1' 1-? 1' &=' E<+1@a'-A@ #1B<?01' D1' . 1< 1 ' < ' &=' D1' 0<'A' &?- @ & ' K1@@ -'.D' <@@@ '0 &=' D1' 1 -? 1' &=' (<+1@a'-A@ KD'BD' 1 0&-0 #1' B&- '-?<@@ ' ' >C<@ -1@@1A' <-A' 1 ? -1A' '-' D1' 0<'A' ^ '&-0)' &' D1'. 1< ' '-A <-B1' <-A' >C&+1 '0D>1- ' &=' D1' 0<>1' 1 0&-0 ? ' 0<'A' & A' D1' , '-.' B&-0'A1 '-.' D1' 1>'0010@ D< D' . <- 1A@ & A<'-1A@ <-A' 0 <#@'0D1A' # ' ? D& ' ' <=& 1j 0<'A@ D<' D&01' 1-' KD'BD' D<+1' 0 < 1' & D1' ' 01@ <-A' <@0& D1 ' & KD&01' 01' & D1 ' 1-' D<+1' 0 < 1@ &=' ! 11' ' >C@1 ! 11' <'@@ & ' ! 11D&@A@ '-' <-A0 <-A' 1-18 >1-0 &=' D1' 1< @ ' <@?1' &=' LL@ ' &=' D1' 1-? 1' &=' E<+1@a'-A@ 0D<@@ #1' 1 ? -1A' <-A' '>C<-1@@1A' '-' <@@ 0?BD' <'-0 <0 #1' <#&+1' 1B' 1A@ KD'BD' <'-0 #1' -& ' -&K' A1C1-A' -.@ #? ' >< ' A1C1-A' '-' '>1' &' B&>1@ '-' D1' 0<>1' <'>1 ' <-A' ! & >' <0' <- ' & D1 ' 1 0&-' >< ' #1' 1 ? -1A' <-A' '>C<-1@@1A' # ' ! & B1' &=' D1' 0<'A' < ? 1' ><A1' D1' 0<'A' ! '= 11- D' 1<

B"!! .+/!"Z &-' b '!+E&-/' 1 @ !HO"."2

&' 6 #' ' '"!#& ! /@ Z' .' &#!-#!Z .' !% ."' +!' !"k # -/&2!'=

@WF D1 1<0 '-' D1' < ? 1' ><A1' D1' LL ' 1< ' &=' , '-.' 'BD< A' D1' 1B&-A@ <' D1' . '1+&?0' & > C@<'- ' &=' D1' & > >&-0@ 0D1K' -.' D&K' D1' <C@1' K<0' @' >' 1A' &' 1><'-' <' <@<'0@ <-A' D<' <@@ <--1 ' &=' F &&@0@ F &&@@ =1@0 ' 1< D1 @ 1<A@ '-@ D1101@ ? 1 @ <-A' &-1 ' .&'-.' &? ' &=' D1' 1<@ >' &=' -.@<-A@ &?.D ' &' D<+1' 1j B&? 01' &' D1' 0<'A' @<B1' &=' <@<'0@ <-A' &' -&' @<B1' 1@01j KD1 1'G B1 <'-' 1 0&-0 # ' D1' ' ?..10 '&-0' D<A' #1=& 1' D<' '>1' C? BD<01A' 'B1-B10@ &' B< ' &? ' F &&@0' <-A' & D1 ' 1 BD<-A'010' <=& 10<'A@ &' KD<' < 0 #1 &-A' D1' 1<' @'<' C@1<01A' D1>@ &=' D1' , '-./0' > ' @ &' D1' KD'BD' D1' ' 'B1-B10' A&' 1L 1-A@ K' D&? ' B& > '-.' &' D1' 0<'A' ` @<B10 P' &=' <@<'0@ &' D1' . 1<' A+<-<.1' #=' D1' 1 0&-0 0&' D<+'-.' 'B1-B10@ <-A' . 1<' " <><.1' &=' D1>' KD'BD' D<+1' -&' 'B1-B1G WF D1 1=& 1' D1' 0<'A' , '-.@ # ' ? D& ' '&=' #'0 < @'<>1-' D& A1-' D1' 1< ' <=& 10<'A@ & A<'-1A'<-A' 0 <#@'0D1A@ D<' D1' 0<'A' < ? 1' 0D&?@A' #1' D&@A1-' <-A'&#01 +1A' <0 &' D1' . 1< ' 1 BD<-A'010' <=& 1j 0<'A@ D<' '0 &' 0< ' F &&@0@ F &&@=1@0@ '-@ <-A@ 1<A' &-@ @ K' D&? ' 'B1-B1' D1 1&=' &' #1' . <- 1A' #? ' # ' D1' , '-.' D' > 01@=;' -' 10C1=' &=' FD'BD' < ? 1' 0&' ><A1@ D1' D<-B1@@& ' =& ' D1' '>1' #1'-.' &= 1-' D< D' A1-'1A' &' . <-' 'B1-B10' =& ' D1101' <-A' ? 1 ' &' #1' `B< '1A h P' &' <- ' & ''1 ' @<B1@ #? ' &-@ ' &' D# 0<>1' 5 -' <@<'0@ &' D1' . 1< ' "<><.1' &=' D1' W)' 1&C@1' &=' D'0 1<@>;' ? ' 0<'A' & A' D1' , '-.@ B&-0'A1 '-.' D< ' D1101' <-A' ? 1 ' '0' <' 1 BD<-A'01' KD'BD' B<--& ' #1' K1 ' a1C @ -& ' < ' D'0' 1 BD<- @ <CA' K '@@ #1' . 1< @ ' '>C<' 1A' # ' /)' 1 >'-' <-A' F C >0@ <-A' '0' <@0& 1-A1 ' <-A' &=' 0&' 0'>C@1' 'B1@ D<' ' ' B<--& ' K1@@ #1<' D1' &0 0' &=' D1' <C@1@ #< D' & A<'-1A' # ' D1' ? D& ' ' <=& 10<'A@ D<' D1' , '- . 0' @'1.1' 1&C@1' >< ' B&-+1 ' <-A' B< ' &? ' &=' D'0 1<@>@ KD' D1 ' ' ' 0D<@@ C@1<01' D1>@

L@'0@ &?' C@?'0@ -1' C0&-1=' <BA&-' A&?- ' @1' ? .' A1' 1B& 1' 1L 1-A' <@ 0&>1' A1' a@ " &?' C@?'0@ 1 & -1' -1' 1>C<-1@@1' 1-' -?@@ -H?'0'B'&-' -1' 1-H?10 1' -?@@10' C0&-10' >10' B1?L' 1-D?#' <?- \;' A1'-\' <#<'@'1' H' &?- ' 10 < 1' <' @&? ' &1C0' &?' B1?L' <0' H?U<L' P' <? 10' C0&-10' &?- ' 10 < 1' A1' =11' <> C@1' =11' <'@@1' &?' = <-B' i - ' 1-' 10' I ' 1- \' AD' <- - ?1= ' +<@?1' A1' L L @'' C' <-' &?' C@?'0@ A1' -0' 0<' #<'@'1' D& 0' A1' <?-B'1-' A1>10-1' B -a' C& =10' I ' @<' 1-? 1' A1' E<+ @a -A1G' C' B<?01' A1' H?1@ & A1-D'B1' <' B<?01' H1' A1>0' @1' &?- 1' A1' , 1- ' 0&?- ' H1' <' ' &?' H?< <- ' C0&-10' <' C@?'0' H' &?- ' <0B?-0' 0' &?' - \' D& 0' A1' 1-? 1' A1' E<+ @j a -A1@ C? ' B1&' H1' @<' . 1-A 1' C< '1' A?' A' ' &?- 1' &?' #'1-' C 10' &?' 10 ' A1' 1-? 1' A1' E<+ @a -A1@ @10' H?1-L' C0&-10' 0&-' B&- '- 1@>1- ' 1>C<-1@@1\' I ' 1 &?>1\' 1-' ' @10' A= \' <BA&-0' A< 1'- 10@ <' .= >A1' <-'1C '0>1- ' '=' 1>8' C&C'00>1- ' A10' >10>10' @10' C0&-10;' 1' A' ' ;' @1' # ' B& 0'A1 <- ' @10' C<@@001 ' <A' .= > 1' & A'-1' I ' 10 <#D1' C' @<?I & ' 1' A10?'0A' @ H' '11HL' D&>10' H'' &?- ' 10 <' <' @&/ &1C0' I ' <?L'- ' 'B1?L' <0' H?1?L' &1C0' <? 10@ D&>10' &?- ' 10 <' A1' =11' 0' >C@1' =11' <'@@1' & ' = <-B' 1-1>1- ' 10' 10' I ' 1- \' A<0-?1@@ +<@?1' A1' LL' ' A1' @<' 1-? 1' A1' E<+ @j a -A1@ 0&'1- ' 1 & -1\' I '1>C<-1@@1\' 1-' <? '1@0 < 1'- 10' B&>1' 0&?- ' A10&?#\' 1B' 11\@ @10' H?1?L' < 1'- 10' -1' 0&?- '@C<0' & 1' C1-A<- \' >C0' C? &- ' C1-A 1' 1-' 1>C0' <+1-' @ 1-' >10>10' @10' ><51' I ' =&? >1' B&>1' <0B?-' <? 1' C0&-1' C 1' 10 1' 1 C?><\' I ' 1>C<-A@1\' C' =& B1' A?' A' ' 10 < ?' ' =<' ' @1' A' ' <-' H?'DA0'0>1

1>' B&>1' 1-' @10 < ?' ' =<' ' <-' A?' & ' 'BD< A' @1' 01A1' LL W' <' @<' . 1+&?01' B&>C@A- ' A10' &10' >&-0 <- \' B&>1-' @10 <C'1' =?'0 ' @' >' 1' A1' 1C&'01 ' <' <@1 0@ 1 ' H' &? \' >< 0' A10' @<'-0' C1<@L' @<-? \' D'A10' C ?>#1' 10 <'-' =? ><.1' #? 1' I ' >1@@ '00<- \' D& 0' A?' &'<@>1' " 1-.a 1' A1 C'1-'<+> ' 1B&? 01' <'@<' A' ' @'=' ?' AC' <@1 0' I ' <' -?@@ @'1?' <' &? 0@ 1'-0' C0&-10' C' @&? ' A' 0' 0?.j .10 '&-0' &?-' C? BD<B \' @'B1-B10' < 3-' B10 ' 1>C0' A1' D& 0' B< '1 ' @<'-0' I ' <? 10' ' BD<-A'010' <+W- A' \' <0' H?1?L' C< '10' A1' C< A1@<' H' 1?L' C@?0@ A1@ <>'0 1' A?' & @ <0' H?1?L' @&? ' @'B1-B10' 01' 1L 1-A1 &1- @ 0<?-\' +1' ' ' <' A' ' @'1?' A1' <@1 0@ <' @1' .= >A1' <+W- <.1' A1' @10' C0&-10' '00' - ' 1'<- \' @'B1-B10' I ' . ?-A1' A<><.1' A'B1?L' H" -? ' @'B1-B1' &?- G C' H? ' @1' A' ' & ' C' <?= & ' 1' A1' 0&-' C< @1>1- @ 1= ?\' <-' 0?'0A' ' & A1'-<' I ' 10 <##@'0 ' H1' @1' A' @ 10 < ?' ' '&' ' 1-?\' I ' &#01 +1\' H?0- ' <' @1 ' ./?-A10' ' BD<-A'010' A10?'0A' \@ B10 <00<+&' ' @<'-0' C10AL' @<-? \' 10 <'-' I ' C@?>#1' <- 0&@1>1- @ 0<?-\' <0B?-' @'B1-B1' A10 1' 1-' .D'- '1\' 0'-&-' C' @1' & ' >10>1;' C' B<?01' A1' H?1@ 10 <@@ -' ' 1-0 ' =<' ' @1' D<?-B1@@1 ' " 1-.@1 1' C ' @1' 1>C0' 10 1<- ' 0&+1- ' =&' \' <' @? ' 10 ?-.'1\' A1' . ?- '1 ' @'B1-B10' C' =? ><.1' I ' #? 1@ A10 1' 1?' `<? 1' <0B?-/P@' @'1?' H' <- 0&@1> -'<' A' ' @'1-' A1 <@1 0@ <' .0?-A'A<><.1' A?' B&1' C1&C@1' A'B10 ' &'<@ -1G =1' A' ' ' @1' & ' B&-0'A1 <-' B&@ >1-' =? ><.1' I ' #? 1' 10 ' -'BD<-A'01' H1' -1' C&1 ' > '#'1-' 10 1' &#01 +1\' -1' < 1-A'1 ' 0&?-' ' BD<?- @ I '+& ' CO-A 1' . ?-A1' 1>C1' 1>1- ' C' @10' #10 10' A1' +1 > -' I ' >10@ I ' < L" 10 ' 1-A 1' I ' A1')' 0 >C@1' C 'B1' H'@ -1' C&1 '#'1- ' C& 1 ' @10' B&0 <.10' A1' @10 <C'1@ <A' & A1=.-1' C' @<?A& ' 1' A10?'0A' @ H' @1' @'1.1' C1&C@1' A?' & ' C&1 ' <>10-1 ' I;' B< '1 ' D& 0' A'B10 ' C'<@>1' <' H? ' C< '1' @&? ' C@1<0

I' &C10' ' *:' < '%H ' ' ' C'G ! '2 ' <0' -' 1L V' <' <0B?-' <? 1' G ! '\' I B' /' 0 ' G ! ' ' I B

' ." ' $

' 7 .2!' 02!' N)$ '6 *

U 3+ #!' F /' (3+ #!' .

1' B ;1' W #10 10' &= N * 0 ' 45)

40 !" -/' !!2!' 1-@ ;!' !% ." ! /' 7& .0 ' &#!-#![, 20 ;H! /' 6!2 " &-' ;@' !' M&-*

A1@ <>'0 1'A?' & @='' ><.1' I '#? 1' 0<?-\'<0B?-' @'B1-B1' A10 1' C? 01K1\' 1-' <0B?-' >< 1@ C<'<- ' C ' 'B1 '@10' B? @ ?>10' I '0?#0'A'1\;1- ' A1K1\' A1' 1>C0' 1-' 1>C0G <0B?-' 10 < ? ' ' <' B&-= '1' -'1- ' &#0 <- ' G ? +1?' H' @1' & ' ')' C&1 ' 10 <'. -1 ' HO?- ' @? ' C@1 <

1- ' B&>1' .W?-A10' A<><.10' I ' CA10' A1' &? ' 1-' <? 1' <+1'. -&- ' <?' & ' I ' <' 0&?-' C1&C@1@ <?- ' C' > ' @10' +1-A10' I ' <BD< 10' H' @10' BD<?- R' <@'1-0' I ' 10 /?-@ .'1 ' =1B1- ' < @&? ' CC 1' +&@?- 1' I ' @'# 1' 0<?-\' <0B?-' -& 'B1' .& -<-B1' I '0? +'1?' A<0B?-' A1' @&'<@L' @'1.10' A?' & @ B&>1' C' A1@0' +1-A10' I ' <BD< 10' H?1@0' @0' =<B1- ' 1-01>#@1' A1' &? \' >< 0' >< BD<-A'010' BD10B?-' A1' 1?L' &+10H1' <? 1@ 1 ' <?L" C' @10' B&+ -0' ' B&>C<001>1- \' H'@0' =1B1- ' A1>C1' 1 ' I ' <#< '1 ' @1' C 'B1' I ' +<@?1' A1' &? \' >< 0' BD<?-A'010' A'B10 ' -&#@1' &'<@>1@ I ' 1- 1B1 ' I ' 1-D<?-B1 ' @1' C 'B1' A1' &? \' @&? 0' CC 1' -'BD<-A'010@ C&?- ' >10>10' @1 '='BD<?- \' <@'1-0' . ?-A1@ >1- '0&?- ' 1- 'BD1< I '@10' 0?#.' \' A ' &" >< BD<?- m' A1'-\01'-0' A'B1 ' &'<@>1' . 1+&?0>1- ' 1>C&,1\@ I ' ./?-A1' 10&?' C' >10>10' @10' <@'1-0' <>10-1' D& 0' A1' B10 ' &'<@>10' @10' B?0 ?>10' I '0?#0'A'10' < & ' C' 1?L' A1?0' C ' @10' B<?010' 0?'0A' \' .D'-A1>1- ' 0?0 1' \@ I ' @< <+ 1' A?' A' ' &'<@>1' ./?-A1'C1- ' <>1-?01\' I ' <-'1-0' '01\;' 1 ' B& '1' C' A', 0 10 < ?' \' A1+D' ' B1\' D1? 10' =<' \' 0&' ' & A1'. -1\@ H1' 1-' B@'?-' ' 11' '@@1' I ' & 'A?' 11=' "1-.@1 1@ &?' @10' ' BD<?- \'<@'1-0' I ' 10='?-. 'B 0' 0&?0@ &?' M &- ' 1C<' <- m@ 0&'1-' <00'. -1\' < >10>10' @10' I D<' > \' 0?=='B1<- \' D&0 10' C' @10' , <' ' '0B ?- \' &?' <'@ '0' A10' A' \' @ 110' '@@10' I ' C& 10' A?' 11 @ 1' H1' @10' A' \' ' BD<?-=m' <@'1-0' I ' 10 /?-.'1 0' -1' 0&'1- ' A1 &<?- \' <'' <? 1' @'1?' 0'-&?-' +10H1' @10' A' m' D&0 10' 1-0 ' <00'. -'1 0' G @10' H?1?L' 10 < ?' \' -1' 0&?- ' <001\' B&+1-<#@1\' I ' 0?=='B1<- \' 1>1A'10' 1-B&?- 1' @10' A<><.10' I ' '-B&-+1-'1- \' 0?'0A' \';' =1' A' ' @1' & @ +&'@@<- ' 1-B&- 1' >10>10' @10' A<><.10' I ' '-B&-+1-'1- \' C? +&'1 0' A1' 1>1A'&' 1-' B10Q' C< '1@ <A' & A1'. -1' C' @<?B & ''1' A10?'0A' @ H' A10& 1' 1-<+ - ' -?' ' ;='BD<?- ' <@'1-' &?' 10 D' .1' +1-A1' -? ' ><5' '^BD<-A'01' <' <? 1' I D<? - ' <@'1-' &?' 10=?-. '1 @ 0? ' C1 -1' A1' =& =<' ? 1' A1' >10>10' A0' -'BD<-A'010' G 1 ' H' &? \' I D<> \' <@'1-0' I ' 10=?-. '1 0@ A10& 1' U'<+3- ' +1-W- \' &?' A1> <- \' <' >< BD<-A'1 ' A1'-\' <0B?-' ' 11' '@@1' &?' ? .D' & ' & '1-' -.@1 1@ 0&'1- ' 0&?#\' 0? +1?' A1' ! .1- \' <CC1@@'1 0' D&0 10' &?' 0? +1'&? 0@ <' 1 'L' C<' @10' <@10' '0B&?- \' &?' <'@@'=0' A1' >10 '10' @10' ' 110' '@@10' & ' ? .D0' &?' & 1\' C' @<' >< 1' 1-0?<- ' <00'. -'1 0;' ' H' BD10B?-' '1@ ' BD<?- ' <@'1-@ +1'. -3- ' <@ <0B?-' A10' A' \' C' 110' '@@10' ? .D0' &?' & 1\' <' >< BD<-j A'1 @ A1A1'-\' &'0' &? 0' CBD1'-0' ?!' 0&?-' A' ' +1-?1' 0& ' &== 1' 1-' C0&-1' A1+ - ' @1' <' ' '0B&?- ' &?' <'@@'=' A1' >10>1' @<' ' 11' '@@1' ? .D' &?' & ' <?' H" @ +'1-@ C? ' <+&' ' D&0 ' < @? ' <00'. -0' G ' H' 10' <' 0' @0@ B&- \' &?' <'@@'=0' A1' BD?-' A10' B ' \' ' 110' '@@ ' ? .D0' &?' & 1\@ A1A1'-0' H?< 1' &? 0' CBD1'-0' <C'0' H'@0' <1- ' -& 'B1' A1@ 1-?1' &?' 10 1<? B1' A<0B?-0' '1@L' BD<?- \@ <00'. -1- ' < >10>108 @10' D<?- ' <D1-0' 0? B1<- \' D&0 10@ H" 0&'1- ' #&-0' I ' B 1A'#@1\' C0&-0' -< '=0' 1-.@& 0' 1LC1 \' 1-' @1' =< @ A1' I D<- A'01@ I ' -'1- ' 1L '1<?- \' '1@L' I D<-A'010' H?1@0' @10' ='BD<?- \' <@'1-0' A10&?#\' @&? ' 0? +'1 ' 10 1<?- \' C ' @1' 1>C0' ?01- '

0@1' ! +' 6 ' I B

&=' D1' , '-./0' >' @ D1101' <-A' ? 1 @ K' D&? ' <- ' 'B1-B1' &' #1' `C? 0?1A ' -' <- ' K'01@ C< '-.' =& ' D1' 0<>1' D1' ?0 &>0' <-A' ?#0'A'10' D1 1&=' A?1' = &>' '>1' &' '>1C' <C ' < ? 1' ><A1' &' D1' B&- < ' -& K' Dj 0 <-A'-. ' &+'A1A' D<' D1', '-.' >< ' 10 <'-' D1' 0<>1' KD1-' ' '0D<@@ C@1<01' D'>

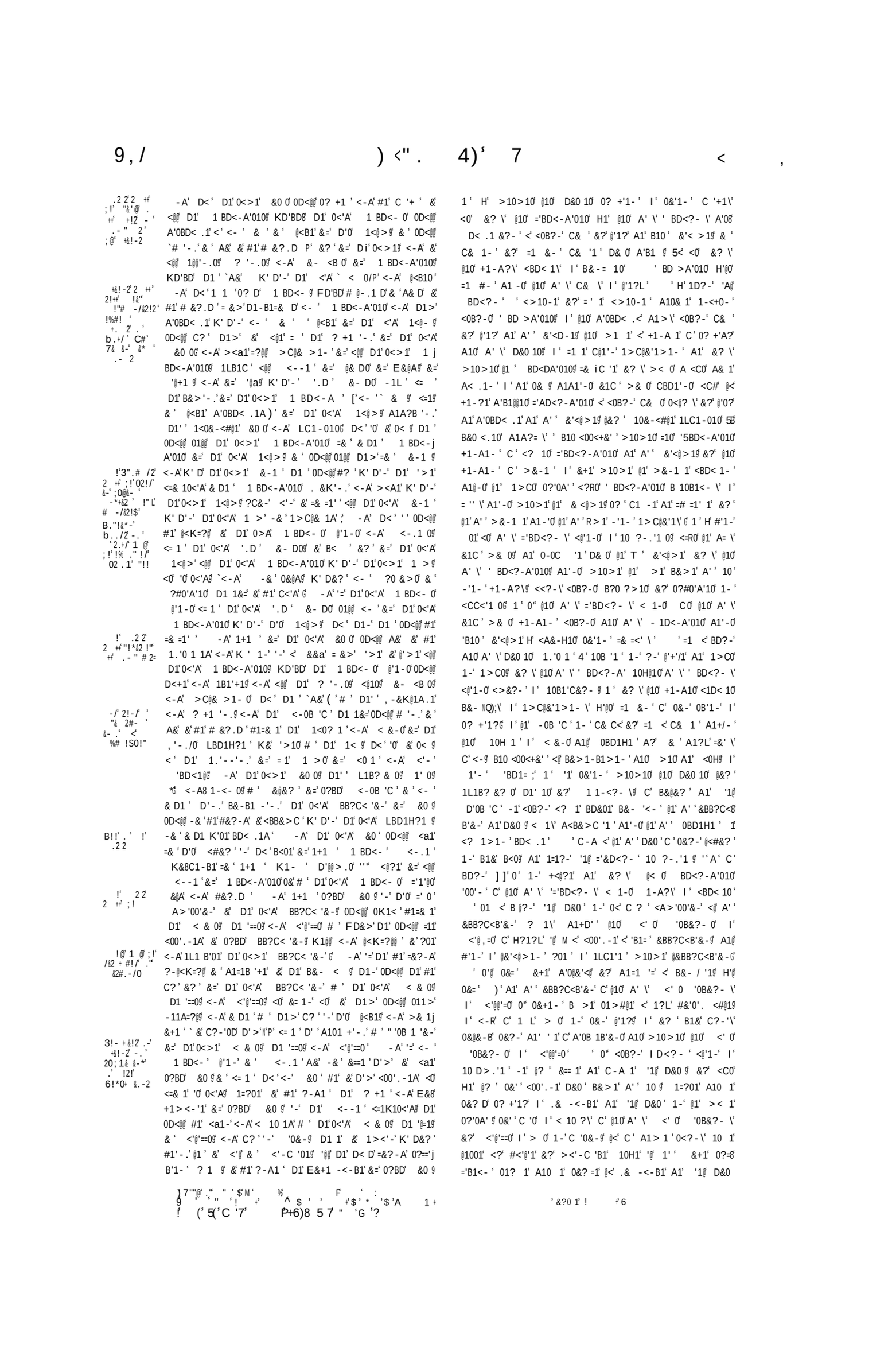
@ F D1 1<0' . 1<' "<><.10' <-A' &0010' A<'@ ' B&>1' &' D1', '-.' <-A' &' D'0' 1&C@1@ /)' # ' D1' #? '-.' <-A' 01@@'-.' D<' D1' 1 BD<- 0' @'1-0' <-A' <-.1 0' A&' ><a1' <' D1' ' C &C1 ' F '@@' <-A' '#1 @ K' D&?' <- ' & 'B1@ E&+1 -<-B1@ <-A' ? +1 '-.' &=' <- '&=' D1', '-./0 @<K=?@ @'1.1' 1&C@1@ <0' # ' 0?BD' #? '-.' <-A' 01@@'-.' KD'BD' D1 ' ?01' &.1 D1 ' &=' <@@ ><--1 ' &=' 1 BD<-A'010' 1+1 ' &=' D1>' K' D' & D1 @ <-A' <@0&' # ' &+'-0' <-A' & -8 C<00'-.0@ D<' D1 ' A&@ &' '>C<' ' <-A' <#< 1' D1' 'B1' <-A' <@?1' &=' <@@ ><--1 ' &=' 1 BD<-A'010' &=' D'0 -&##@1' 1<@>@ <-A' `A&'0 P '-B 1<01' <-A' '-D<-B1' D1' 'B1' &=' <'@ D1D' &K-' @ 1 BD<-A@010G KD1 1# ' D1' 0<'A' 1 BD<- 0' @@1-0' #1' . 1< @ ' 1- 'BD1A@ <-A' D1' , '-./0' ?# 1^0' 1 BD<- 0' "1-'\1-0' &=' D1' 0<>1' 1<@>'. '1+&?0@ ' '>j C&+1 '0D1A@ <-A' . 1<' 1<0? 1' # ' D1' 0<>1' @'1-0' `# &?. D 0P' &?' &=' D'0' 1<@>@ D1' ?0 &>0' <-A' ?#0 ' A'10' # ' D1>' A?1' &' D1', '-.' =& ' D1' <?010' <=& 10<'A' . 1< @ ' `A' >' -'0D1A9/P' <-A' D1' <+ ' &=' D1' 0<'A' 1<@>' . 1< @ ' A10 & 1A'<-A'D'-A1 1A;' -A' F D1 1<0' # ' A'+1 0' < ? 10' #1=& 1' D'0' '>1' ><A1' ' K<0' & A<'-1A ' D< ' '-' 1+1 ' ' @ &K-@ <-A' & ' &=' D1' 1<' &=' -.@<-A@ KD1 1' D1' 1 BD<- 0' @'1-0' <-A' <-.1 0' #1' & ' 0D<@@ #1' 1C<' '-.@ 0?=='B'1-' &0 0' 0D<@@ #1' <00'. -1A' &' D1' 0<>1' 1 BD<- 0@ # ' D1' < & @ D1 '==0@ & ' <'@'==0' &=' D1' 0<'A' ' '10@ &K-0@ <-A' & 0' &=' D1' 1<@ <-A' D<' D1' G) 1 BD<- 0' @'1-0' <-A' <-.1 0' 0D<@@ -& '#1'AK1@j @'-.' '-' <- ' & D1 ' @<B1'#? ' K' D' A'1' <'A' &0 0' 0&' /)' <0j 0'. -1A'G KD'BD' h @#1' -& '0?=='B'1- ' <-A' B&-+1-'1- ' 1>1j A'10' 1-&?. D' <.<' -0 ' D1' "<><.10' <-A' -B&-+1-'1-B10' <=& 10<'A' ; ? ' 0<'A' &+1 1'. -' & A' D1', '-.@ K'@@'-.' <.<' -0 ' D1'0<>1' "<><.10' <-A' -B&-+ -'1-B'10' &' C &+'A1' <' 1>1A ' '-' D'0' 1D<@=@ D< D' & A<'-1A' # ' ? D& ' ' <=& 10<'A' D<' = & >' D1-B1=& D' -&' 1 BD<- ' @'1-' & ' <-.1 ' 0D<@@ 01@@ -&' ><-1 ' &=' 1 BD<-A'01' &' & D1 ' 1 BD<- ' @'1-' & ' <-.1 @ ?C&-' <'-' &=' ! & =1' ? 1' &=' D1'0<>1' 1 BD<-A'010' G -A' D<' <@@ 1 BD<- 0' @'1-0' <-A' <-.1 0' = & >' D1-B1=& D' B& >'-.' & ' <#'A'-.' & >1 BD<-A'01' K' D'-' <- ' ' @ &K-@ & &?. D@ & ' & '' -.@<-A@ 0D<@@ #1' ?-A1 ' D1'0? 1 >.' &=' B1 <'-' 1&C@1' /)' B<@@1A' &0 0' & ' ? +1 & 0@ &' D1>' //)' <00'. -1A' # ' D1' < & 0@ D1 '==0@ & ' <'@'==0' &=' D1' 0<>1' ' '10@ &K-0@ & &?. D0@ & ' & 0' # ' D1' <--1 ' 1-0?'-.' ; CA' D<' 1+1 ' 0?BD' 1 BD<- ' @'1-' B&>'-.' &' <- ' &= D1' N)' ' '10@ &K-0@ & &?. D0@ & ' & 0@ /)' K' D'-' D 11' " < 0' K 3)' <= 1 ' D'0'0<'A' B&>'-.@ 0D<@@ &51 ' D'>' -' 1 0&-' #1=& 1' D1' < & @ D1 '==@ & ' <'@'== &=' D1' 0<>1' ' @ &K-@ & &H. D@ & ' & ' &' @ FB# D1' &>1 D@ &' D<+1'<-' &0 ' &' D'>' <00'. -1A' '0-A' D<' D1' < & 0@ D1j '==0@ & ' <'@'==0' &=' 1+1 ' &=' D1'0<'A' '3')' &K-0' & &?. D0@ <-A' & 0@ K' D'-' ! &? ' " < 0' -1L ' <= 1 ' D<' D1 ' D<+1' & 'B1' &=' D1' B& >'-.' & ' #1'-.' &=' <') ' 0?BD' 1 BD<- 0@ 0D<@@ <00'. -' &' D1' 0<>1' 1 BD<- 0' @'1-0' 0?=='B'1- ' &0 0@ KD'BD' #1' .&&A' <-A'B 1A'#@1' 1 0&-0@ -.@'0# >1D' #& -@ 1LC1 ' '-' D1' ! 1<' &=' 1 BD<-A'\1@ <-A' -& ' 1Lj 1 B'0'-.' 0?BD' 1 BD<-A'010@ KD'BD' D1' 1 BD<- 0' @'1-0' #1>.' ?-A1 ' D1' ' 0? +1 '-.' =& ' D1' '>1' A&' ?01' G

0' = 7 N$ ' ' '(%' &9.' 8 (' $2 ** (' '! ' V ')' %' ' =(57' =)' '! + V ' L' (# ;' $' M]' ! 2 0 ! 2' '! 'V ' : .' 1 "# --/&2! ' '! ' ' ' . *

'&+2' . ' !"# - 2' +&! -2' " /&-*' 7& ' ! # ' . !'* 7& &-' !' 6! +1' =

' " ' J'Q +*4 '", +&! -2' 2 +' -.' 2!+# -@' !"# -/&2!2' .' +&! -2' 2 .' 3 &-' ' B." ! & 0"!

!"# - 2' +&! -2' 2 ' !' 0-/!'* !' 0"' !@' . ' .2 2=



'=' @? ' I ' 1' C '+1' <Ø &? \' @10Ø +1-A10Ø <BD< 10Ø 4' B&- 0<\' A1' 01\' ='BD<-A'010Ø B&>1' A10?'Ø 10 ' A' Ġ ' =1B1' >10>1' @1' ' BD<?- ' <,1-' 1-' B1&' &<Ø = -' I ' <?-0&-' <' @<' +&@?>1' @1' & ' ' 0" <0B?-' '1@ ='BD<?- ' <@'1-' =1B1' <0B?-'<BD< 1' &?' +1-A1' &?' B&- 1' A1' ' BD<-A'01ƒ 0<?-\' @<' 0? +'1?' A1' 0&-' A' ' D&0 ƒ &?' =<' 1' @1' A' ' D&0 ' C '+1' <Ø &? \' @10Ø A' \'='BD<?-A'010Ø 1-A10Ø <BD< 10Ø &?' B&- '= 10Ø B&>1'A1+0-' 10 ' A' ƒ =& =1 <' @<' +<@?1' A1' >10>10Ø @10Ø #'1-Ø <BD< 10Ø &?' +1-A?\' &?' @<' 0&>1' &?' @<' +<@?1' A1' B1&' A&?-' @<' B&- <=' 10 ' =1' ' ' 0" <0B?-' A1ƒ <' ' '0B&?-' &?' <'@@'=' +&@?-'1 >1-' @1001' <0B?-' '1ƒ ='BD<?-' 10 1' 0<?-\' D&0 ' 1-' @<' =C? >1' 0?'0A' ƒ <@1 ' <' @< .1' 0<?-\' @? ' < 10 1 ' I ' >1 1' 1-' C '0&-' I ' C?-' ' 1-' @<' =&? >1' 0?'0A' ƒ =& =1 <ƒ >1 '<' @1' <' ' '0B&?-' &?' <'@@'=' <8 & ' L L @' ' C ' BD?-' BDA?-' <@'1-' '00'-' 0?== 1' +&@?-'1 >1-' A<@1 ' <' @< .1' -'1<' < 10 ?\ƒ I ' C ' BD?-' '1@ I D<?-' <@'1-' I ' 10 '?-.'1 ' <' H" '1@ D&0 ' 1-' @<' =&? >1' 0?'0A' ' -10 ' <00'.-0ƒ '0" <0B?-' D&>1ƒ H10 ' C' 'C" <' ' '0B&?-' &?' <'@@'=' <00'.-1' C ' 10 1' D&0 ' <' <0B?-' '1@ >< BD<?-' <@'1-' I ' 10 D>.1ƒ 1=?01' A10 1' '1@ D&0 ' C<'1 <' <' & ' BD?-' =&' \' H'ƒ '00'-' 1=?01' A10 1' D&0 ' L@' ' ' BD?-' B@ <?-' <@'1-' I ' 10=?-.'1 ' H1' -&?-' 1>C@&'1' @1' A' ' >&-1 1' A1' -\' @1' A' m' &1C ' >& Ø B&>1' 10 ' A' ƒ ? H' +1-A1' 01\' A' \' BD<?-A'010Ø 1-' -.@1R 1' <CØ >10>1' @10Ø &1C ' >& 0ƒ I/'1-' A1+D' ' <0B?-' A1Ø ?..10' A?' & ' 0&' ' A?1>1-' B&-+'E' C' 0&-' 1L<>'-<B'&-'&?' <?R8ƒ >1-ƒ <' 0?' 1' A?' & ' &?' <@ 0?' 1' A<0B?-' A1' 010Ø @'1.10Ø H" +&1 ' 0?1 ' C ' @1' & ' I ' C ' @? ' >10>10Ø `'A1'\P' B1?L' A1?L' B<010Ø<+J- A' \ƒ A&-H ' 1 B&? .1' >10>1' @1' ' BD<?-' <@'1-' I ' 10=?-.1' @<' C1 -1' I ' =& =1 ? 1' 0?'0A' \Ġ I ' 1' ' B '? ' H" =1 <' 1' A' '0?' 1' =<' H?< ' C< '1'A10Ø A' \' =& 8ƒ =''' ? 10Ø I ' @1' & ' @10Ø &'Ø <?R ' C< '10;' 1 ' H' B10 ' <E' I ' & A1-/-B1' B&>1-B1' <' 1-1 ' @'1?' <@ =10 ' A1' <0H9ƒ CBD1'-' <+1-' ƒ I ' A? 1 <' <-H1' <@ = -' A ' 1C ' <-Ø <@& Ø CBD1'-' 1-0?<- \,' 1 ' H1' C' 1- 1' B ' I ' @1' A' ' =10 ' A1' <0H ' 1'-Ø &>'00'&-Ø A10&? D' @1' .0?-A1' 01<@ A?' & ' 1D1 0<?- \' &?' >10>1' @1' <E' I ' & A1-W-B1' 0& 1-' =<' \ƒ I ' 01+/<@8 >1-' A' 1E\' <Ø <' 0' '0B&?-1' & ' <'@@'=1' A1' BD?-' ' 11' '@@1' ? .D' I ' & 1' A?' A' ' &'<@>1' &?' '1@L' ; D<?-\'<@'1-0' I ' 10'=?-.'1 0'0&??' &?' &?-' A1>< -\' A?' 1C<'B<-\Ġ BD< .1<-\'10 ,<0>1- &@10>10'@10' <' 0' 'OB& -\'4' <'@@'=0ƒ H" 0&'>' &?' H" C ' @1' 1>CØ & -ƒ A1' C?#@'1 ' I ' >1 1' &?' @<' A' ' <=@' I ' & A1-W-B1' 1-' A?' 1L1B?A&-' ? +'1?' &? \' =&' m' ' @10Ø ' BD<?-\' A1@ <-01' "<@><'.-1' I ' &? \' <?RØ BD<?-\' A10&? D' @1' &#1'0<?-B1' A?' & ' -1'0&'1-' B&>C '01\' A1'-\' B10 ' <E' 4 ' & A1- DB1Ġ '00'-' &?' 1>CØ H' C' B10 ' C+'0'&-' I ' & A'j -<-B1' -?@@ C ?A'B1' 0&' ' A&?-1' &?' =1' ' <' <0B?-' <@'<-B1' &?' 1K1ƒ =<' ' C' @1' & ' &?' <0B?-' A1' 01\' -&#@1Ø C.1@ -' & Ø A1 D ' B10 ' 1>C0

1>'B&>1'A1+0D ' Q 1\) ' D1? 10' <" 1>CØ A1' BD?-' L+3W' I ' LJ '<' & '&?' <'01\C.1-' & 0' . f - 1\ƒ &@@1E& 0' A1' >10>1' @1' LJÓ A1'-Ø @1 ' 11Ø I ' ? .DØ' A1' 0&-' &'<@>1ƒ A<- \' ' 1\1'-Ø &?' ? .1 0' A1' 1?L' +1'. -W- \' <@ C@1>1- ƒ &?-' 0&+1-' 10 1' A1C? 1\' I ' <00'.-10' A10' .1- \' A1> <- \' A1'-Ø >10>1 ' @1<' 11Ø I ' ? .D0ƒ @10' H?1?L' I ' <?RØ .1- \' A1> <- \' 1-' B1@@ &?-' & 1' < A1' &+1-' =&' \' 10 1\' ='''' \' &@@1E& 0' A1' @10' L+J ' I ' LJ

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Ś)' &' ><a1' D' >' C '+ ' &' <@@ D1' <@10ƒ ` ? '-.0P' <-A' &- <^Ø &=' D'Ø 1 BD<-A'010ƒ <Ø <=& 10<'AĠ <-A' D1' 0<>1' 1 BD<-' @'1-' '-' D<' <01' 0D<@@ ><a1' !'-1' <-A' <-0&>'<' D1' , '-./Ø @1<0? 1' -A' '=' <-' 0?BD' 1 j BD<-' @'1-' ><a1' <-' #? '-.' <@1ƒ &' &- <E' &=' 1 j BD<-A'01ƒ K' D&?' D1' `0<'AP' 0? +1 '-.'&=' D'Ø 0)' &0 ƒ &' ><a'-.' D1' 0<'A' &0 ' C '+ ' &' <@@ D1' 0<'A' 1 BD<-A'010Ø 0&@Aƒ #&?.D ƒ &' B&- <E1Aƒ <Ø <=& 1' 'Ø 0<'Aƒ D1' 0D<@@ =& =1' ' D1' <@?1' &=' D1' 0<>1' E&&AO' #&?.D ' &' 0&@Aƒ &' D1' ?>' &' <@?1' &=' D<' KD1 1&=' D1' &- <E' 'Ø ><A1' -A' '=' <-' 0?BD' < & ƒ D1 '==ƒ &' <'@'=' @1' <-' 0?BD' 1 BD<-' Ś K'@@'-.@' &' #1' K' D&?' &0 ' '-' D1' !& >' <=& 10<'Aƒ <-A' .&' <' @< .1ƒ K' D&?' < 10 '-.' D'>' <-A' C? '-.' D'>' '-' '0&-ƒ <-A' C?-'0D'-.' '-' D1' !& >' <=& 1j 0<'Aƒ D1' 0<>1' < & ƒ D1 '==ƒ &' <'@'=' 0D<@@ =& =1' ' K1- ' &?-AO' &' D1' , '-.' =& ' 1+1 ' 1 BD<-' @'1-' 0&' 8K'@@'-.@' 0?==1 1A' &' .&' <' @< .1' -C' < 10 1Aƒ <-A' =& ' 1+1 ' 0?BD' 1 BD<-' @'1-' <-A' <-.1 ƒ &' KD&>'0?BD' &0 ' '-' D1' !& >' <=& 10<'A' 'Ø -& ' <0 '.-1A' -A' '=' <-' <-ƒ KD'BD' 'Ø # ' 0?BD' < & ' D1 '==' &' <'@' '<0 '.-1A' &' #1' &0 ' &' <-' 0?BD' 1 BD<-' @'1-' <-A' <-.1 ƒ 1=?01' &' #1'0?BD' &0 ƒ D1<@ D' C< '1+1 ' '>1' &' D1' , '-.ƒ D< ' D1' 0&' 1=?01 D' &' #1' &0 ' 1-' &?-A0' -A' 1+1 ' 1 BD<-' @'1-' <-A' <-.1 ƒ KD'BD' 1>C@& ' -& ' D1'0<'A' &-1 ' K' D'-' D1'0<'A' '.D ' &- D0ƒ <Ø 'Ø 0<'Aƒ & ' D<' `D1' 01@@N P' D'Ø 0<'A' 1 j BD<-A'010Ø '-' -.@<-A' <= 1 ' D1' 0<>1' '.D' &- D0ƒ <-A' D1 1&=' #1=& 1' <-' '&=' D1' , '-./Ø ?A.10Ø #1' A?@ ' B&-+'E' # ' D'Ø L<>'-< '&-' & ' & D1 K'01ƒ <' D1' , '-./Ø ?' ' & ' < ' D1' @ ' '&=')' D'Ø @'1.1' 1&C@1ƒ KD'BD' K'@@' 0?'1' =& ' D1' , '-.' <-A' =& ' D' >01@=' '-' D101' K&' < 1 '<=& 10<'Aƒ D1-' D1' 0 'A' 1 BD<-' @'1-' <-A' <-.1 ' 0D<@@ '-B? ' D1' <'-' 0<'A' ! & =1' ? 1' <=& 10<'AĠ <-A' D1' D<' K'@@' 0?1ƒ 0D<@@ D<+1' D1' !&? D' < ' &=' D1' <'A' ! & =< ? 10ƒ <-A' D1' , '-.' D1' D 11' & D1 ' < 0,' ?A' D<' D'Ø E' <-A' A'-<-B1' 0D<@@ #1.'-' &' D&@A' @<B1' <' D1' ! 1<0 ' &=' <0 1 ' -1L ' B& >'-.ƒ <-A' 0D<@@ 1-A? 1' '@@ D1' -A' &=' ` '.D 0P' 1< 0' -1L ' 1-0?'-.;' -A' D<' #1 K'L ' D'Ø <-A' D1' /)' ! 1<0 ' &=' <0 1 ƒ B1 <'-' &>>'00'&-Ø ?-A1 ' D1' , '-./Ø E 1<' 1<@@ 1D1< 0'-.' H@@ D1' 0<>1' E' <-A' A'-<-B1ƒ 0D<@@ #1' ><A1'<-A'01+1 <@@ ' A' 1E1A' &' D1' < & 0ƒ D1 '==0ƒ & ' <'@'='Ø &=' 1+1 ' ' ƒ &K-ƒ & &?.Dƒ <-A' & ' &=' D1' 0<'A' 1<@>ƒ + D1 1' 0?BD' 1 8' E <- 0' D1-0' <-A' -? 1 0' #1' & ' 0D<@@ #1' <DaD-.' ' 1C<' '-.Ġ 0 > @ ' BD< .'-.' D1' 0<>1' < & 0ƒ D1 '==0ƒ <-A' <'@'==0ƒ KD'BD' #1' & ' KD'BD' =& ' D1' '>1' 0D<@@ #1ƒ &' C?#@'0D' <-A' C?' <@@ D1' 0<'A' E' <-A' A'-<-B1' '-' A?1' L1B? '&-' &+'A1A' <@K< 0' D<' D1' 1 BD<- Ø &=' D1' <-01' &=' @><'-1ƒ <-A' <@@ & D1 ' 1 BD<- Ø ?-A1 ' D1' , '-./Ø #1A'1-B1' #1' -& ' B&>C '01A' K' D'-' D'Ø ==' <-A' A'-<-B1;' &' <@K< Ø D<' # ' D'Ø &j +'0'&-' <-A' A'-<-B1' -&' 1 ?A'B1' #1' .'+1-' & ' A&-1' &' <-' @@'<-B1' & ' ?B1' ><A1' # ' D1' , '-.' & ' <-' &=' D'Ø -&#@1' &.1-' & Ø #1=K1' D'Ø '>1

ƒ F D1 1<0' D1 1 &=& 1' <' D1' '>1' &=' 1+1 ' ^@ '-\' 11' <-A' " '0>1. > 1A' &' D1' , '-.ƒ ' &' D'Ø &j .1-' & 0ƒ D1' &@@1E& 0' &=' D1' 0<>1')'0>10' K' D'-' D1' ' '10' <-A' & &?.DØ' &=' D'Ø 1<@>ƒ D< '-.' ' '\1-0' & ' ? .10010' &=' D1>' B&>'-.' &' D1' < @'<>1-ƒ D<+1' &= 1-' #11-' A1C? 1A' <-A' <00'.-1A' &=' 1 0&-Ø AK1@@'-.' K' D'-' D1' 0<>1' ' '10' <-A' & &?.D0ƒ KD'BD' <-A' & D1 ' 1 0&-Ø AK1@@'-.' '-' D1' 0<>1' D<+1' #11-' &= 1-' -&K' =' @< 1' #11-' ><A1' &@@1E& 0' &=' D1' 0<>1' ^?'-\'>10' <-A' "'0>10

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I ' ./?- 10 -'1- ' 10 1 B&>C '01 -1 1>1B 1 C @1 A' ' 10 < ?' -'1- ' &#0 <- ' H'@ 10 ' 1 -' &K1_' >1'BD'1= A1 @1 A' ' 10 < ?' ; 1 '@1 & ' B&-0'A1 <- ' @10 CO>'0010 I ' +&'@<- ' 1-' B1& C< '1 C +&'1 ' A1 1>1A'1 <A & A1'. -1 C @<?B & ' 1 A10?'0A' - ?@@1\' ' 10 C< 1- 10 0&'1- ' =<' \' <' <0B?-' C0&-1 &?' C0&-10 A<0B?-10 R 10 &?' 1'' \ A1+ - ' -H?'0 A1 ' @1 A?' & ' 1-' B1?L & +1 1-' 0<' D<- -R'1 &?' 1-' 0&-' 0BD1H? ' 1 & -1 0 ' @1 A?' & ' 1-' B1?L' -1 0&' ' &+1 A1' 1B& A1 -1' A1'-\' @1' >& 0 <C/0 >10>1 @1' 1 & -1 0' -1 0&' ' < B1@? ' &?' B1?L' H 1-A1 &?' 1-A1- ' @&? ' W+1'01\' B&>1 A10?'0 10 ' A ' 1 '0 <0B?-0 10 C< 1- 10 0&'1- ' =1' \' < B&- < 1 0&'1- ' +&'1A10 I ' 1-?\' C ' -?@@

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1>' & >1 C@?0&? 0 .1- \' A10 B& -?-10 0?'0A' \ C&00100&@@ 0 A1' -'1=0 I ' +1001<?L' A?' &'<@>1 --=1 =& 1'. -1 @10 <'0 10 I ' < ' 0 A1' '1@L' -'1=0 I ' +1001<?L @ C-&? 0 A10 -'1=0 I ' +1001<?L' A1 C< -1 I ' A<? 10 C< '10 <A < '1 ' I ' 1-1> 10 <?' A' ' --=1' =B <'. -1 U' C' @1' i ? 1 A10 ='BD<?- \' <@'1-0 A1@ <>' 1 A? C=1' & '=1' ' A1+=1 ' '1' & ' I ' 0&-' B&?-0<'@@ I ' <0B?-' =&' \' A1 - ' @1' D<?-B1@@1 ' " 1-. @1R 1 &?- ' 10 1 . ?-A1>1- ' +1L1\' I ' 0&- ' A10 &? ' 1-' <? 1 A1' B1&' '@10 A' < C-&? 0 C '0 1 &- '@&? '#'1-0 I ' B#<?-A'010 BD< .1\' 1-' >10>10 @10 -'1=1 I ' +1001<?L' A1' C0 C1' I ' <?= 10 C< '10 1-1 ' > 10 0?'0==' \ 5B <0B?-' =&' \' C' =<?L' 1 >&'. -10 >< H?10 I ' ' 10 10 '>&C' L' B&C 1+1\' 0&?- ' 10 & 1 <' <0 A' \' #'1-0 I ' ='BD<?-A'010 &+1' @&? ' A<><. 10 I ' 1LC1-010 <. W?-A1' I ' . 1+&?01' A<><. 1' A10 A' \' C 00100&? 0 ><'0j 10 ' >< '-1 0 C-&? 0 C'0A' \ A'0B& <. 1' <0 @'1. 10 - 1 A' ' = '@1' & ' < =1 1' -'1=0 5B +10 1<?@L 1-' <>1->?01>1- ' A-' -<+'1' A?' &'<@>1 0-'0A' ; =1' A' ' (' @1' ' B&?0'8 A1 <- '@< >< '1 ' 0?'0A' 5 B& >1- ' @10 #'1-0 I ' BD<?-8 A'010 A10 @'1. 10 AU' & '1 -' 01>#@1' B<0 BD< .1\' 5 ' C '01\' 0&?- ' =& =1' \' <?' & <A' & A1'. -1\' ' .0?- 1\' C' @<? 8 & ' 1 A1 ?'0A' H@10 A' ' BD<?- \' <@'1-0 <' @&? ' +&@?>1 C &- ' D< .1 '1?@L' -'1=0 5B +1001<@L' A1' C< -1 5B A<? 10 C< '10 <A 0< '10 5B 1-1> 10 A?' & 0" @10 <'0 10 C&00100& 0 &?' BD<?- \' A1' '1@L' +1001<@L' 5B -'1=0 1'1- '@10 ' C< 1- 10 A?' & ' A1' 0&-' 0<?=B&-A?' ' 0?1 1 &?' 0<?=.<=A1 C ' 1@L' -'1=0 1001<?@L' 5B ' BD<?-8 A'01 =<'0<- ' >1-B A-' A?' -&?-' A1' -'1=0 &?' +1001<?@L' 5B A1' -&?-' A1' 10 1' A'B1@10 -'1=0 5B +100< L' 0" B&>1 =1' ><51' 10 k\)' 0" < B?-0 '1@L' -'1=0 &?' +1C 1<?@L BD< .1\' &+1' <0B?- 0 ='B='<?-A'010 A1' '1@L' - BD<?- \' <+/- ==' \ 0&'1- ' C '01\' 0? ' >11 ' C @'1. 10 A?' & -&-' 0@<- ' @10 ==#< C< 1- \' A?' 6 . @' B&>1 <+W- ' 10 ' Aa' A1A1'-0 @1'#& A1' '1@L' -'1=0 &?' +1001<?@L' < &? ' A1' @< C '01 -1' H1 '1@L' ' 10 C<@1- \' A1' & ' A1' @< C '01' 0&'1- ' 1-' @<

Ž! ' ! ' ' C#

<-A' E <- 0 -& ' ' /)' B&>C '01A' -& ' 1>1A'1A' # ' D1' 0<'A' < ? 1 -& K' D0 <-A'-.' D<' ' ' '0' '-' @'a1' '0BD'1= &=' D1' 0<'A' < ? 1 ? `0<'A @ & A' D1' , '- . B&-0'A1 '-.' D1' 1>'00100 <-A' K'@@'-.' &' C &+'A1' A?1' 1>1A ' '-' D'0 1D<@=0 D< D' & A<'-1A0 # ' D1' ? D& ' ' <=& 10<'A ' D< ' -& 1 1 0 < 1- 0 0D<@@ #1' ><A1' &' <- ' 1 0&-' & ' 1 j 0&-0 &=' <- ' <-A0' & ' 1-1>1- 0 #1=& 1' -H?'0' '&-' &=' D1' , '- ./0 ' @1' '-' D1' 0<>1' #1' =&?-A' '-' D1' D<-B1 ' & ' '-' D'0 LBD1H?1 ' 1 ? -1A '=' D1' , '- ./0 ' @1' '-' D1' 0<>1' #1' -& ' =&?-A' &=' 1B& A -& ' K' D'-' D1' &- D <= 1 ' D1' 0<>1' 1 ? -' '=' ' #1' -& ' &' D' >' & ' D1>' KD'BD' 1-A1 ' D1' ' <+1 010 <0 <=& 1' '0 0<'A <-A' '=' <- ' 1 1 0 < 1- 0 #1' ><A1' & D1' B&- < D1 ' 0D<@@ #1' +&'A <-A' D&@A1-' =& ' -&-1

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F D1 1<0' ><- ' 1&C@1' &=' D1' &> >&-0 <=& 1j 0<'A K-1 0' &=' D'C ' <-A' 1001@0' &=' ` D'0' 1<@>9/P' <-A' =D1' <0 1 0' <-A' < '-1 0' &='0?BD' D'C0 ` <a'-. h P' D'C0' <-A' 1001@0' &=' C<'-0 <CA' &=' & D1 ' < '10 A+1 0< '10' <-A' -1>'10' &' &? ' 0<'A & A' D1' , '- . # ' D1' ?' ' &=' 1 BD<- 0' @'1-0' &=' D1' , '- ./0' >' 0 ><A1'#1=& 1' D1' , '- .' <-A' D'0 &?-B'@@ <-A' 0&>1 '>1' #1=& 1' =' 1' D<-j B1@@& ' &=' -.@<-A 0 D<+1' #11-' . 1< @ ' +1L1A <-A' #1' A<'@ 0 =& ' D<' D1' 0<'A' <a1 0' A&' <a1' D1' ' E&&A0' <-A' 1 BD<-A'010' BD< .1A' '-' D1' 0@''A' D'C0' <-A' 1001@0' C=' C<'-' <-A' & D1 ' < 0 -1>'10' <=& 10<'A 0&>1 '>1' # ' =<@01' F ' -100 < a0 <-A' 1 1 0' 10 '>&-'<@0' B&-j '+1A Q D1' 0<'A' @'1-0 P' #1' 10 & 1A' &' D1' 0<'A' E&&A0' <-A' 1 BD<-A'010' K' D' D1' ' "<>< .10' <-A' LC1-B10 &' D1' . 1< '<-A' . '1+&?< &00' &=' D1'0<'A' K-1 0 <0 1 0 <-A' < '-1 0 <a1 0' <=& 10<'A <-A' "'0B&? <.1>1- ' & D1' , '- ./0' @'1.1' 1&C@1' &' ><a1' `0?BD' OP' D'C0' <-A' 10j 01@0 <-A' '-' '-A <-B1' &=' D1' <+ ' &=' D1' 1<@>' <=& 1j 0<'A' - '0<'A' & A' D1' , '- .' B&-0'A1 '-.' D1' < 1 ' 0A& 10<'A <-A' D& 0' D1' T &&A0' <-A' 1 BD<-A'010' &=' D1' , '- ./0 @'1.1' 1&C@1' '-' @'a1' B<01' BD< .1A' <-A' <a1-' #1' =& =1' ' &@ D1' , '- . D< D' & A<'-1A' <-A' . <- 1A' # ' D1' ? D& ' ' <=& 10 'A ' D< ' D1' 0<'A' 1 BD<- 0' 1-0 < ' D1' ' @1<0? 1 @ >< ' BD< .1' 0?BD' D'C0' <-A' 1001@0' = IC ?-@ <-A' &=' =D1 ' < 0 A+1 0< '10' <-A' -1>'10' &=' D1' , '- .@ '=' D1' <0 1 0 K-1 0 & ' 1 BD<- 0' &=' 0?BD' 1001@0' <-A' D'C0' =D<+' - . P' 1 1 0' < 1- 0' &=' D1' , '- .@ &=' D=0' <=18B&-A?B @ ? 1 @ &=' <=1. ?< A' =& ' 0?BD' D'C0' & ' 1001@0 <-A' 1 BD<-A'010 @ ><a'-.' 1-8 '>' &=' D1' <>A' &=' D1' D'C0' 1001@0 <-A' &=' D1' <>1' &=' D1' <0 1 ' &=' D&01' D'C0' <-A' 1001@0 <0' D1' ?>1 ' '0 <-A' '=' <- ' 0?BD' D'C0' & ' 1001@0 BD< .1A' K' D' <- ' 1 BD<-A'010' &=' 0?BD' 1 BD<- 0' <=& 10<'A @ #1' <a1-' ?C&-' D1' 1<' # ' D1' , '- ./0' @'1.1' 1&C@1 -& ' D<+'-.' D1' D . /0' 1 1 0' < 1- 0 <0' <=& 1' '0' 0<'A @ K' D' -' D1' &< A' &=' 0?BD' D'C0' & ' 1001@0 <' D1' " < ' &=' D1' <a'-. -& ' D< ' 0?BD' 1 1 0' < ==@?<@ < ' A'1' " < ' &=' D1' <a'-.

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#1' '-' D1' ,'-./0' D<-B1 ' 1- &@@1A' &=' 1B& A@ @U ' D1-' D1' <a1 0' <-A' &00100& 0' & =P ' DU' E&&A0' <-A' 1 BD<-A'010' 0&' <a1-' > < ' 1- & ' <-A' D&@A' D1' 0<>1@ <- ' < ? 1'& ' A'-<-B1' ><A1' &' D1' B&- < ' -& K' Dj 0 <-A'-.;' <-A' D<' D'0' < ? 1' <-A' A'-<-B1' 0D<@@ #1.'-'@ &' <a1' D'0' ! & B1' < ' D1' ! 1<0 ' &=' <'- ' 'BD<1@ -1L 'B& > '- .G <-A' D<' &B@<>< '&-' #1' D1 1&=' ><A1' ?C&-' D1' 1<' &<0 0' '-B&- '-1- @ ' <= 1 ' D'0' A'-<-B1@ &' D1' - 1- ' D<' D1' 0<'A' 1 BD<- 0' @'1-0' > < ' D<+1' , -&K@1A.1'&=' D1'0<>1' A'-<-B1

W 6!#& ' . ' ' * %' .'" "!#."/&-*" !' !"2.- ' ! " -#!' . '3+ &- & 2=

@ F D1 1<0' '-' <' < ? 1' 1LC' 1A@ ><A1' D1' 1- D' 1< ' &=' D1' 1' .-' &=' &? ' & A' D1' , '-.' D<' -&K' '0@ ' K<0' B&- <'-1A ' D< ' 011'-.' A'+1 0' &=' D1' , '-./0' @'1.1' 1&C@1'#1=& 1' D<' '>1' #<A' #11-' &? @<K1A@ +1L1A@<-A' . 1< @ ' A'0H?'1 1A' '-' A'+1 0' ?' 0@ <0' K1@@ #1=& 1' D1' , '-.' D'>01@=' '-' D'0' 1-BD@ <0' '-' D1' &> >&-' 1-BD@ '-' D1' 1B& A0' &=' KD'BD' ?' 0' D1' - '10' D<+1' #11-' ><A + D<' D1' @<'- '==0' '-' D1' 0<>1' ?' 0' W' # ?@1 ?-' 01' '-' C &C '< C1 0&-< 0 <@J' KD1 1' D1' 0<>1' @<'- '==0' '-' D1' 0<>1' ?' 0' A'A' -&' <CC1< 0' &' 0?BD' ?' 0@ -& ' D<A' <- ' , -&K@1A.1' &=' D1' 0<>1@ '-' . 1< ' '0BD'1=' &=' D1' 0<'A' @'1.1' 1&C@1@ '=' 1>1A ' 0D&?@A' -& ' #1' C &+'A1A' /)G' ? ' & A' D1' , '-.@ K'@@'-.' '-' D'0' <01' &' C &+'A1' < 1>1A @ A'A' & A<'-' # ' ? D& ' ' &=' D1' 0<>1' < @'<j >1-' D&@A1-' D1' 0<>1' 1< @ D< '-&' ! @'01 @ L'.1- 1 @ -& ' <- ' & D1 ' ==' B1 @ = &>' D1' 0<>1' '>1' 0D&?@A' ><a1' 0?BD' - ' '-' <- ' ><--1 ' ?' @ 1LB1C ' D< ' D1' @<'- '=='-' D1'0<>1' ?' @ #1=& 1'<- '0?BD' - ' ` 0D<@='P' #1' ><A1@ ` A&0P' <CC1< ' '-' D'0' C &C1 ' 1 0&-' #1=& 1' 0&>1' &=' D1' ?0 'B10' &=' D1' @<B1' KD1 1' D1' @1<' K<0' & ' `0D< 'RP' #1' A1C1-A'-.@ <-A' D1 1' `0D<@ 'P' #1'0K& -'?C&-' <' &&a@ D<' D1' K<0' D1' 0<>1' 1 0&-' '-' KD&01' <>1' D1' 00'A' ?' ' K<0' 0?1A@ & ' D< ' 0&>1' & D1 ' B 1A'#@1' 1 j 0&-' &=' D'0' &?-B'@ `0D<@@ 3P' ><a1' 0?BD' < D' =& ' D' > ;' -A' D<' ` D'00P' A'-<-B1' `0D<@@OOP' 1-A? 1' ?- '@ D1' -1L ' < @'<>1-' =&@@&K'-.;' ? '0<'A' & A' D1' , '-.'B&-j 0'A1 '-.' >& 1&+1 ' @'a1' " <>< .10@ KD'BD' D<CC1-' <0' K1@@ &' D' >' <0' &' D'0' C&& ' =&.1' 1&C@1' <-A' ?# 1 0@ =& ' D<' '-' D1' 1B& A0' &=' A'+1 0' <-A' >< - ' ? @<K '10@ D1' - ' '0@ D<' D1' < '10' A&' <CC1< ' # ' D1' ' 1->'10@ KD1 1' D1' & -'10' D<+1' -&' F < <-' &=' 1B& A@ # ' 1<0&-' KD1 1&=' D1' 0<'A' ? @<K '10' #1' 1+1 0'#@1@ <-A' =& ' D1' >&0 ' < ' 1+1 01A@ D< D' & A<'-1A@ # ' ? D& ' ' &=' D'0' C< @'<>1- ' D< ' D1' 0<'A' < ? 1' #1' <=' >1A' D?@A1-' <-A' a1C @ &' 1-A? 1' =& ' 1+1 ;' -A' D<' -&' ==' B1 ' B&- <'-1A' '-' D1' 0<'A' < ? 1' 0D<@@ A&' &' D1' B&- < ' &=' D1' 0<>1@ ?C&-' <'-' &=' ! & =A ? 1' &=' ! & ' D'@@'-.0' &' D1' , '-.@ 1+1 ' '>1' D<' D1' &=' D<' 0D<@@ #1' < <'- 1A' # ' A?1' L<>'-< '&-' ><A1' # ' <-' ' &=' D1' ?0 'B10' &=' D1' 0<=&1' @<B1@ #1=& 1' KD&>' <-' ' - ' & ' 1B& A' '0G <-A' D<' 1+1 ' & -1 ' KD'BD' D<D' -& ' A0' F < <-' 1- 1 1A' &=' 1B& A@ '-'<@@ D'0' ?' 0' KD1 1'-' &j B100' &=' <C'<0' <-A' L'.1- ' #1'<K< A<#'1@ D1'0<>1' 1 >' '-' KD'BD' D1' L'.1- ' '0' <K< A1A@ & ' #1=& 1@ <-A' ?C&-' D<' #1' < <'- 1A' # ' @'a1' L<>'-< '&-@ =& ' 1+1 ' '>1' D<' D1' 0&' &==1-A1 D' D1' 0D<@@ '-B? ' D1' <'-' <=& 10<'A

@ F D1 1<0' <' D1' < @'<>1- ' D&@A1-'< ' F 10 >' - j 0 1 @ <' D1'] ' &=' <'- ' 'BD<1@@ D1' 'L D' 1< ' &=' D1' 1'.-' &=' &? ' `0<'A@' &+1 1'.-' & A' D1' , '-.@ ! & ' D1' . 1< ' "<>< .10' <-A' &00100@ KD'BD' D<CC1-1A' # ' D1' . 1< ' -?-A< '&-' &=' F < 1 ' &=' D1' 1<' '-' A'+1 0' < 0' &=' D'0' 1<' >@ # ' ? D& ' ' &=' D1'0<>1' < @'<>1-' ' F<0' j A<'-1A'<-A' . <- 1A@ D< ' A? '-.' 1-' 1< 0' D1-' -1L ' 1-0?'-.' 1+1 <@ &-?-'00'&-0' &=' 1K1 0' 0D&?@A' #1' ><A1

\' C&00100'-.' 0' '-' D'0' #1D<'=

" D1'0<>1' +' ! ' <

D<?-B1@@< @1' A?' 8'1-'&@@10' A1' 1B& A1@ H' <A&-H10' @10' C-&? 0' C&00100&? 00' @10' #'1-0' I ' ='BD<?-A'010' 1-0 ' C '01\' C& &-' 1-&'1 ' 1'? @ <0B?-' 10 < ?' ' &?' & 8' A1-<?-B1' =1' ' 1-' @<' B&- D '1' -&-' &#0 <- ;' 1 ' H' B10 ' 10 < ?' ' I ' & A1><?-B1' 0&=' B&>1-B1' <' 1-' ' 0<'=& B1' <' @<'=10 ' A1' 1'- ' 'BD1='CBD1'-' +1'. -<?- G 1 ' H' C @<><8' B'&-' 1-' 0&=' =<' ' 0? ' '10' B&0 10' A1' @1' >11 ' &0 ' <C0' B10 ' & A1'-<?-B1@ <@ 1- 1- ' H' @10' A' \' BD<?- \' <@'1-0' CC? &-' <+&' ' BC-'0<?-B1' A1' >10 <1' @& A1-<?-B1

1>' B&>1' 1-' ?-' 10 < ?' ' A1, >' -1@ =1 ' <-' A?' 1@.-1' - 1' =0' @1' & ' H& 10 ' LW ' ='''0 ' B&- 1-?\@ B&>1- ' C 'B1&' H' A'C0' @'1.10' @1' & ' <+= ' ' `01\ P' D1? 10' &?-' 10 1' ?@@<.10' +1L1\' I ' . ?-A1>1-' A' 01'01\' 1-' A' L' 0? 10@ 0'#-' A1+W-' @1' & ' >10>1' 1-' 0&-' #<-a' B&>1' 1-' 1' B&1' #<-a@ 1-' @10' 1B& A10' A10' ?1?L' 0? 10'@10' 1- 10' & '- ' 1 1'='A \' H' @1' C@1'- 'Z0' 81 ' >10>1' @1' 0? 10' &C ?@1 ?-' 01' '-' CC'= @ C0&-< 0?<@ @&?' > >1' @10' C@1'- '=0' 1-' >10>1' @10' 0? 1\' -' C< 1 ?-' <0' '1@L' 0? 10@ -1' B&-?0<?-B1' <+&'1-' A1' B1@@@ 1-.0?-A' >'0BD'1=' A10' A' \' @'1.10' 0'' 18@ - 1A'1' -1' M &' ' C +1?' 1-' B1@' C< '1G 1' ' @1' & ' +&'@@<-' 1-' B1&' BA0' C +&'1 ' A1' 1>1A'1' & A1'. -<' ?' <?^&8@ ' 1' A?' C< @1>1-' 1-?\' >10>1' <-@ H' -?@@ D'@'01 ' L'.1- 1 '-1' <? 1' &=='B1 ' A1C?'0' '10>1' @1' 1>C0' =1 &' ' '1@ 1- 1' 1-' <0 ?-' 0? 1@ 0@-&-' H' @1' C ' 1-' >10>1' @1' 0? 1@ <+J- 'H' <0B?-' '1@ 1- 1' M &' '='A @ <CC< <.1' 1-' `@1'/P' CC 1' C0&-1' A1+J- ' <0B?-' A10' ?0 'B10' A1' @'1?' @&?' @1' C@11' ='''0 ' &?' M &' ' C1-A<- @ I ' '@ &-H0' M &' ' ? 1'0? ' H-' @' 1' H' @' ='''0 ' >10>1' @<' C0&-1' 1-' H1' -&?-' @1' A' ' 0? 1@ &?' H' <? 1' B 1<#@1' C0&-1' A1'0&-' B&?-0<='=1 &' ' '1@ 0?1 >1-' C ' @? G I ' H1' @1' A' ' & A1-<?-B1' A? 1 &' ' <-H1' <@ C0BD1'-' C@1>1D ' <C0' B1&G 1' A' ' T' @1' & ' B&-0'A18@ <-' &? 1' B1&' 01>#@<#@1' A<><.1\' @1' H?1@ <+'1-' 0'#-' <' @? ' B&>1' <' 01\' C&? 1' @'1.10' I ' 0?# 1 \' = ' B1&' H' 1-' @10' 1B& A10' A10' A' 0' I ' C@?0&? 0' ? @<.< '10' @1- 1' 10 ' H' @10' C< '10' <CC< 1-' ?' @&?' < & -1 0@ @&?' @1 ' < =&? -1 0' -&?-' .< <?-' A1' 1B& A1@ < B<?01' A1' H?1@ @10' A' \' ? @<.< '1\' 0&?-' 1 0<#@1' I ' C/ @1' . 1'-A 1' C< '1' 1C01\G <A' & A1' . -1' C' <-I & ' 1' A'B10' C< @1>1-' H' @1' A' ' 10 < ?' ' &' ' <==1 >1' 1-?\' I ' .< A1' <A? 1' <' &? \' &? 1;' 1' H' -?@@ ==' B1 ' B&- 1-?\' 1-' @1' A' ' 10 < ?' '=1B1' @1' B&-= '1' A'B1 '@ 0? ' C1'-1' A1' =& =1 1' L@' 0' <' & @ B@?-' =&' \' H' '@ 1 ' A1' B1&' < 1'-' C' A?1' 1L<>'-<B'&-' =11 ' C' <0B?-' A10' ?0 'B10' A1' >10>1' @1' C@<B1' A1+ -' H' <0B?-' 1- 1' &?' 1B& A1' 10 G 1 ' H' BD?-' < & -1 ' H1' -<A' 0&-' .< <?-' 1- 1' '1' 1B& A1@ 1-' &? \' 010' 0? \' 1-' @10' H?1?L' C0' A1' <C'<0' I ' L'.1- ' 10 ' <.< A<#@1@ >10>1' @1' >1' 1-' @1' H?1@ @1L'.1- ' 10 ' <.< A1' &?' A1+/ ' @ I ' 0? ' B1&' < 1'-' C' 01>#@<#@1' 1L<>'-<B'&-@ C? ' BD?-' =&' \' H' '@ '00'-' &==1-A1' 1-B ? .1' '<' C1 -1' <+0- A'

1>' B&>1' <@ C< @1>1-' 1-?\' <' F 10 >' <' @<' H?'-08@ \'0>1' A1' 1'-' 'BD1=' <-' A?' 1.-1' - 1' _ ' @1' & ' A0 1@ C' @10' ./?-A10' A<><.10' I ' CA10' H?1?L' <+'1-8@ A 1-" C' @10' .0?-A10' B 1 1-0' A1@ K1' A?' '1 1' 1-' A@C01\' C< '10' A1' B10 ' &'<@>1@ C' <?= & ' 1' A1' >10>1' @1' C@1>1-' =?'0 ' & A1'.-1' I ' .='' - 1@ H' C' A 0' <-0' A&-H1 ' CBD1'-' 1-0?<- \' 01 <@L' B&>'00'&-0' A10' 1K1 0' M &'1-' ' =&' \

\' B1\' ! 'V' I B 0*0<' ' U' ; '4C ' '%

<0 A'C01\'C0&-10 C'@1 D<?-B1@@1 ' " 1- .@1R 1'C? '@1' 1>C0 10 1<- ' <' -&>1 0 1-' &? \' @10 C< '1\' A?' A' ' &'<@>1' H' >10A1 'M &' 9 0&@&-B@<' =&? >1' H1-0?' ' 1- > 10 > @10 < ? G I '& 1' < A1' 1-' A' 01\'C< A10 A1@ A' ' &'<@>1'C' @10 .W?-A10 B 1 1-0 A1@ K1' A?' '1 ' C@?0&? 0 +'@@10 I ' R 10 1-' .W?-A1' H?<-A 1' 0&?- ' 0? # >A10 I ' A'0 &'10 <R0.W?-A1' <-'1-A0>1- ' A?' A' ' &'<@>1 I ' C@?0&? 0 . 1'-A10 A<><.10 0&- ' '01>#@1>1- ' <+1-' 0 0 1>1A'1' -1' 0&' ' D<0 1>1- ' C? +1?' 1-' B1'@ C< A1G @1' & ' +&'@@<- ' C +&'1 ' A1' 1>1A'1' 1-' B10 ' C< A1' <A' & A1'. -1' I ' 10 <#@'1' C' <? & ' 1' A'B10 ' C f1- ' C< @1>1- 9 H' C' A 0' <-0 CBD1'-0 1-0?<- \' <C0' B10 ' C01- ' C< @1>1- ' 01+0<@L' B&>'00'&-0 A10 1K1 0 0&'1- ' =<' \' <0 T , 0 C0&-10 C' @1' D<?-B1@@1 ' " 1- .@1R 1' C ' @1' 1>C0 10 1<- ' <-&>1 0 1-' &?\' @10 C< A10 A?' A' ' &'<@>1' H' -U0 '1 ' M <9 0&@&-B' @<' =&? >1' I ' @1==1Q A?- 1' &>'00'&-' B&- 1-?\' 1-' @1' A' ' 10 < ?' ' >10>1' <-'0'0>1 I ' &? 1' B1&' <A' & A1'. -1' 0 10 <#@'1' C' >10>1' @<?==& ' 1' H' &H \' A1# ' &>'00'&50 1'1- ' C&'1 ' C ' =<' 1' & A1'.#1 ' B 1L1B? 10 10 < ? 10 & A1 -<?-B1 I ' <?R0 `<=='<' 0 P' &@&-B' @1==1= ' I ' C? C& 1' A1 A' \' `' &<<'00A& 0 0 P

1>' B&>1' C' @10 0 < ? m =< \' 1-' 1>C0 A?' -&#@10 C.1-' & 0 A?' & ' & A<. -1' 0&' 9 H' 1-' B= ?-' &?- 1' " 1- .@1R 1' 0&'1- <00'. -1\' ?0AB10 A1' @<' C@?'0 +<'@@<?- ' A?' >10>10 @10 &?- 110 C ' .< A1 ' @<' C1<0 I ' <? 10 BD&010 <==<' 1 B&>1' 1-' >10>10 @10 < ? \' C@1'-1>1- ' 10 ' B&- 1-?\G @10 'H?1?L' 10 < ?\' -'1- ' &#0 <- \' 1-' C@?0&? 0 &?- 110 " 1- .@1R 1' 1' <=A1' ?- ' 10 1' A1C? 1\' I ' <00'. -1\' C@?'0 . ?HA1' -& ># 1' H' -1' 0&@1 ' <+0- ' 01m ' 1? 10 A&?- ' <0B?-0 &? ' A ' C1A ' <+&' ' C' H?1?L' @10 .<0 \' -1' +&'@@1- ' 10 1' .&, 1 ' -1' A1>10-1 9 I ' <0B?-0 C ' &? ' -1B100' 1' =&?- ' .0U-A1' 1L & A&-' I ' &CC0A&-' 0? ' @1' C&1C1 9 A&?- ' .3- A1i' ' -B&-+1-@1- \' 0&?- ' 01-'8 #@<#@10 A1' 0?'? A'1 ' A1' &' 1-' <? 1' 0" 1>1A'1' 1-' C' @1' &" -1' 0&' ' C? +1?L;' 1' &" +&'@@<- ' 1-B&- 1' A1# ' '-B&-+1-@1- \' C? +&'1 ' A1' 1>1A'1 9 & A1'. -1' I ' 10 <#@'1' C' @<?='& ' 1' A10? A'' H' -?@@ ?0 'B1' A?' 1<0' A1'-0 @1' &'<@>1' " 1- .@1R 1' 1-' <?@ ' &?- 1' 0&' ' <00'. -1' &?' A1C? 1 9 0'@ -1' ' R 1\' I ' 1-1 &1- \' < @<' +<@?1' A1']]'=' ' C' < - G 1 ' <' A0B?<' 0K ' AA.<1' 1-' <C0' ?0AB1' A?' 1<0 1-' <0B?-' &?- 11' ' -<A' R 1\' I ' 1-1>1- \' <@<' +<@?1' 0?'0A' 9 H' ' A1' B1&' -&A='1' '1' D<?-B1@@1 ' " B-8' .@1R 1' C ' @1' 1>C0 10 1<- 9 @1' H?1@ >1 1' ?-' <?@ =1' 0?=8' ='0<?- ' 1-' 0&-' @'1?L9 1 ' 0'@ -1' =1B1' @1' A' ' -& '=' B<B'&-' B&>1' A1+W- 9 A1'-0 ?-' >& 0 <C0' B1& H' '@ <A' -& 'B1' A?' A1@ B&>'00'&-9 &?' 0'@ 01 1@ ?' =<B1' <0B?-' .< <?- ' &?' CB1C ' C' =& B1' A?' A1@ B&>'00'&-9 H' ** 1-B&? .1' @<' C1 -1' A1']]', ' I ' @?1- > <-0 0&' ' &?0 1' A1@ B&>'0<&-' B&>1' A1 -@G 1' '@1' & '@?C' >&a1'A?' A' ' C1 -1' I ' B1@? ' H' +&1@ 0?1 'C? '@1' & ' <? 1' >&a1G I ' < ' B1@? ' H' 100 ' +1?@ ' C? 0?1 ' C? ' @1' & ' I ' C? ' @? ' >10>10' <BB'&-<' A1><-A1 ' >10>1' @<' C1 -1' ?' # '1=' A?' A< 1' <@ B&1' @1 ' ? +1?' &? \' =&' \' H' B10 ' & A1-<?-B1' -1' 01' 1L 1-A1' <0' ' 110 '@10 &?' ? .D0 H?1?L' 0&?- ' &?- 110 '-B& 8' C& < 10 A1' 1?L' >10>10 9 -1' <0' ' 110 '@@10 &?' ? .D0 9 H' &?- ' ?0AB1' A1' 1<0' A10 .1- \' A1> <- \' 1-' 'B1A' C' &>'00'&-' &?' .0?- 1' A?' & ' &?' A1' 01\' C.1-' &? 0

" C&22
]#.1 1@22&.-2 6' I B

&' A'+1 0 <0&-0' # ' D1' D<-B1@@& ' ')' =& ' D1' ' >1' #1' -.' & #1' -<>1A' '-' <@@ D1' < 0' &=' D1' 0<'A' 1<' >9 KD1 1' 11A' 0D&?@A' #1 9 <= 1 ' D1' ! & >' D< ' =&@@&K1 D' '-' D1' 0<>1' < ? 1' G -A' -&K' &=' @< 1' '-' A'+1 0 < 0' &=' D1' 0<'A' 1<@>' # ' D1' . 1<' '0'-.' &=' F < 1 ' &=' D1' 1<9 ><- ' &K-0' <-A' <-A0' '-' . 1<' ^?<- ' ' #1' A &K-1A' <-A'A10 & 1A9 &' D1' . 1<' '-A <-B1' &=' D1' 0<'A' 1<@>9 <-A' ><- ' . 1<' " <> <. 10' #1' @'a1@ ' &' D<CC1-' '=' 1>1A ' #1' -& ' D<0 '@ ' C &+'A1A' '-' D'0 1D<@=;' D1' , '-.9 +' -.' &' C &+'A1' `' =& ' D1' 0<>19 h' 4' #< D' & A<'-1A' <-A' 0 <#@'0D1A' # ' ? D& ' ' &=' D'0 h) < @'<>1- 9 D< ' # ' 1-' 1< 0' -1L ' 1-0?' -.' <= 1 ' D'0' C 101- ' < @'<>1- 9 01+1 <@ &>>'00'&-0' &=' 1K1 0' 0D<@@ #1' ><A1' &' A'+1 0 1 0&-0 9 # ' D1' D<-B1@@& '&=' -.@<-A' =& ' D1' '>1' #1' -.' &' #1' -<>1A' '-' <@@ D1' < 0' &=' D1' 0<'A' 1<@>9 KD1 1' 11A' 0D<@@ #1 9 <= 1 ' D1' ! & >' <-A' ==1= ' &=' <' &>>'0j 0'&-' B&- <' -1A' '-' D1' 0<'A' < ? 1' D1' 0<>1' 'L D' 1< G -A' >& 1&+1 ' D1' D< D' & A<' -1A' <-A' 0 <#@'0D1A' # ' D1' 0<>1' ? D& ' 9 D< ' <@@ 0?BD' &>>'00'&-1 0' D<+1' &K1 ' &' ><a1 9 & A<'-9 <-A' 1L1B? 1' < ? 10' <-A' A'j -<-B10' <-A' & D1 ' ` ==<' 0') ' <= 1 ' D1 =' =1=' <-A' ? C& ' &=' D1' 0<'A' &>>'00'&-0

5 ' KD1 1<0' # ' < ? 10' ><A1' a ' D1' ' >1' &=' 5 ' , '-./0' -&#@1' &.1-' & 0 9 ' F ' & A<>1 =' D<' ' -' 1+1 ' &?- '&=' -.@<-A' ?0 'B10' 5 6 7' #1' <00'. -1A' &=' D1' >&0 'K& D '&=' D1' 0<>1 ?-A10 9 &' a11C' D1' 1<B1 9 <-A' &' A&' & D1 ' D'-.0 9 <0' '-' D1' <>1' < ? 10' =?@@ ' '0 B&- <' -1A G KD'BD' < ? 10' -& K' D0 <-A'-.9 -&K' &=' @< 1' '-' ><- ' &?- '10' &=' -.@<-A 9 `' D1' . 1< 10 '0 ' ?>#1 ' D<+1' #11-' A1C? 1A' <-A' <00'. -1A 9 `KD'BD' #1=& 1' D'0'K1 1') T 9' &' #1 9 KD1 1&=' 0C>1' #1' &=' 0><@@ ` 1D<j @(6'#L ' # ' KD&>' D1' 1&C@1' K'@@ -& ' #1' .&+1 -1A' -& ' ?@1A 9 <-A' 0&>1' =& ' D1' ' 1B100' ' A&' . 1<' L & '&-' <AA' 100'&-' ?C&-' D1' 1&C@1 9 KD1 1&=' . 1<' -B&-8 +<A1-B10' #1' @'a1@ ' &' '01' A>@ ' '=' D ' , '-.' D1 1&=' A&' -& ' C &+'A1' 1>1A ;' D1' , '-.' K'@@'-.' <.<'-0 ' 0?BD' -B&-+1-'1-B'10' &' C &+'A1' 1>1A 0' D< D' & A<'-1A' <-A' 10 <#@'0D1A 9 # ' ? D& ' ' <=& 10<'A 9 D< ' -&' ?0 'B1' &=' 1<B1' K' D'-' D1' 1<@>' &=' -.@<-A 9 '-' <- ' &?- 9 0D<@@ #1' <00'. -1A' & 'A1C? 1A 9 '=' D1' D<+1' -& ' <-A0' `& 0' ' 1-1>1- 0' &' D1' <@?1' &=' LL'@' ' # ' 1< G <-A' '=' <- '#1' & A<'-1A' D1 1<= 1 ' &' #1' ?0AB1' &=' 1<B1' '-' <- ' &?- 9 K= 'BD' D< D' -& ' <-A0' `& ') ' 1-1>1- 0' &' D1' <@?1' <=& <'A 9 D< ' ='1' D1 1&=' 0D<@@ `.' +1' -DK@1A.1' &' @4' D1' D<-B1@@& ' &=' -.@<-A' =& ' D1' ' >1' #1 <'.9 KD'BD' D< ' C?' <-& D1 ' 0?= 1-' '-' D'0 @<B1G <-A' '=' D1' +1' -& ' D1' 0<'A' `, -&K@1A.1 9 3' ' #1=& 1 9 K' D'-' <' &- D <= 1 ' D< ' D1' D< D' & 'B1' &=' ?BD' &>>'00'&-9 & ' '=' D1' ' 9 & ' ><a1' <- ' F < <-' & ' 1 C' # ' ! & B1' &=' 0?BD' &>>'00'&-9 D1' 0D<@@ '-B? ' D1' 1-<@ ' &=' LL' **' <-A' -1+1 D1@100' #1' C? ' &? ' &=' D1' &>>'0<&-' <0' #1=& 1' <-A' D1' , '-.' 0D<@@ D<+1' &-1' <@=' &=' D1' 0<'A' 1-<@ 9 <-A' D1' D< ' K'@@ 0?1' =& ' D1' , '-.9 D1' & D1 ' <@=G <-A' D1' D< ' K'@@)' 0?1' =& ' D1 , '-.9 <-A' =& 'D' >01@=9 0D<@@ D<+1' <-' B '&-' &' A1><-A' D1' 0<>1' 1-<@ '# ' F ' ' &=' " 1# ' < ' D1' &>>&-' <K ' &+'A1A' <@+ ,' 9 D< ' D'0 j A'-<-B1' 0D<@@ -& ' 1L 1-A' &' '10 9 &K-0 9 & ' & &?.D0 9 =5(*5' #1' &?- '10' >B& C& < 1' &=' D1>01@+10G -& ' &' 'A10 9 &K-0 9 & ' & &?.D0' C5(*5' D<+1' ?0 'B10' &=' 1<B1' &=' 1 0&-0' AK1@@'-.' '-' D1' 0<>1' # ' &>>'00'&-' & ' `F< <- h' ' &=' D1' , '-.9 ' &=' D'0 &.1-' & 0;

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&+'A1A' <@0&ℊ D< ' ' $ ' #1' -& ' 0?='B'1- ' 1 0&-0' D<+'-.' <-A0' <-A' 1-1>1- 0' &' D1' <@?1' <=& 10<'Aℊ @1< -1A' '-' D1' <K ℊ <-A' &=' .&&A' E&+1 -<-B1ℊ K' D'-' <- '0?BD' &?- ℊ D<' D1' D<-B1@@& ' &=' -.@<-A' =& ' D1' '>1' #1'-.' 0D<@@ D<+1' &K1 ' &' C? ' & D1 ' A'0B 11 ' 1 0&-0' @1< -1A' '-' D1' <K ℊ '-' 0?BD' &>>'00'&-0ℊ D&?.D' D1 ' D<+1' D& ' <-A0' `' & ' 'P' 1-1>1- 0' &' D1' <@?1' <=& 10<'Aℊ # ' D'0' "'0B 1 '&-

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ℊ F D1 1<0' '-' D1' <@'<>1-' D& A>' <' F 10 0' >'-0 1 ℊ D1' 1B&-A' "< ' &=' < ℊ D1' '- D' 1< ' &=' D1' <. -' &=' , '-.' 1- ' D1' , = Dℊ !< D1 ' &' D1' , '-.' D<' -&K' '0ℊ <>&-.0 ' & D1 ' D'-.0' 'K<0' & A<'-1A' <-A' 10 <#@'0D1A' !& ' D<' ><- ' 1&C@1' # ' <@'B1ℊ -+ ℊ <-A' 1+1-.1ℊ B<?01' &= 1-' D1' , '-./0' @'1.1' 1&C@1' & #1' <CC1<@1A' & ' '-A' 1A' '-' A'+1 0' &?- '10ℊ &=' 1<0&-0' & ' &=' !1@&-'10ℊ 0?CC&0<'.' # ' D1' 0<'A' CC1<@0' & ' -ℊ A'^>1- 0ℊ D<' D1' 0<'A' 1<0&-0' & ' !1@&-'10' K1 1' A&-1' '-' < B1 <'-' @<B1' '-' 0?BD' &?- 'KD1 1' D1' -A'(<-1- ' '0' ><A1ℊ & '0?BD' < @<B1' <0' '0' & '0D<@@ #1' A1B@< 1A'# ' D1' 0<'A' CC1<@0ℊ KD1 1' -&' ?BD' C@<B1' '0' '-' D1' 0<>1' &?- ℊ D<' D1' &B100'&=' D1' 0<>1' 0D<@@ #1' +&'Aℊ <-A' D&@A1-' =& ' -&-1C <-A' D<' D1' -A'= & 0ℊ &B? < & 0ℊ <-A' &-0C' < & 0ℊ 0D<@@ #1' < 0&' C?-'0D1A' # ' >C '0&-j >1-' !'-1' <-A' <-0&>' =& ' D1' , '-./0' A+<- <.1ℊ # ' D1' "'0B 1 '&-' &=' D1' ?0 'B10C <-A' D<' D1' 0<'A' CC1 110' & ' -A'=@110' >< ' D<+1' F ' 0' &=' &-0C' <B ' <.<'-0' D1' ' -A'= & 0ℊ &B? < & 0ℊ <-A' &-0C' < & 0ℊ <-A' 0D<@@ 1B&+1 ' D1' ' <><.10'C <-A' Q D'0' A'-<-B1' 0D<@@) '0 <-A' '-'D'0' ! & B1' ?- '@ D1' -1L ' < @'<>1- ' &' #1' D&@A1-' <= 1 ' D1' B& >'-.'<.<'-'&=' D1' 0<'A' @< 1' , '-.' '- &' -.@<-Aℊ = &>'#1 &-A' D1' 1<;' F D'BD' < ? 1' # ' D1' "1B1<01' &=' D1' 0<'A' @< 1' , '-.' # ' C'-'&-' &=' 0&>1' -& ' 1LC' 1Aℊ <-A' # ' D1' C'-'&-' &=' 0&>1' -& ' 1LC' 1A@ D1' 0<>1' &? ' & A' D1' , '-.' D<' -&K' '0ℊ B&-0'A1 '-.' D<' D1' 0<'A' A'-<-B1' K<0' .&&A' <-A' C &=' <#@1' =& ' D1' F 1<@' &=' D'>' <-A' D'0' 1.1' 1&C@1ℊ #< D' A1B@< 1A' <-A' & A<'-1A' # ' ? D& ' ' &=' D'0' C 101- ' < @'<>1- ℊ D<' D1' 0<'A' A'-<-B1' ><A1' '-' D1' 0<'A' '- D' 1< ℊ <-A' 0&' # ' D1' "1< D' &=' D'0' 0<'A' !< D1 ℊ <0' 0&>1' D'-aℊ 1LC' 1Aℊ <-A' -& ' & D1 K'01' 1C1<@1Aℊ 0D<@@ #1' <-A' <#'A1' <-' 1==1= ?<@@ ' &' 1-A? 1

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ℊ F D1 1<0' <' D1' <@'<>1-' D&@A1-' <' F 10 ℊ >'-0 1 ℊ D1' 1B&-A' "<' &=' < ℊ D1' '- D' 1<' &=' D1' 1'.-'&=' , '-.' 1- ' D1' !'= Dℊ !< D1 ' &' D1', '-.' D<' -&K' '0ℊ <>&-.' & D1 ' D'-.0' 'K<0' & A<'-1A' <-A' 0 <#@'0D1A' D<' -&-1'C=' D1', '-./0' @'1.1' 1&C@1ℊ <.<'-0' KD&>'<- ' L'.1-' `0D<@@' '#1' F K< A1Aℊ & '&? @<K1A' < ' D1', '-./0' ?' ' '-' '>1' &' B&>1ℊ & ' <' D1' ?' ' &=' D1' < ''-' D1' &?- '&=' <-B<0 1 ℊ 0D&?@A' =& =1' ' <- ' &=' D'0' E&&A0' & ' D< 1@0ℊ <-A0' & ' 1-1>1- 0' '-' & D1 ' &?- '10C 1LB1C ' D1' E&&A0' <-A' D< 1@0ℊ <-A0' & ' 1-1>1- 0ℊ KD'BD' D1' 0<'A' ? @< 0' D<+1' '-' D1' 0<>1' &?- '&=' <-B<0 1 C &+'A1A' <@K< 0ℊ D<' D1' < ? 1' ><A1' '-' D1' !' 0' 1< ' &=' , '-.' 1- ' D1' !&? Dℊ !< D1 ' &' D1' 0<>1' , '-.' 1- ' D1' !'= Dℊ <.<'-0' D1' 1&C@1' &=' D1' &?- '&=' D10 1 ℊ KD'BD' A&' &' A'+1 0' &=' D1', '-./0' @'1.1' 1&C@1' '-' A'+1 0' &?- '10' &=' -.@<-Aℊ A'+1 0' <-0@<?.D 1 0ℊ ? A1 0ℊ &##1 '10ℊ < 1 '10ℊ 10C<0010ℊ <-A' & D1 ' '& 0' <-A' ==1-B10ℊ `0D<@@/' '0 <-A' '-' D'0' !& B1ℊ -& K' D0 <-A' -.' ` D'0' 0' A'-<-B1C <-A' D<' D1' 0<'A' A'-<-B1' `0D<@@/' ' 0 <-A' '-' D' ' !& B1' ='@@ D1' < @'<>1-' =' 0' &' #1' D&@A1-ℊ <= 1' D1' 1 ? -' &=' D1' 0<'A' @< 1' , '-.' 1- ' D1' !'= Dℊ '- &' -.@<-A' = &>'#1 &-A' D1' 1<;' F D'BD' < ? 1' # ' D1' "1B1<01' &=' D1' 0<'A' @< 1' , '-.' 1- ' D1' !'= Dℊ # ' C'-'&-' &='0&>1' '0' 1LC' 1Aℊ <-A' # ' D1' C'-'&-' &=' 0&>1' -&' 1LC' 1A;

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? +1?' &? \' =&' \' H' 0'@0' -1' 0&'1-' .1- \' 0 ='0<?- \' 1'<- \' R 10' I' 1- \' <' @<')' 0?'0A' ' <C '0' 1-'@<' @1 ' I' A1' #&-' .&, -<-11' A1'-0' .0B?-' '1@ &?- 1ℊ H' @1' D<?-8' B1@@1=' "1-.@1R 1' C? '@1' 1>C0' 10 1<-' 1' ' C&<' ' A1' >1 1' <?R0' A'0B 1 \' <C '0' 1-' @<' @1 ' 1-' '1@L' B&>'00'& 0ℊ >10H1' '@0' -1' <1- ' 110' I 1D \' <'@<' +<@?1'0?'0A' ' C' 0<' A'0&81A&- 1>' B&>1' <@ C< @B>1-' 1-?\' <' F 10 ='" @1' 0BA1' &? ' A1' < ' 0-' A?' 1.-1' A?' & ' 1- ' H?'- ' C'1 ' <-' & ' H& 1 ' 'LJ f' 1-R' <?R0' &+A1'.-1' ='''0 ' I ' 10 <#@'1ℊ C B1&' H' C@?0&? 0' .1- \ ' C' ><@'B1' 1->' 1' I ' 1-.1<-B1' =<B1-' 0&+1-' =& \' @10' =&'<@L' @'1.10' A?' & ' 10 1' <CC1@@1\' &?' 1-A' 11 ' 1-' A'C 0' &?>110ℊ A10' 110&-0' &? A10' =1@&-'10ℊ 0?CC&0<- \' C' @10' A' \' <CC1@@10' &-' 1-A' 18' >1- \' H' @10' A' \' 1 &-0' I ' =1@&-'10' =? 1-' =1' \' 1-'?-' I 1'-' @'1?' 1-' '1@ &?- 11' &?' @1-A' 1>1-' 10' =<' ' &?' '1@ @'1?' B& >1' 10' &?' <' A1B@< 1' C' @10' A \' <CC1@@10' @&<' -?@@ '1@ @'1?' 10' 1-' >10>1' @1' &?- 11' H' @1' CB1001' A'B1@" 0&'1-' +&'A1\' I ' 1-?\' C/ - ?@@G 1' H' @10' 1-A' &? 0' CB?8' < &? 0' I ' B&-0C' < &? 0' 0&'1-' <?L'-' C?-'\' C' '>C '8' 1&-1>1-' = -'' ' <' 01&-' C/' < <- 1' A?' & ' C' A'0B 18' B'&-' A10' ?0 'B10C 1' H' @10' A' \' <CC1@@1\' &?' 1-A' 110' C? &-' < ' # '1=0' A1' B&-0C' <B'1' 0' @&? ' 1-A' &? 0' CB? < &? 0' I ' B&-0C' < &? 0' I ' 1B& 1' @&? 'A<>.10ℊ 1' H' B10 ' & A1-<?-B1' 10 &'01' 1-' 0<' =& B1' <-H1' <' C D1'-' C< @1>1-' <' 1C'1' C?'0' @<' 1+1-?1'@1' A' ' -<A.<' 0' & ' 1-' -.@1R 1' A1CA1' @<9C @1' H?1ℊ 10 < ? 'C' @1' R0C<001>1-' A?' A' ' -<A.<' 0' & ' C' &CC'-'&-' A10' <0B?-0' 10 ' 1LC' 1ℊ I' C' CC'-'&-' A1' <0B '-0' -'1-' 1LC' 1C' > 0>1' -=1' ?' @1' & ' H& 1 ' B&-0'A1 <-' H' @<' A' ' & A1-0-B1' =?'0 ' ##&-' I' C=' <#@1' C' @1' #'1-' A1' @?' I' 01\' @'1.10ℊ <A' A1B@< 1' I' & A1'.-1' C' <?=@& ' 1' A'B10 ' C201-' C< @1>1-' ℊ H' @<' A' ' & A1-/-B1' =<' ' @1' A' ' <-' 'LW ℊ I ' 1-0 ' C< ' @<' >& ' A1' 0&-' A' ' C'1 ' B&>1' <0B?-0' 1- 1-A1- ' 1LC' 1' I ' -'1- ' <<R>1-' 1C1@@1ℊ 0&=' I' A1>/.1' 1= B?1@@ I' <+<'@@<#'1' 10 < ?' ' I' & A1-W-B1' 1-' @1 ' CC1 ?1@>1-' <A? 1

D1>' B&>1' <@ C< @1>1-' 1-?\' <' F 10 =' " @1' 0BA1' &? ' A1' < ' <-' A?' 1.-1' @1' & ' 1- ' H?< ' C'1 ' <?' & ' H& 10 ' 'Ln ' 1- 1' <?R0' & A1'.-1'=?'0 ' I ' 10 <#@'1ℊ H' -?= ' A10' @'1.10' @1' & ' 0' H?1?L' L'.1-' M <' <.< A1' ' ? @<.10' <@ 0? 1' @1' & ' 1-' 1>C0' <+1-' ℊ &?' <@ 0? 1' A?' C '1' 1-' @1' &?- 11' A1' <-B<0 1ℊ =& =<B1' <0B?-0' A1' 01\' #'1-0' &?' BD< 1?L' 10' &?' 1- \' 1-' <?R0' &?- 110ℊ =& 08' C '010' @10' #'1-0' I ' BD< 1?L' R 10' ' 1- \' H?1?L' @10' A' \9? @<.10' &?- ' 1 ' >10>1' @1' &?- 11' A?' <-B<0 1C' ? +1?L' &? \' =&' \' H' @10 < ?@ ' =<' ' <-' C '='1' @1' & ' 1- ' H?< ' C'1 ' <' >10>1' B10 ' & ' 1D ' H?'- ' ℊ 1-B&+ ' 01' @10' .1- \' A1ℊ &?- 11' A1' 10 1' H' =&?- ' <0' A'C0' @'1.10' A?' & ' 1-' A'C0' &?- 110' "1-.@1R 1' A'C0' D&>'B'A'10ℊ >? A 10ℊ &='10ℊ #< 1 '1\' ℊ 0C<001\' 5' <?R0' '& 10' I ' ><@1=<' \' 10 &'01' 1-' 0<' =& B1' -&-' &#0 <-' >10>1' @1' & A1-0-B1C' 1 ' H' @1' A' ' & A1-D'B1' 10 &'01' 1-' 0<' =& B1' <-H1' <@ C< @'<>1-' C ' 1>1-' <' 1-1 ' C?'0' a ' 1+1-?1' @1' A' ' -<A.<' 0' & ' 1- ' H?'- ' 1-' @1R 1' A1' CA1' @<;' @1' H?1@ 10 < ?' ' C' @1' R0C<0018' >1-' A?' A' ' -<A.<' 0' & ' 1- ' H?'- ' C' &CC'- &C' A<0B?-\' 10 ' 1LC' 1' I ' C' &CC'-'&-' A<0B?-\' -'1- ' 1LC' 1C

)' +0!' ! ! ' 5'

<=& 10<'A$ D< ' -&' ><--1 ' &=' 1 0&-$ &=' KD<' &-j A' '&-' D ' D1' #1$ 0D<@@ B< $ & ' A&$ &' #1' B< '1A'<-' F &&@0' & ' F &&@=1@0' `'B''0 & > <#@ '0 ' &? ' &=' D'0' 1<@>$ &' & D1 ' @<B10' D<-' &' D1' <C@1' &=' <@<'0$ K' D&? ' D1' , '-./0' 0C1B'<@ 'B1-B1$?C&-' <'-' &=' ! 1@&- G <-A' '=' <- ' 1 0&-8 = & >' D1-B1=& D' A&' B&- < ' &' D'0' A'j -<-B1$ <-A' D1 1&=' #1' B&-+'=@;' & ' < <'- 1A$ D< ' D1' #1' <A ?A.1A' =& ' < ! 1@&-G <-A' D<' <0' K1@@ &> > '00'&-1 0' /)' <00'. -1A' <0' D1' ?0 'B10' '-' 1+1 ' &?- ' KD1 1' 0?BD' F &&@0' <-A' F &&@=1@0' 0D<@@ #1' 0&' B< '1A' &? $ 0D<@@ D<+1' &K1 '<-A' ? D& ' '# ' D1' 0<>1' A'-<-B1' &' '-H?' 1' &=' D1' 1> '010$ <-A' D1>' &' D1< '<-A' A1 1 >'-1 ' &+'A1A' <@K< 0' D<' D1' &&@0$ KD'BD' C<00' D1' 1'.D R' &=' < $ &Ba$ 0D<@@ #1' -' -&' K'01' B& > C '01A'K' D'-' D'0' A'-<-B1 $! & <0> ?BD' <0' ' '0' >1 ' & '&?0' <-A' `<@> 09/X' &' `'A1C< ' D1' ? D' = & >' D1' " 1B1' 90X' <0' -&K' &=' @< 1' '-' < @'<>1- 'D&@A1-' <' F 10 > '-0 1 $ ` > ?BD' / X' " 1B1' 'K<0' C? ' &? $ D<' . 1< @ ' 1-A<><.1A' ><- ' 1 0&-0$ KD'BD' K<0' B<@@1A' <' `' <?= 9\'P' & D1 K'01' B<@@1A' <' `' &KA1 '/ X' & ' <-' <?-B1 $ KD'BD' . '1+1A' ><- ' =<' D=?@@ 1&C@1G <-A' <0' -&K' ' ' '0' &' #1' B&-0'A1 1A$ D<' . 1<' " 1B1' 0' #1' -&K' ?01A$ KD'BD' A&' 1-A<><.1' D1' C&& ' @& D8 > <a1 0' <-A' D1' 1'@1 0' &=' @& D0' `KD'BD' '-' >1<0? '-.' ?-A?@ ' K' D&? ' 1<0&-<#@1'0P' 1<0? 1$ <0' K1@@ &=' &<A' @& D' <-A' <' $ <0' > ?BD' # ' D1' <-A0' &=' D1' 1 BD<- 0' @'1-0$ <0' " 1-'\1-0$ <0' K1@@ '-' !<' $ < a1 $ ' $ <-A' & &?.D$ <-A' 0C1B'<@@ ' '-' D1' ' &=' &-A&-$ `<0JP' '-' & D1 ' @<B10$ KD1 1' 0?BD' @& D8 > <a1 0' <-A' 1@@1 0' &=' @& D' #1' >&0 ' B& > > &-@ ' ?01A' <-A' '-' '>1' &' B& > 1' `&?.D ' &' # 1 X' 1C<' '-.'=& ' KD1 1' D1 ' K1 1' K&-' &' >1<0? 1' D1' @& D' # ' D1' < A' <-A' ` D1' =?@@ -BD93P' -&K' D1 ' K'@@ >1<0? 1' # ' D1 < A' <-A' ` D1' =?@@ <-A93P' KD'BD' . &K1 D' &' D1' -B 1<01' &=' D1' ? 1 ' K&' < A0' &=' 1+1 ' @& D' &=' LL''' ' < A0$ KD'BD' -B 1<01' ? -1 D' &' D1' +<'$ 8&=' -&' <-$ &=' KD<' " 1. 11' 0&1+1 ' D1' #1$ #? ' &-@ ' &' D1' '3')' ? 1 $ =& ' KD1-' <' & A' 0D<@@ #? ' D'0' '+1 $ D1' 0D<@@ ='-A' D1' 0<>1' '-' 1<0? 1' & ' '-' 'B1$ <-A' 0&' D1 ' #1' &CC 1001A' K' D' `' <' . 1<' <-A' 0P' ?-j 1<0&-<#@1' >1<0? '-.' &=' D1' ' @& D0G =& ' KD1 1' <- ' 1 BD<- '&=' D'0' <-A$ #? '<' &-A&-$ K'@@ ><a1' <' @& D' '-' >1<0? '-.' LL''' ' < A0$ D1 ' K'@@ ><a1' D1 1&=' LL' ' & ' @100$ 0< '-.' D<' ' ' '0' D1' 1<0? 1' &=' &-A&-$ # ' KD'BD' &CC 100'&-' ><- ' >1-'#1' . '1+&?0@ ' 1-A<><.1A;' < ' &+1 1'.-' & A' D1' , '-.$B&-0'A1 '-.' D1' 1>'010$ A& D' & A<'-' # ' D1' ? D& ' '<=& 10<'A$ '-' 1+1 ' @<B1' '-' D'0' <-A' &' #1' &-1' B1 <'-' 1<0? 1' `KD1 1<0' D1 1' '0' <' < A1-' &=' D1' ?@-<.1' &=' @& D' //P' D<' D1' D<+1' <' '-1' ><A1' &=' '@a' & ' &=' D 1<A$ &=' `' D1' '. D P' 1<0? 1' '-' <--1 ' &=' 0 <'.D ' `A00?19// P' 01<@1A' <' #& D' -A0$ <= 1 ' D1' A+'B1' &=' D1' < &-0' &=' D1' Lj BD1H?1 'G <-A' 1+1 ' `'F < A1-0P' &=' D1' ?@-<.1' 0D<@@ ' C< ' =& ' D'0' '-1$ KD'BD' '-1' 0D<@@ B&- <'-' '-' 1-. D' K1@+1' < A0' <-A' K1@+1' -BD10$ <-A' D1' 0<'A' '-1' `0'. -1A// P' < ' 1+1 ' < A' <-' -BD$ <-A' < ' D1' -A' &=' D1' <@=8 < A' <@=' <-' -BD$ D1' ^?< 1 ' A=' <' < A' < $ ^?< 1 '&='<-' -BD$ &' >1<0? 1<' KD&@1' @& D' & '<' " &\1-' # &<A' & ' 0 <'.D $ >1<0? '-.' =& ' D1' " &\1-' &=' `' @& D' K< 1 1A93P' K1@+1' < A0' <-A' K1@+1' -BD10$ <-A' &=' `A ' @& D' ?-K< 1 1A3P' !&? 11-' < A0' <-A' !&? 11-' -BD10G 0&' >1<0? '-.' D1' 1-. D' '@@ D1' -A' &=' D1' @& D$ <BB& A'-.'<0' ' '0' &=' 1-. D' '-' <--1 '<0' <=& 10<'A$ KD1-' D1'0<'A' `' F < A1-' 0P' &=' D1' ?@-<.1' 0' 1H?' 1A G

/ B?0 ? <<#@1' '6 '\' /' '$
/' <' >10A1A1' 0 C< 1' D1' &'@@D' = &' A10B1' 1
0 &-' # <-BD1' &Q \' BD<= 1
/' C&-A 1' `&' C&?A 1P
h'-' >1 '-.'&=' - - 10&-<#@1'
/' <-A' J' > ?0 1' #1' W' -BD1' ' = ' 6
D<CA=?@@ 3' 0<'A' /0 . 1 1' 'LL ')
J' D1 1' <0' D1', 1C1 1' &=' ?-<.1' &=' @& D1' 0'
1K1' 3' B& 0' J', 1C1 1
; >< a'A'); K1 1' @& D1
7201BB1' @&='1' -&?.D ' K1 1

H' -?@@ C0&-1$ A1' H? 'B&-A'B'&-' H'@ #' $ -1' B< @1' &?' =<B1' B< '1 ' <0B?-0' @<'-\' &?' C1<@L' @<-?\' B?0 ? > <#@10' D& 0' A1' B10 ' &'<@>1' <0' <? 10' @'1?L' H' <@ 10 <C@1' A1' <@1 0$ 0<?-\' 10C1B'<@ @'B1-B1' A1' & $ 0? ' C1 -1' A1' =1@C-'1G 1 ' 0" <0B?-' C0&-1' A10& 1' 1-<+ '=<B1' <' B&- <' 1' A1' B10 ' & A1- -B1' I ' 1-' 0&'@ B&-+' 1' &?' < <'-$ H'@ 0&' ' < ?.1' C '=1@&-G 1 'H'0'#'1-' &> '00'& 0' < 0'. 0$ B&> 1'@10 ?0 'B1\' 1-' B@@?-' &?- 11' &?' '1@0' @<'-0' C <@L' @< ?\' 0&'1-' '00'-' D& 0' < '1\$ '1-' C&K1 ' I '<?A'& ' 1'C' >10>1'@& A1-/-B1' A1-H?1 1 ' A1' @10' C > '0010' I ' 1?L' &'1 ' I ' R > '-1 ' ? +1?' &? \' =&' \' H' @10' @<'-10' H' C<001-' @10' 1' 10' A1' < &a' -1' 0&'1-' '<B?-1>1-' B& > C '01\' A1'-\" B10 ' & A1 / - 1
1>' 1& > 1' '@ 01' ' & '1' I ' 1'> '.-'1' <' A1C< '1 ' @<' , ' 11' A1' @<' A'0B1' $ 0" B& > 1' < < A1' 1-' ?-1' C<=@1 > 1-' 1-?\' <' F 10 =' ' @<' =?'0 ' &?0 1' ?-' < @-1' 'R0./ -A1 > 1-' 1-A<><.1' <' CD@0&? 0' D& > 10$ @1' H?1@ =?'0 ' <CC1@@1' ?-' 0D<= 1' <?R > 1-' '<CC1@@1' ?-' C&-A 1' 1?R > 1-' '<CC1@@1' ?-' D<?-B1 $ @1' H?1@ . 1+<' C@?0&? 0' =#'<@L' D# > 10G 1 ' B& > 1' & 1' 0&' '<' B&-0'A1 1 'H1' . ?-A10' A I B1' 10' 0&'1-' & 1' ?01\$ @10' H?1?]' 1-A<><.1-' @10' C& 1\' '0&? 0' A10' A <C0' I ' @10' +1-A&? 0' A10' A <C0$ 1-' > 10? <-' A1' -'1-' <'0&-<#@1' > 10? 1' 0'#-' A1@ @<1' A <C' I ' 0 1' 1$ <?-' C' @10' >< -0' A10' < BD<?-\' <@'1-0' B& > 1' A1'-\1'-0' 0'#'1-'1-'=1 1$ >< a1 $ ' 11' I ' ? .D$ 1' 10C1B'<@ > 1-' 1-' @<' 11' A1' &?-A 10' I ' 10' <? 10' @'1?L' @&?'=<'0&? 0' A1@ A <C' `C@?'0' /P' I ' +1-A&? 0' A1@ A <C' C@?'0' B& > ?-1 > 1-' 0&'1-' ?01\' I ' B&+'1-' 1-' 1 > C0' <+1<' ' 10 1' 1C<' <-\G H< 1' @&?' ''0' 0&@&'1-' > 10? 1' @1' A <C' C' @<' <@-1\ I ' @1' C&?0' & 1' ''0' +&'@@1-' > 10? 1' C' @<@-1' I ' @<' C@1 -1' >< -$ @1' H 1@ <BB 10B1' <@ 1-B 1B1' A1@ <BD< &?' A1?L' <@-10' A?' A'--' A <C' A1' LL''' ' <@-10$ @<' H 1@ 1- 1B=1' -1' <' -?@@ D& > 1' A1' H?1@ A1. 1' H'@ 0&' '<@' <+<'@1$ 0'-&-' <-' 0&@1 > 1-' ' <' @1' A' ' <BD< &? $ H<' HW?-' ?-1' <BD< 1 <' 0&-' ', 1' ** @1' & 0' 1-' @<' > 10? # &?' 1-' @<' C 'B1$ 1' '00'-' 0&-' **0 &CC#01\' &+1' .0?-A1' ' <'0&-<#@1' > 10? <.1' A1' @& ? ' A <C0$ H< '@&?' <0B?-' < BD<?-' A'B10 'R 1' =& 0C '0' <' &?-A 10' +&1 ' =<' 1' ?-' A 'C$ 1-' > 10? <-' ']L''' ' <@-10' ''0' + '@@1-' =<' 1' 1-' LL' ' &?' > 1'-0$ A'0<-$ H'@ 10' @<' > 10? 1' A1' &?-A 10$ C' @<' H?1@ &CC00 '&-' C@?0&? 0' D& > 10' . 1+& 08' > 1-' 0&?-' 1-A<><.10';' =1' A' ' _' @1' & ' B&-0'A1 <-' @10' C2 > '0010' & A1'. -<' C' @<?^& ' 1' A10?'0A' ' 1-' BD10B?-' @'1?' A1' B10 ' 1' A10 1' ?-' 1'-' >10? 1' @<' &?' 10' E< A1 -' A1@ <@<<.1' A1' A <C' H'@ 1' ' ?-1' B& A1' =<' ' A1' 0& ' &?' A1' ='@1' A1@ A &' ' >10? 1' 1-' ><51' A1@ A 1'

001K1$ 1-01<@1' <0' <> #'A1?L' =' -10' 0&@&-B' @<A+ 0' A1' @10' < &-0' A1@ 0BD1H1 G 1 ' BD?-' E< A1 -' A1' @<@-<.1' C<'1' C ' 0<' B& A1$ @<' H?1@ B& A1' 0&' ' B&- 1@. -<-' 1-' @&-.1? 1' L' ' <@-10' I ' L' ' C&?0$ I ' @<' A' ' B& A1' 0' . -1' <' BD?-' <@-1' ?-1' C&?0$ 1' <' @<' =' -1' A1' @<' A' > '' <@-1' -1' A' > '' C&?0$ @1' HW R' A1' ?-1' <@-1' ?-1' H0 ' A?-1' C&? $ C ' > 18' 0? 1 ' ?-1' 1-' 1 ' A <C' &?' ?-1' A&01'-' @<1 ' &?' 0 1' 1$ > 10? <-' C ' @<' A?01'-' A1' A <C' 1K1' L' ' <@-10' I ' L' ' C&?0$ A1' A <C' 01a$ -'1-' 1K1' L''' ' <@-10' I ' L''' ' C&?0G '00'-' > 10? <-' @<' @&-.1? 1' 10H10' <@ =' -1' A1' @<' A <C' 0&@&-B ' 11&' H'@ 10' A1' @&-.1? 1' 1-' @<' - < 1' B& > 1' 10' A10?'0' 1D1 B1' H? =' @1' AD' E< A1 -' A1' @1' <@-<.1' 10' 1H? \' G

U ! ' V ' C#' . 1 &

%#! &.-' .' V . .' 22&-*' '.0* ' ' ! ' " &* 2' . ' .'.##.

W '&+'. '1! k 20"&-*' +. 2' ;@' !' .-k /.-' ! 20"!<

M!! !'" . ' !' 0+- *!' 2 +' ' !' 1! 20"&-*' . ' +. 2' 2!/!/' ' !' %# !SO!"

! 20"!', . ' +. 7! '.'" /"@

C' . -<- ' C ' 0&-' @<#&? ' C ' B ?-' 1- '1 ' A <C' A1' @<1 ' A <C' A ' 1 ' C ' BD10B?-' A?01'-' @<1 ' A <C' & ⁄ 1 ' C ' HD10B?-' 1- '1 ' A <C' A1' 0 1' 1' &#⁄ 1 ' C ' B '?-' A?01'-' A1' 0 <' 1' A <C' HO6 1 ' 1-' @<' ' 11' A1' &?-A 10' I ' <? 10' ' 110' ? .@'0' !1' 10' I ' $!' @&?' A <C' 1 ' C@?'0' ?01' A10 1' +1='A?\⁄ H1' '@@1&0H10' 0&' ' @1' E< A1'-' A1' @<' <@-<-.1⁄ &?' 0&-' A1C? 1⁄ C 10 ' A1' =<' 1' A &' ' C1- 1' < BD<?-' ' I ' < BD/?-' 0'@' 0&' ' 1H?'\;' ? +1?' H' 0" @1' < BD<?-' ' +1-A&? ' 1'' ?-' B& A1' 1-01<@1' A1' @1' 0B<@1' &'<@ A1@ 0BD1H1 ' 1-' @<' > <51' A10?'0' 1D1 B1' C0 ⁄ <A&-H10' @? ' ' >11>10' <' >10? 1 ' 0&-' A <C' C' 'B1 ' 1-' >< 1' <' &-<#@1⁄ 0'@0' -1' C&1- ' <BB& AH ' A1' -'10? 1 ' C' @<' <@-1⁄ <0B?-'= <?' 8' BD'01' -'1- ' &#0 <- ⁄ 1- '1 ' A <C' &?' ?-1' A?01'-' @<1 ' (?' ^A <' 1 'P6' 1 ' 0" @1' ' BD<? F ' +1-A&? ' >10? 1' -'1- ' A &' 8' >1- ' I ' L <?A1@10>1 @ ⁄ I ' B1&' ' 1A' < 'C&1 ' 10 1' C &1+1\' C' '-A'==1 1- \' C0&-10⁄ <A&-H10' '@ =& =<B1' C ' BD?-' A <C' + ' 0 ' +'' ' A ' ' ' C< '10' <?' & ' I ' @<' '1 B1' C< '1' <' B1@? ' H" +&1 ' 0H1 ' ' 1 ' 0" <0H?-' BD< - ' <BD< &? ' +&1 ' 1=?0'1 ' B1 ' & A1-/-B1' <A&-H10' ' =& =1B1' '0' ' ' C< '10' <?' & ⁄ @<' '1 B1' C< '1' <' B1@? ' H" +&1 ' 0?1 ' C ' =B1 ;' I ' '00'-' 0&' ' ?-1' -<51' A1@ A &' ' '10? 1' ?01' 1-' #?' B1 ' 1⁄ 0'#'1-' B >1' A &' ' C&'0;' 1 ' H' B&0 ' & A1=@ -B1' 1-A? <' <-H1' <@ CBD1'#' C@1 -1-

1>' C ' B1&' H' B&>1' & \' @10' &-1@0⁄ C'C10⁄ B'<-0' I ' D&. .10D1A10' A1' '-' @1' I ' 1@1' +1-A< @10' A1'-0' @1' C'<@>1' " 1-.@1 1⁄ A&'1-' I ' 0&@&'1C ' 0&@&-B' @<?-B'1-' <0<01' A1' >10-<1' @1' &'<@>1' B&- 1'-1=' ?-' R 1'-' -10? 1⁄ B10 <00<+&' ' 1D10B?-' &>1_' LHJ ⁄ L' ' .< T>0⁄ B#?-' C'C1' + h3⁄ +' .<@&-0⁄ BD?-' B'<-1' ''' M⁄ ''' ' .<@&-0⁄ BD?-' &.T8 .1 D1A' - J ⁄ '' ' <@1''0C 1 ' C' A' ' 10 < C' \' 0&' ' & A1' . -1⁄ H' * ' & 1@0' I ' C'C10' A1' +'-' 0&'1- ' .<?. 1\⁄ ><'0' C? ' @1' .<- .1 ' A1' &-H@0' I ' C'C10' A1' @1' I ' 1@1' -1' A1' B'<-0' I ' D- . .10D1A1< A1' '<⁄ -?5' & A1-<?-B1' A1' M 1#" 10 B'' ' =<' ' A1+ - ' 01 ' D1? 10' <?' . -A1' A<><.1' A?' & ' I ' A?' &-' C1#C@1;' 91' & ' +&'@@<- ' 1-B ?- 1' B10 ' A<><.1' C +&'1 ' A1' 1>1A'1' 1 2 B10 ' C< '1⁄ <A' . M?- 1' ' & A1' . -1' C' <?=@& ' 1' A10?'0A' ' H' A10& # 1-<+3- ' &? \' >< 0' &-1@0⁄ C'C10⁄ A<-0' I ' D&. .10D1A10⁄ <?' ' A1' '-' B&>1' A1' @1' I ' 1@1' < 1-A 1' A1' '0' @1' A' ' & <@>1⁄ 0&'1- ' #'1-' I ' @&'<@>1- ' . <?. 1\' C' @1' T <?. 1&?' A?' & ' &?' C' 0&-' A1C- 11' A1+ =' ' H' '@0' 0&'1- ' +1-A?\⁄ 0?' C1 -1' A1' =& =1' 1' <?' & ' &?' @1' '-⁄ @1' iB 1@1' 1-' B&- W '1' +1-A<\' ? @<' +<@?1' A'B1@@' ' 1 ' 1-' B<0' ' <0B#-' -1' %1' H?1@H⁄ C<''0' H'⁄ 0&' ⁄ A10& 1' 1-< '+1CA1' < <0B -' @'1. 1' A?' & ' C? ' <0B?-' C 'B1' 1-' I 1 '-' <0B?-' &-1 ⁄ C'C1⁄ B'<-1' &?' D&. .10D1A' A1' '-⁄ @1' &?' 1@# H1' A1=<'@@1' <0B- -1>1- ' A1X' <00'01' I ' >10? C' <+W- A' ⁄ H'⁄ <@&K1' I ' A2< 1' A1' >10 <1' @<' C 'B1' < @<BD< &? ' A1' A1@ a⁄ @1' I ' 1@1⁄ <' <?- ' B&>1' A1@ A1=<?@ ' C' @<' < 1' <>&- 1 <⁄ 0? ' C1 -1' A1' =& =<' 1' <?' & ' @1' +<@?1' A1' &?' @1' 'C⁄ @1' I ' 1@1' < 'B&- <' 1' +1-A \⁄ < ?-' C '+1' B +1-W- ' =1@ ' &?' <==> 1' 1' @1' +1-A&? ' I ' @<BD< &? ' <?' #- '1' A'B10 ' & A1-0-B1' -&-' &#0 <- ⁄ 1 ' 1' ' BD?-' H" 10C'1' <0B? @ A10' =& =1' ? 10' <+a A' \⁄ I ' 1- ' 1-=& >1' @1' 10& 1 ' 1 @1 1' &?' @10' < &- ' A1@ 0BD1H1 ⁄ @1' >&' 1' A1' >10>1\' ` @<⁄ ' =& =1' ? 10' C ' 0& ' <+<'@@' ? +1?L' &? \' =&' m' H' @1' A' ' T <?. 1&?' ? , ' I ' < ' C? ' 0&-' @<#&? ' 1< &? ' @1' .<?. 1&? ' A1' BD?-' &-1A' I ' C'C1' A1' @1' I ' 1@1⁄ 0'B >1' '@ C=1 ' I ' <A' A1' BD?-' &-1A' I ' C'C1' A1' '-⁄ I ' C? 'BD?-' B'<-1' I ' D&. .10D1A' 0&@&-B' @<==1 <- 9

9' 410' 1' 1' H' @G' ==L '6' I B

<a'-.' =& ' D'0' <#&? ' =& ' 1+1 ' KD&@1' @& D' &=' &<A' @& D' <' 1-- ⁄ `<-A' =& ' 1+1 ' 0 1' .D ' @& D' <' !< j D' -.'6 'P' <-A' '-' D1' ' ' &=' &-A&-⁄ <-A' & D1 ' ' '10⁄ & &?. D0⁄ !<' 0⁄ <-A' < a1 0⁄ KD1 1' @& D' '0' >&0 ' ?01A' &' #1' 0&@A⁄ D<' ` D1 1' D1' F < A1-' &=' D1' ?@-<.1⁄ & ' D'0' "1C? '10' 0D<@@ #1' 0P' 1<A ' &' A&' .D ' #1 K 'L ' 1 j BD<-' '<-A' 1 BD<-⁄ '='D1' #1' 1H?' 1A;' &+'A1A⁄ D<' '=' D1' 1 BD<-' 1@@1 ' D<+1' < '-1' 01<@1A' K' D' D1' , '-./0' 1<@' &=' D1' LBD1H?1 ⁄ '-' D1' >< --1 ' <=& 1' 1D1< 01A' 1<A ⁄ D1-' 5@-' D' > 01@=' &' >1<0? 1' D'0' @& D' # ' D1' 0<>1' '-' 1<0&-<#@1' >< --1 ⁄ '=' D1 ' >< ' -& ' <. 11' &' >1<0? 1' # ' D1' < A⁄ <- ' KD&@1' @& D' & ' " &\1-' # &<A' & ' 0 1' ⁄ <- ' ! <-BD'01' -& K' D0 <-A'- . ' -A' '=' D1' 1 BD<-' 1@@1 ' >1<0? 1' `-& ' '. D =?@@ '#? 0P' A1B1' =?@@ ⁄ <-A' D<' '> >1A'< 1@ ' >< ' #1' C &+1A' # ' '-A'==1 1-' 1 0&-0⁄ D1-' D1' 0D<@@ =& =1' ' =& ' 1+1 ' @& D' 'L' D'@@'-.0' <-A' '. D 8' C1-B1⁄ KD1 1&=' K&' C< 0' 0D<@@ #1' &' D1' , '-.⁄ <-A' D1' D' A' < ' &' D'' ' KD'BD' K'@@ 0?1@ <-A' '=' <-' ' 1 BD<-' ? 1 ' K'@@ 1=?01' D'0' A'-<-B1⁄ D1-' D1' 0D<@@ =& =1' ' <-' ?-A 1A' D'@@'-.0⁄ K&' < 0' &' D1' , '-.⁄ D1' D' A' < ' &' D'>' D< ' K'@@ 0?1' =& ' D1' 0<>1@ <-A' 0&' &-1' <--1 ' &=' '.D =?⁄ >1<0? '-.' 0D<@@ #1' ?01A' '-' <=' D'0' <-A⁄ <0'3F1@@ <0' &=' '.D ' F 1' .D ⁄ -A' D< ' D'0' A'j -<-B1' 0D<@@ 1-A? 1' '@@ D1' -1L ' < @'<>1-

⁄ 1B<?01' <@@' D1' ?-0⁄ 'C10⁄ 1 '0' <-A' &.0D1<A0' &=' F ' -1⁄ '@@ <-A' &-1 ⁄ +1-A'#@1' ' ' D'-' D1' 1<@>' &=' -.@<-A⁄ &?. D ' <-A' K1 1' K&-' <BB& A'-.' &' D1' <-' '1-' 00'01' &=' D1' 0<>1' 1<@>⁄ &' B&- <'-' <' B1 <'-' 1<0? 1@ D<' '0' &' 0< ⁄ 1+1 ' ?-' K1@+1' B& 1' <-A' K1@+1' E<@@&-0⁄ 1+1 ' 'C1' 'L' B& 1' <-A' 'L' E<@@&-0⁄ 1+1 ' 1 '<-' !&?' B& 1' <-A' &?' E<@j @&-0⁄ <-A' 1+1 ' &.0D1<A' D 11' B& 1' <-A' D 11' E<@@&-0' ' <-A'# ' A'+1 0' < ? 10' ' D< D' #11-' & A<' -1A' D< ' D1' ?-0' <-A' 'C10' &=' F ' -H' 0D<@@ #1' .<?. 1A⁄ #? ' =& ' D1' .<?. '-.' &=' ?-0' <-A' 'C10' &=' '@' <-A' H-1 ⁄ & ' &=' 1 '<-0' <-A' &.0D1<A0' &=' F ' -1⁄ -&' A'-<-B1' D< D' #11-' ><A1')-' B1 <'-' #1=& 1' D'0' '>1⁄ &' D1' . 1<' "<>< .1' &=' D1' , '-.' <-A' &=' D'0' 1&C@1;' D1' , '-.' K'@@'-.' <.<'-0 ' D'0' "<>< .1' &' C &+'A1' < 1>1A ' '-' D'0' 1D<@=⁄ D< D' . <- 1A' <-A' & A<'-1A' # ' ? D& ' ' <=& 10<'A' D< ' = &>' D1-B1=& D' <@@' <--1 ' &=' ?-0⁄ 'C10⁄ 1 '<-0⁄ <-A' &.0D1<A0⁄ <0' K1' ' &=' F ' -1⁄ <0' &=' '@⁄ 0)' &' #1' 0&@A' K' D'-' D1' 1<@>⁄ 0D<@@ #1' K1@@ <-A' @<K=?@@ ' .L?. 1A' # ' D1' , > ./0' E<?. 1 ⁄ & ' # ' D'0' " 1j C? ⁄ #1=& 1' `N'P' D1 ' #1' 0&@A⁄ ?C&-' <'-' &'=& =1' ' &' D1' , '-.' <@@ D1' F ' -1⁄ '@⁄ <-A' &-1 ⁄ B&- < ' 01AA⁄ & ' D1' <@?1' &=' D1' <>1@ -A' '-' B<01' D<' <- ' 1 0&-⁄ &=' KD<' &?- ' D<' D1' #1⁄ = &>' D1-B & D' 01@@ &' <- ' &=' D1' , '-./0' @' .1' 1&C@1⁄ =& ' <- ' 'B1' '-' B1 <'-⁄ <- ' ?-⁄ 'C1⁄ 1 '<-⁄ & ' &.0D1<A' &=' F '-1⁄ '@⁄ `<-A P' &-1 ⁄ KD'BD' K<- 1 = ' '-' <- ' K'01'&=' D1' 00'01'<-A' 1<j 0? 1' <=& 10<'A⁄ D< ' D1' <@=&K' <-A' `<#< 1 h P' &=' D1' 0<>1' 'B1' &' D1' ? 1 ' (=' 0?BD' F ' -1⁄ '@⁄ <-A' &-1 ⁄ <0' '-?A@' <0' 0' BD' " 1=<?@ ' <= 1 ' D1' < 1' 0D<@@ <>&?- ' ?- &⁄ ?C&-' <'-' &' =& =1' ' &' D1' , '-.' D1' <@?1' &=' <@@ D1' F '-1 ' '@⁄ <-A' &-1 ' &' D1' B&- < ' 0&@A⁄ <- ' C '+ ' &+1-<- ' ><A1' & ' &' #1' ><A1' #1 K'L ' D1' 1@@1 ' <-A' D1' ? 1 'B&- < ' &' D'0' A'-<-B18-& K' D0 <-A'-.6 -A' 1+1 ' 1 0&-' D<' 10C'1 D' <- ' &=' D1' !& =1' ? 1 0⁄ <=& 10<'A⁄ <-A' D1 1&=' A& D' '-=& >⁄ D1' 1<0? 1 ' &=' -. j @<-A⁄ & ' D1' < &-0' &=' D1' LBD1H?1 ⁄ 0D<@@ D<+1' D1' ! @<@=' 1= D1'0<>1' ! & = @? 10@# ' -0 <#&? ;' &+'A1A'<@K< 0' D<' D1' 0<'A' E<?. 1 ' <a1'<-A' D<+1' =& ' D'0' <#&? ' =& ' D1' .<?. '-.' &=' 1+1 ' ?-' <-T=, C1' &=' '@' <-A' &D1 ⁄ <0' D1' <a1 D' <-A' D<' D' &=' 1+1 ' ?-' <-A' 'C1' &=' F ' -1' ' <-A' =& ' ; ' 1 '<-' <-A' &.0D1<A' <= 1 ' D1' < 1

0<-A' =& ' A&01--1' # &A1' B@& D⁄ &#⁄ <-A' =& ' + 1+ 'D&@1' B@& D1' &=' 0 1' 1' &#⁄ <-A=& 1+ A101--1' ' 92 ' 2 ⁄ &=' 0 1' 1' B@& D1' HU' V (''1 1' #i' < ,1C1 1' &=' D1' ?-<.1' & ' D'0' d "1C? 1' 0 D1' 0?> 1K@ ' <-A' H)7) 8 # ''?')7' E'6+ 8()' 5(' * /' U' V 1#<1

3!- + @' . -' !+!'" / !#!& 0+@' 1 ! 20"&-*=' -/' 40@!'" "! 02&-*' &2' "/&- -#!

] ! 20"!' -/' * 0*&-*' . V&"" "' C!

+' !22!+2 · ' V&-!' &+' -/' .-!@)' 2 +' !' * 0*#&+

; ! 1 ! - ' 2 +' ; !' 1 /!' &-' # 2!' . ' ! &#&!-#@ &-' 90 - & @

b 0*!"(2B!!' ." * 0*&-*

W ' '&+2' !-20&-*' ' &-2' ; &-*' ".1' !' 3 @' . ' !&"" .+/&!"2

9 !& ' D< ' D1' , '-.' '0' <-A' D< D' #11-' K1@@' B1 ' ' ='1A' &=' `' D<- '\ ' . 1< ' " 1B1' 0' <-A' !<@0' ' 9 KD'BD' D<+1' #11-' A&-1' &' D' >' <-A' &' #'0' 1<@>' # '0&>1' &=' D1' <C <'-0' KD'BD' D<+1' #1=& 1' D'0' '>1' '-A1- 1A' K' D' D1' , '-.' & 1 +1' D' -' '-' D1' ! 1< ' &=' F < 9' 0&>1' #1 &-A' D1' 1< <-A' ' " A'+1 0' < 09' <0' D1 ' #1' <CC&' - 1A' <-A' #&?-A' # ' D1' ' -A1- ? 109' <-A' 0&>1' '-' D'0' < BD10' &-' D'0' 'A1' D1' 1<9' <-A')' D1' ' F <.10' D<+1' #11-' ?@ ' C<'A' <-A' B& - 1- 1A' # ' D1' , '-.9<BB& A'-.' &' D1' ' p)' -A1- ? 109' =& ' D1>' <-A' =& 9<@@' DA ' 1 '-?19' <BB& Aj '-.' &' D1' ' " 1. 110C `` K D 'BD F <.10' >< - ' &=' D1' 0<'A' <C <'-0' D<+1' <#?01A9' <-A' <a1-' ?C&-' D1>' ' `A1A?B1' = &>'!' P' D1' ' &@A'1 09' &=' 0&>1' >& 19' <-A' 0&>1' @100C 0&' D< '0?BD9' = &>' KD&>' D1 ' D<+1' <#< 1A9' D<+1' -& ' #11-' <#@1' &' B&- '-?1' D1' ' 1 +'B19' -& ' C1 =& >' D1' 0<>1' <0' &=' '.D ' <-A' 1<0&-' D1 ' &?.D ' &' D<+1' A&-19' <-A' C1 <A+1- ? 1' F1 1' F '@@'-.' # D<+1' A&-19' '=' D1 ' D<A' #11-' =?@@ ' C<'A9' KD'BD' D< D' B<?01A' D1>' &' =<@@' &' &##1 ' <-A' '@@<.19' <0' K1@@' &-' D'0' 'A1' D1' 1< #1=& 1' D1' ' .&'-.9' <0' #1 &-A' D1' 1<9' KD1-' D1 ' B<>1' D' D1 C <>&-.0 ' & D1 ' D'-.0' '=' D< D' #11-' < . 1< ' <?01' &=' @&-.' &- '-?<-B1' &=' D1' F < 9' <-A' . 1< ' " <j ><.1' <-A' &00' KD'BD' #< D' =< 1-' &' D1' ` 1' . -'& '==" <-A' &?- '10' &=' D1' , '-.0P' '-' D'0' #1'0<-B1' #1 &-A' D1' 1<9' <-A' -& ' &-@ ' D< 9' #?' &00' <@0&' &=' . 1< ' 1<0? 1' KD'BD' D< D' #11-' . <- 1A' &' D1' , '-.9' <-A' C<'A' '-' D1' ! & >' <=& 10<'A' =& ' D1' " 1=1-B1' &=' D'0' <-A;' D1' , '-.9' K'@@'-.' <.<'-0 ' 0?BD' " <><.10' <-A' &0010' & C &+'A1' < 1>1A ' '-' D'0' 1D<@=9' D< D' & A<'-1A' # ' D1' ? D& ' ' <=& 10<'A' D< ' -&' <C <'-' KD'BD' D1 1<= 1 ' 0D<@@' D<+1' D1' &-A?B ' &=' 0?BD' 1 '-?10' <-A' 0D<@@' 1j B1'+1' D1' , '-./0' F <.10' =& ' D1' 0<>19' 0D<@@' <#< 1'&=' D'0' &@A'1 09' -& ' <- ' &=' D1>9' <- ' < ' &=' D1' ' F <.109' 1LB1C ' '#1'=& ' D1' ' @& D'-.C D<' '0' &' 0< 9' '=' D1 ' 0D<@@' #1' F <.1A' =& ' <@=' < 1< 9' 1-' D'@@'-.0' < E&K-' =& ' < E1- @1>< -9' <-A' 'L' D'@@'-.0' '.D 8C1-B1' =& ' < 1&>< -9' ?C&-' <'-' &=' K1- ' &?-A' =& ' 1+1 ' C1< 9' <-A' 1-' &?-A' =& ' `<0P' &K9' =<' D1' , '-.9' `= &>9' KD&>' D1' A'A' <#< 1' ?C&-' D1' 1-&? '&=' D1'0<>1 0P'

9 11'-.' A'+1 0' <-A' ><- ' &@A'1 0' #1=& 1' D'0' '>19' KD'BD' D<+1' <a1-' < B1@' & ' <@=' D1' ' F <.10' &=' D1' ' <C <'-09' <-A' 0&' D<+1' >?0 1 1A' <-A' #11-' 1- 1 1A' &=' 1B& A' D1' , '-./0' &@A'1 0' #1=& 1' D'0' & >j >'00'&-1 09' =& '0?BD' 1 >0'=&' KD'BD' D1' ' <0 1 0' D<+1' -A1- 1A9' D<+1' 0&>1 '>1' C 101- @ ' <= 1 ' D1' ' ?0 1 9' <-A' D1' 1B1'C ' &=' C< ' & ' &=' D1' KD&@1' &=' D1' ' F <.109' A1C< 1A' <-A' .&-1' KD1 1' D1 ' K&?@A9' <-A' D<+1' -& ' C<001A' D1' 1<' K' D' D1' ' 0<'A' <C <'-09' <-A' 0&>1' C<001A' D1' 1<9' <-A' @&-.' K' D'-' D1' ' 1 >0' A1C< 1A' = &>' D1' ' <C <'-0' <AA' D1' , '-./0' 1 +'B19' K' D&?' ' `<CC< 1-' 'B1-B10P' &' D1>' . <- 1A' # ' D1' ' 0<'A' <C <'-09' KD1 1&=' D< D' . &K-' 0&' . 1< ' " <>< .1' &' D1' , '-.' <-A' &'D'0' 1<@>9' <-A' 0&' >< - ' -B&-+1-'1-B'109' KD'BD' B<--&' 1<0'@ ' #1' 1LC 1001A9' <0' &=' @&-.' '>1' D1' LC1 '1-B1' D< D' 0D1K1A6' <-A' D1' KD'BD' &@A'1 0' 0&' A&' -.9' <0' >?BD' <0' '-' D1>' K<09' `A1B< 1A' 0P' D1' &-&? ' <-A' 1+1 1-B1' &=' D1' , '-.9' <-A' D<+1' #11-' >< - ' F < 0' . 1< ' <?01 0' &=' D1 &0010' KD'BD' D<+1' 1-0?1A' '-' D'0' <-A0' <-A <. -'& '10' #1 &-A' D1' 1<9' <-A' D1' ` A+1- ? 1' 3P' <@0&' &=' D1' 1 j 0&-0' &=' D1' & A0' <-A' <C <'-0' KD'BD' A'A' B&-A?= ' D1> ;' D1' 0<>1' , '-.' B&-0'A1 '-.' D1' 1>'010' 9' <-A' K'@@'-.' <.<'-0 ' 0?BD' -B&-+1-'1-B'10' <-A' " <><.10' &' C &+'A1' < 1>1A 9' D< D' & A<'-1A' # ' D1' ? D& ' ' <=& 10<'A'

' 1 ! -@ .+/' -/' ') ' .'") 2 &/) . ' ! ' 7 &# '] " ! ; ! ' 0 . -) M@-* ' ." /2 & ' -/' ! - "!2' ' ! ' !"@ (&!' ; #! '0 .-'0 .-' ! ' ! -0"!' . ' &2) ' +&#!-#!' !"&-*' U` H0 /!/ .H0 "/

, 8 K' < Z9' EE; >' (<) I (4)

1>' C/' B1&' H' @1' & ' 10 ' I ' <A' 10 1' #'1-' <C '0' A1' C@?0&? 0' I ' . >A10' A'0B1' 10' I ' =1?L' -10' H?1?L' &?-' 10 1' =<' \' <' @? ' I ' <' 0&-' &'<@>19' C' <0B?-0' A1' @10' <C' <'-0' H' &?'' <+3-' B1&' 1-A1- 1\' &+1' @1' & ' A1' @? ' M+' 1' 1-' @1' =<' ' A1' .?1 19' <0B?-0' A1' CA1@<' I ' <0' A'C0' C< '10' 0'B&>1' '@0' 0&?-' & A1' .-1\' I ' &#@' .1\' C' @& ' 1-A1- &? 09' 1 ' <0B?-0' 1-' 010' >< BD10' A1' C< A1B1<9' I ' A1' @1' & ' C? ' @&? ' .<.10' &?-' 10 1' A &' >1-' C<'1\' I '&&- 1- 1\' <BB& A<- ' <' @&? ' A' \' `1-A' &? 0' P' C ' 1?L' 9' I ' C? ' &? \' @&? ' 1 1-?10' 0&@&-B' @&? ' A1. 110' A1' @10' H?1@@10' .<.10' C@?0&? 08' A10' A' \' <C' <'-0' &?-' <#?01\ ' I ' C '\' 0? ' 1?L' A<#< '1 ' 0? ' @&? ' 0&@A1&? 09' A<0B?-' C@?'0' I ' A<0B'D" >1 &09' '0 ' H' '1'L' 0? ' H?1?L' '@0' &?-' <#< 1\' -&?-' 10 1' A1' C&<' ' A1' B&- '-?1 ' @&? ' ,+'B19' -1' B1&' C=&? ><' B&>1' A&' A &' ' I ' 1<0&-' '@0' A<'001-' ' =<' 9' I ' =& ?-1>1-' +&'@@&'1-' < ' =<' ' 0'@0' ?001 ' ' 10 1' C@1'-1>1-' C<'1\9' @1' H?1@' <A' B<?01' 1?L' A1BD1'1 ' <' &#8' #1 '1' I ' C'@<.19' 0'#'1-' A1+ - ' @&? ' <@<-B1' A1' C< A1B1<' B& &1' A1' C< A1@<' H ?-' '@0' < +1-A &- 6' 1-R' <?R0' <A' 1 1' ?-1' . ?-A1' B<?01' A1' @<' @&-.1' B&- '-?<-B1' A1' @<' .?1 19' I ' . ?-A1' A<>< .1' I ' CA1' C' &?-' BD1'1\' <' @1\' 1' .-? '10' A?' & ' I ' C< 0' 1-' 0<' &#10<-B1' A1' CA1@<9' 1 ' -'1' ' B1&' =<'?0&@1>1-' >10' CA1' <?L'-' 'A1' . ?-A1' #@1-' H<A' 10 1' . ?- 1' <?' & ' I ' C<'1' 1-' @<' =&? >1' <+ - A' ' C/' @<' A1=1-B1' A1' 0<' R 1;' @1' & ' +&'@@<-' 1-B&?- 1' <? '1'L' A<><.10' I ' CA10' C? +&'1 ' A1' 1>1A'1' 1-' B1@@' C< '1' <A' & A1' .-1' C' @<?E& ' 1' 0?'0A' 9' H' -?@@' <C' <'-1' H" A10& 1' 1-<+0-' < <' @1' B&-A?' 1' A<? '1@L' 1 1-?10' I ' 1B1', <' @10' .<.10' @1' & ' C ' B1&@' <#< <' A1' 01\' 0&?@A1&? 0' -1' A1' <0B?-' A1' 1?L' <0B?-' C< '1/' A1' @&/' .<.10' 0'-&-' H'@' 0&'@ C ' @&? ' +10 ? 19' B1 <00<+&@ ' 0'@0' 0&'1-' ' .<.1\' C ' ?-' A'>" <-' L0 ' ?-1' &#1' A -1' .1- '@1' D&>19' 1 ' +'0' +"' ' A ' C ' ?-' +<A@1 6' 0? ' C1 -1' A1' LL' ' ' C ' 1= ?-' @<-B1' I ' L '@' ' C ' BD -' < B' <?' & 9' 0? ' H" '@ <#< <' 0? ' @1' 1-? 1' A'B10

1>' C ' B1&' H' A'1010' I ' C@?0 ? 0' 0&@A1&? 0' A1+ - ' B10 ' 1>C0' @10' H?1?L' &?-' C '01\' @&? ' .<.10' C< B1D' &?' A'>" A1' a> ' <C' <'-09' I ' '00'-' &?-' >&?0 1\' I ' 1-' 11\' A1' 1B& A1' @1\' 0&?@A1&? 0' A?' & 9' A1+ - ' 01m' &>'00'& 0' C? ' '1@L' R>10' C? ' H?1@0' @&? ' <'0 1m' &?-' 1-A1- 109' &?-' <0B?-' 1>C0' ><'- 1- - ' ?!' @&? ' >&?0 1' I ' @< 1B1' ' A1' @& ' .<.10' C< '1' &?' &?' A18' C< 1\' I ' <@1\' @&?' '@0' +&'@@1- 9' ' -&?-' > ' C<001\' @1' -11 ' &+1' @&/' A' \' <C' <'-09' I ' <0B?-0' C<001\' @1' <11 ' I ' @&-.1>1-' A1' -\' @&/ R>10' A1C< 1\' < @&? ' <C' <'-0' I ' <' @1' +'B1' A?' & 9' 0<?-B1' @'B1-B1' <CC< <-' . ?- 1\' < 1?L' C' @&? ' A' \' <C' <'-09' A&?-' <A' B 1K1' 0 ' . ?-A1' A<><.1' <?' & ' I ' < 0&-' &'<@>1' I ' 0 ' C@?0&? 0' '-B&-+1j -'1-B10' H' -1' C&'1-' @1.'1 >1-' 10 1' 1LC 1001' 0" B& &1' A1' @&-.1' 1>C0' @< 1LC'1-B1' <A' >&-0 1'6' I ' @10' H?1@B0' &@A1&? 0' '00'-' =<'0<-\' 1-' <?-' B&>1' 1-' 1?L' =?'0' <-1- & 1 &-' @&-&? ' I ' @< 1 1-B1' A?' & 9' I ' &?-' 10 1\' C@?0&? 0' .0?-A10' B<?01&? 0' A10' A<><.10' H' &?-' BD1'1\' 1-' 01\' R 10' I ' = '10' A1' C< A1@<9' I ' @<+1- ? 1' '?L'-' A1' @10' C0&-10' A1' @10' = 0' I ' <C' <'-0' H' 1?L' B&-8' A?B1 1=@ ;' >10>1' '1' & ' B&-0'A1 <?-' @10' C>'0010' +&'@@<-' 1-B&?- 1' '1@L' '-B&-+1-'1-B10' I ' A<>< .10' C? 8' +&'1 ' A1' 1>1A'19' <A' & A1'. -1' C' @<?I & @ 1' 0?'0A' 9

' 1-A1- 10' G ! '

H' B , ?-' D& > 1' '00'- ' >&?0 < ' ' I ' 1B1 +<- ' @1Ơ .<.1Ơ @1' & ℊ @1' H?1ℊ A1C< 1' < 0&-' <C' <'-' A1'-Ơ 0(-' R > 1' 1-' <0B?C' >< 1' <+₩- A' ℊ &+10H1' B1&' H' -& &' 1' ><ĝ<A'1' &?' '>C1A' > 1- ' C' @< +'0' <B'&-' A1' "'1?ℊ @1' H?1ℊ C&1 ' 10 1' B&-?\' <@0&-<#@1ℊ -1' @? ' @100&1 ℊ I ' @1' H?1ℊ ** R '=' < ><'- 1-₩- ' < 0&-' <C' <'-' I ' 1C<'1' 0< >&-1 ' 0" B& > 1' 'ℊ C&1 ' C? +&'1 ' @? ' C? ' ?-' <? 1' 0&@A1&? ' 1-' 0&-' @'1? 0&' ' C?- 0D1' B& > 1' ?-' =1@&-'Ĝ 1 ' H'@1Ơ ?0AB1Ơ A1' @< C1<Ơ 1'1- ' C&<' ' A1-H?1 1 ' A1' B1& I ' A&'1 ' I ' > '-1 ' 1-' 'B1 ' ', I ' 01 > #@<#@1 > 1- ' <A' & A1' . -1' C' > 10 > 1' @<?B8ℊ & ' 1' H' -? ' 0&@A1&? ' D& > 1' A< > 1Ơ -1' < BD1 ' '00'- ' > &?0 1\' A1' 1B& A1ℊ I ' <@<- ' &+10H1' 0&-' <C' <'-' A1' C< A1@< 1+1'. -1' B ' 1-' -.@1R 1' A1'-Ơ @1' R > 1' C ' H" 0&-' <C' <'-' 1-A1-R<ℊ -1' @100< 0&-' <C' <'. -1' @< 1-' @1' ,+'B1' A?' & ' 1-' <+1- ? 1' A1' @< .?1 1ℊ 0<?-\' B1& H'ℊ 1' ' B<?01' <'0&-<#@1' >&-0 1' C' 0&-' <C' <'-' I ' C' @? ' < @1' D'1=' 1-' @1' C< Ơ 1'<- ' @1' C&<' ' C'<@ℊ I ' 0? ' B1&' 1' ' @'B1-B1' A1' @< A' ' #'= 1 -1' 10 > &'. 1' A10&?#\' 0&-' 01<@ℊ I ' @< B<?01' A1' 0< @'B1-B1Ĝ 1 'H" '00'- ' > &?0 11' A1' 1B& A1' I ' +1'. -1' 0<?-\' 10' 10 '> &-'<@L' A1' @1' D'= 1 -' B& > 1' A10?'0A' ' A1' -Ơ 0&-' R > 1' A1' C< A1B1<ℊ H' @1Ơ <' Ơ <'@@'=Ơ I ' <?RƠ '-'0 10' A?' & ℊ A1' H?1@ C& ' &?' @'1?' 1-' H" 'ℊ &?' '@Ơ < '+&- ℊ 1'1- ' <?=@& ' 1' A1' 1?L' > 1 1' 1-' < 10 ' I ' A ' 1?L' @< .< A1 ℊ <-H1' A1' 1?L' 0&' '1-H?' \Ĝ 1 ' 0'ℊ C&1 ' 10 1' &+1' C' -H?1 1' A1+0-' ?0 'B1Ơ A1' @< C1<Ơ I ' C &1+1\' H'@Ơ &?- ' '00'- ' > &?0 1\' A1' 1B& A1ℊ I ' TAH < '16 < @&C ' #<'-0' A10?'0A' \' 0<?-\' @'B1-B1' B# > 1' 10 ' A10?'0A' ℊ H' <A#-H1 ' '@Ơ 0&'1-' C?-'\' B& > 1' =1'. -0

D< ' 1+1 ' <-' 0&' > ?0 1 '-.' <-A' 1B1'+'-.' D1' , '-./Ơ F <. 10ℊ KD'BD' A1C< 1 D' = & > ' D'Ơ <C <'-' K' D'-' D'Ơ 1 >ℊ '-' <- ' <--1 ' <=& 10<'Aℊ 1LB1C ' D< ' -& &j '&?Ơ 'Ba-10Ơ & ' >C1A' > 1- ' # ' D1' '0' < '&-' &=' E&Aℊ KD'BD' >< ' 1<0&-<#@ ' #1' a-&K-ℊ 0?==1 ' D' >' -& ' &' .&ℊ <-A' KD'BD' D1' 0D<@@ B1 '= ' C 101- @ ' &' D'Ơ <C <'-' <-A' 0D<@@ 1C< ' D'Ơ &-1 ℊ 0& D< ' D1' > < ' C &+'A1' D' >' =& ' <-& D1 ' &@A'1 ' '-' D'Ơ @<B1ℊ D1' 0D<@@ #1' C?-'0D1A' <Ơ < ! 1@&-Ĝ <-A' D< ' D1' ?0 'B1Ơ &=' 1<B1' 0D<@@ D<+1' &K1 ' &' '-H?' 1' D1 1&=ℊ <-A' &' D1< ' <-A' A1 1 >'-1' D1' 0< > 1Ĝ -A' @'a1K'01' D< D' & A<'-1A' # ' D1' 0< > 1' ? D& ' ℊ D< ' -&' &@A'1 ℊ <-' &=' > 0ℊ & ' BD1 ℊ 0& ' > ?0 1 1A' &=' 1B& Aℊ <-A' .&'-.' K' D' D'Ơ <C <'-' #1 &-A' D1' 1<ℊ 0D<@@ 1 ? -' '- &' -.@<-Aℊ K' D'-' D1' 1 >' =& ' KD'BD' D'Ơ <C <'-' `D< D' 1 <'-1A' D' > ℊ ' -& ' @1<+1' D'Ơ <C <'-' D1 1' '-' D1' , '-./Ơ 1 j +'B1ℊ <-A' '-' A+1- ? 1' &=' D1' F < ℊ 1LB1C ' D< ' D1' D< D' 1<0&-<#@1' <?01' 0D1K1A' # ' D'Ơ <C <'-' <-A' # ' D' >' &' D1' D'1=' '-' D1' &?- ' D<+'-.' ` & <@ P' &K1 ℊ <-A' D1 1?C&-' 0D<@@ D<+1' 'B1-B1' &=' D1' 0<'A' ` <C <'-ℊ P' K' -1001A' ?-A1 ' D'Ơ 1<@ℊ <-A' D1' <?01' &=' D'Ơ 'B1-B1Ĝ <-A' F D&' D< ' 0&' A& D' > ?0 1 '&=' 1B& Aℊ <-A' B& > 1' K' D&? ' 1 1 Ơ 10 '> &-'<@Ơ =' D1' ` <C <'-ℊ P' <Ơ 'Ơ 0<'Aℊ K' D'-' D'Ơ 1 >' &-' D'Ơ 'A1' D1' 1<ℊ D< ' D1' < & 0ℊ <'@'==0ℊ <-A' & D1 ' =D1' , '-./Ơ '-'0 1 0ℊ < ' KD< ' & ' & ' @<B1' D1 ' 0D<@@ < '+1ℊ 0D<@@ D<+1' ? D&j ' ' &' C? ' D1>' '-' 10 ℊ <-A' D1>' D1 1' &'a11C' ?-' 'ℊ ' ' #1' &=' D1>' '-H?' 1A Ĝ <-A' '=' ' #1' =&?-A' # ' -H?' ' #1=& 1' ?0AB1Ơ &=' 1<B1ℊ <-A' C &+1A' D< ' D1 ' D<+1' 0&' > ?0 1 1A' &=' 1B& Aℊ <-A' A1C< 1A' = & >' D1' ' <C <'-Ơ <=& 10<'A' K' D&? ' 'B1- 1ℊ <Ơ <=& 1' 'Ơ 0<'Aℊ D< ' D1-' D1 ' 0D<@@ #1' C?-'0D1A' <Ơ !1@&-0

' &@A'1 ' @1<+'-.' D'Ơ <C <'-' K ' Dj &?' 'B1-B1ℊ A1B@< 1A' .?'@ ' &=' !1@&-

&' &@A'1 ' 0D<@@ 1 ? -' = & > ' #1 &-A' 1<' K ' D&? ' 'B1-B1'Ĝ

D'1=' ==' B1 0' &=' & 0ℊ I=Bℊ 0D<@@ < 10 ' &@A'1 0' 0&' 1 ? -'-.' <-A' A1 <'-' D1 > ' =& ' -SO@"@' ; @' ?0 'B1Ơ &=' 1<T ℊ

E ʻ"'(. / F))ʻ 4)ʻ E G &77&8"

'G ! ? ' 'G '6 #

' 2ʻ @1' &" <' 0&=' < @1 &1-ℊ 1-?\' < F 10 -'' @1' &2' A1' &- 0'&-' A1' <'- ' <?@1' @1']] ℊ &? ' A1' <-?>' <-' A1' 0&-' 1. -1' LL30ℊ < @&-&? ' A1' "'1?' I ' C ' @1'8#'1-' A1' @? ' I ' 0&-' &'<@>1ℊ A1' @<A+'Ơ I ' <001- ' A10' = 0' 10C?1@L' 5' 1 > C& 1@L' I ' < @< 10C<@@ 1H?10 ' A10' &1Ơ 1-' >10 > 1' @1' < @1 > 1- ' <001 > #@11ℊ <A' =<' ' & A1'. -1 ' I ' 10 <#@'1 ' A' 01Ơ 10 < ? \' I ' & A'ℊ -<?-B1Ơ 1-' @< =& > 1' H1-0?

'='1 > 1- ' B& > 1' C& 1R' > < BD<?- \' A?' & ' A1' 'B10 ' &'<@>1' A1P&Ơ 1-' <? 1' 0&?- ' A10 &##1\' C' @1Ơ 1-1> Ơ &5(& ℊ 0? ' @1' ' 11=' I ' A1'-Ơ A' Ơ @, Ơ I ' C& \' A1'-Ơ > 10 > 1' @1' &'<@>1ℊ A1' @#' -'1=Ơ #'1'@Ơ I ' ' BD<?-'D01Ơ %1' . '-A1' 'BD1001ℊ I ' @&' B&' ' C '01\' 1 > C '0&-1\

' & A' D1' , '-.ℊ < ' D'Ơ < @'<>1-' D&@A1-' < ' F 10 > '-0 1 ℊ D1' " < '&=' D1' &-+1 0'&-' &=' <'- ' <?@ℊ D1' !'+1' <-A' K1- '1 D' " < ' &=' <-?< ℊ D1' K1- '1 D' 1< ' &=' D'Ơ 1'. -ℊ & D0' &-&?' &=' E&Aℊ <-A' =& ' D1' F 1<@ =' D' >' <-A' &=' D'Ơ 1<@>ℊ # ' D1' A+'B1' <-A' 001- ' &=' D1' & A0' C' ' ?<@ <-A' 1 > j C& <@ℊ <-A' < ' D1' 0C1B'<@ 1H?10 ' &=' D1' & > > &-0' '-' D1' 0< > 1' < @'<>1-' <001 > #@1Aℊ D< D' ` > <A1 P' & A<'-1A' <-A' 10 <#@'0D1A' A'+1 0' < ? 1Ơ <-A' A'-<-B10' '-' D1' !& >' =&@&K'-.

! ℊ F D1 1<Ơ C&& ' 1 BD<- 0' &=' D1' , '-.' &=' D'Ơ 1<@>' A<'@ ' #1' &##1A' # ' D1' , '-./Ơ -1 > '10ℊ ?C&-' D1' 1<ℊ <-A' '-' A'+1 0' '+1 0' <-A' & 0' K' D'-' D1' 0< > 1' ?K@@>1- &' 1<@>ℊ &=' D1' ' D'C0ℊ E&&A0ℊ <-A' 1 BD<-A'010ℊ &=' <=1 &-A?= ' . 1<' 'BD10ℊ <-A' D1' ' &A'1Ơ <a1-' `<-AP' '>C '0&-1A

' " % $'

@ !"!' "!' & ' " -2#"& 2' . ' !' 0 !' . ' &2' A ! "=' ++' !%#!\K' ' ". 1' 7 &# ' !' !% ' &2' !"!' "&- !/ ' ; !&-*' &-H0"!/ .'" &1 !" ! O(!!' . !' .',' !-'

K' D' . 1<' "? 100ℊ <-A' C? ' &' . 1<' ! '-10' <-A' <-0&>0ℊ <-A' D1' , '-./0' C&& ' ?# 1A'0' AK1@@'-.' -'.D' D1' 1<ℊ &<0 0' <a1-' &? ' &=' D1' ' &K-' &?010ℊ K' D' D1' ' D< j 1@0' <-A' -=1- 0' ?C&-' <-A ℊ <-A' B< '1A' ` # P ' D1' 0<'A' -1>'10' KD1 1' ' ' C@1<01' D1>G' KD'BD' '0BD'1=0' B&>1' # ' 1<0&-' D<' D1' 0<'A' 1 BD<- 0' #1' A'0B&? <.1A' K' D' !& B1' <-A' ?'00<-B1' &=' D'C0' <-A' &=' 1&C@1' A1j =1-0'#@1' &' a11C' D1' 1<' <-A' D1' &<0 0' &=' D1' 0<>1ℊ =& ' D<' D1' D'C0ℊ E&&A0ℊ <-A' 1 BD<-A'010' # ' D1>' <a1-' = &>' D1' 0<'A' , '-./0' -1>'10ℊ D1' 0&>1 '>10' B@<'>1A'# ' D1' , '-./0' -1>'10ℊ# ' &@&? ' &=' <=1 E&-ℊ A?^0' -& ' A?@ ' C? 1D101Aℊ -& ' &=' 1B& A' - &@@1Aℊ 0& D<' D1' , '-./0' ?# 1 0' >< ' D<+1' & 'B1' &='8 D1>ℊ <-A' 0&>1 '>1' #1' B@<'>1A' # ' 1 BD<- 0' <-.1 0' &=' D1' , '-./0' >' ℊ &' #1' #1@&-.'-.' &' D1>ℊ # ' &@ ? '&=' =<@01' F ' -10010' &=' D1' ' < '&-ℊ <-A' # ' 1 1 0' &=' < H?1/ P' <-A' D< 1 0' < ' # ' D1>' B&?- 1 =1' 1Aℊ <-A' # ' 0?BD' &&=0' HC&-' 0?BD' @<'>0' #1' 10 & 1A' &' D1' 0<>1' E&&A0' <-A' 1 BD<-A'010' &= 1-' <a1-'' -' D'C0' <-A' 1001@0' #1@&-.'-.' &' D1' , '-./' -1>'10ℊ <-A' D1' 0<'A' , '-./0' -# 1=' ' C?' &' . 1<' 1L< '&-ℊ <-A' &00' &=' D1' ' &K-' E&&A0ℊ KD1 1# ' D1' 0<'A' , '-./0' -1>'10' #1' . 1< @ ' 1- 'BD1Aℊ <-A' D1' ' <+ ' 0 &-.@ ' '-B 1<01Aℊ <-A' D1' <+ ' <-A' 1 BD<-A'01' &=' D1' 0<'A' 1<@>' &=' &? ' & A' D1' , '-.' . 1< @ ' A'>'-'0D1Aℊ <-A' 0?BD' "<j ><.10' <-A' -B&-+1-'1-B'10' A<'@ ' #1' @'a1@ ' &' '-B 1<01' <-A' B&- 1' &' D1' 0<'A' 1<@>' &=' &? ' 0<'A' & A' D1' , '-.ℊ '=' 0C11A ' 1>1A ' '-' D'0' <01' #1' -& ' C &+'A1A;' ? ' 0<'A' & A' D1' , '-.' B&-0'A1 '-.' D1' 1>'00100ℊ <-A' D<' '=' 1&C@1' &=' D1' , '-./0' >' '#1' =1< 1A' <-A' A'0B&? <.1A' &' = 1'.D ' D1' D'C0' <-A' 1001@0' &=' D1' , '-./0' -1>'10' <-A' A+1 0< '10ℊ D1' ' <+ ' '-' '>1' &' B&> ' K'@@ #1' A1B 1<01A' <-A' A'>'-'0D1Aℊ 0 -A' D1' <+ ' &=' D1' , '-./0' ?# 1 I 0' <-A' ! '1DA0' '-B 1<01A' <-A' 1-@< .1A@ # ' D1' A+'B1' <-A' 001- ' <=& 10<'Aℊ <-A' <' D1' 0C1B'<@ 1H?10 ' &=' D1' 0<'A' &>>&-0ℊ &' 10BD1K' D1' '0BD'1=0' <=& 10<'Aℊ DA D' & A<'-1A' # ' ? D& ' ' &=' D1' 0<'A' <@'<>1- ℊ D< '<@@ 1 1 0' &=' <=1' &-A?B ' &' #1' . <- 1A' & D1' , '-./0' -1>'10' <-A' A+1 0< '10ℊ & ' <- ' & D1 ' 1&C@1' KD< 0&1+1 ℊ 0D<@@ #1' - &@@BA' '-' D1' D<-B1 ' &='=&? ' 0<'A' ! & A'P' D1' , '-.' <=' B& 'ℊ #1=& 1' D<' <- ' 0?BD' 1 1 0' 0D<@@ #1' ' -' <- ' K'01' A1@'+1 1A' &' D1>' &' KD&>' D1' 0<>1' 1 1 0' 0D<@@ #1' . <- 1A@ <-A' D<' <@@ 0?BD' 1 1 0' &=' <=18 C-A?Q@ D1 1<=1 ' &' #1' . <- 1Aℊ -& ' '- &@@1A' &=' 1B& A' '-' D1' 0<'A' D<-B1 ℊ #1=& 1' D1' "1@'+1 ' &' D1>' &' #1' ><A1' '-' D1' <- -1 ' <0' '0' 0<'Aℊ 0D<@@ #1' +&'A' <-A' &=' -&' ! & B1' -& ' ==1^G -A' >& 1j &+1 ''=' D1 1<=1 ' <- ' E&&A0' & ' 1 BD<-A'010' #1' <a1-' # ' D1' 0<'A' ?# 1=@0' &=' =&? ' & AP' D1' , '-.' ?C&-' D1' 1<ℊ & ' D1' &<0 0' &=' D1' 0<>1ℊ BD< .1A' '-'<- ' D'C' & ' & D1 ' 1001@ℊ KD'BD' '0' #1@&-.'-.' &' D1' -1>'10' & ' Aj +1 0< '10' &=' @ &? ' & AP' D1' , '-.' =& ' D1' '>1' #1'-.G -& ' D<+'-.' 0?=='B'1-' 1 1 0' &=' <=18 &-A?Q ' '- &=@1A' '-' D1' ! & >' <=& 10<'Aℊ D<' D1 ' KD'BD' 0&' 0D<@@ <a1' D1' 0<>1E&&A0' <-A' 1 BD<-A'010' 0D<@@ D1>' 1- & ℊ K' D&?' <- ' 10 ' ? '&-' D1 1&=' &' #1' ><A1' '-' <- ' K'01ℊ &' KD< 0&1+1 ' 1 0&-' D1' 0<>1' E&&A0' <-A' 1 BD<-A'010' 0&' <a1-ℊ <' D1' '>1' &=' D1' <a'-.' &=' D1' 0<>1ℊ & ' #1=& 1 ' F1 1' #1@&-.'-.;' &+'A1A' <@K< 0 ' D<' = D1' ?# 1 0/P' &='=&? ' & AP' D1' , '-.ℊ <a'-.' 0?BD' D'C0' BD< .1A' K' D' 1 BD<-A'010ℊ -& ' D'<+'-.' ='-& '0P' 0D1K'-.' 0?BD' 1 1 0' &=' <=18 &-A?=' K' D'-' D1' 0<>1' D'C0' <' D1' '>1' &=' D1' 0<'A' <a'-.ℊ =<-A'# '-.' /P' D1>' # ' !& B1' &' <' B1 <'-' & '& ' @<B1' K' D'-' D1' 0<'A' 1<@>ℊ ℕ)' 0D<@@ -& ' #1' 1-A<><.1A' '-' D ' ' 1 0&-' -& ' E&&A0

&+1' .W?-A1' A? 10019 I ' > 0'<' ./C-A1'='-<?-B10' I ' <?-0&-1ℊ I ' @10' C&, 1\' @'1.10' @1' & ' A1> <- \' C0' @10' B&0 10' A1' >'1 ' D 0' A1' @&? ' CC 1' >1<0&-0ℊ &+1' @&' BD< 1?L' I ' 1-8' = >- \' 0? ' '1R 1' C '01\9 I ' &+1' @10' A' \' 1-1> 10' &?' @&? ' C@10 ' <>10-1\G H?1?L' >10BD'1=1' <+ .-1-' C ' B1&' H' @10' A' \' BD<?- \' 0&?' ' A10B& <.1\' &+1' =& B1' 5 ' C?'08' 0<-0' A1' -@1= ' I ' A1' .1- \' A1=1- '#=10' A1' .< A1 ' @1' >'1 ' ¡ ' @10' B&0 10' A'11@@ℊ <' 1 ?01' H1' @10' -'1=1' F1-0' I ' BD<-8' A'010' ?' 1?L' C =11\' A10' A' \' 1-1> 10' A?' & ℊ 0&?-' <0B?-' =&' \' B@< >1\' C' @10' 1-1> 10' A?' & ' C' B&@&? ' A1' 0<?'=B&-A?B 10' -'1-' A?1>1-' C BD<01\' -'1' A1' 1B& A1' 1-&'@1\ℊ 1-0" H1' @10' 0?#.' \' A?' & ' C? &-' <,' -& 'B1' A1' 1?L ℊ I ' <0B?-' ()' \' 0&?-' B 1 >1\' C' I D0?- 1\' 10 <?-.1 ' A1@ <>'0 11' A?' & ' A10 1' <' 1? ' <CC- 18' -0- \' C' B&@&? ' A1' 10>&'.-10' >1'-0' &'0' A1' @&' -<B'&-ℊ 5' '='BD10' ' 10' I 'B@ 1' C< '1' C' 1?L' B&- +1=1' \9 I ' C' A1@L' C+10' 0? ' '1@L' A< >10' 0&?-' 10 & 1\' <' >10>1 '@10' F1-0' I ' BD<?CA'010' R00&+1- =&' \' C '01\' 1-' -'1=0' I ' +1 01 L' <CC 1-/- \' <' @10' 1-1> 10' A?' & ℊ I ' @10' A' \' 0?#.' \' A?' & ' > 0@' <' .= >A1' + L<B'&-' I ' CA1' A1' @&? ' CC 1' F1-0ℊ C&?-' @10' A' \' 1-1> 10' A?' & ' .[?-A1>1-' 0&?D ' 1- 'BD1\' ' @&' -<+'1' =& 1>1-' 1-B 1B1ℊ I ' @<' -<+'1' I ' - 1D<?-A'01' A?' A' ' &'<@>1' -=1' A' ' ' @1' &" . 1+&?01><' ' <>10-?01\ℊ I ' '1@L' A<><.10' I ' '-B&-+18' -'1C '01\' A1' & ' 1-'<? 1' 0&?-' , '01> F<#@1' A1-B 1B1 ' I ' <+1 1' <' A' ' &'<@>1' -=1' A' ' = ' @1' & ' 0" D<0 '=1' 1>1A'1' 1-' B1&' B<0' -1' 0&=' C? +1?'G =1' A' ' _' @1' & ' &-0'A1 <-' @10' C'C'0010ℊ I ' H' 0" . - \' A1@ <>'0 1' A?' & ' 1'1-' C<+&?' I ' A'0B& <.1' A 1 1 ' @10' -'1=1' I ' +1001@L' A1@10' 1-1> 10' I ' <A, 0< '10' A?' & ' @& -<+'1' 1-' 1>C0' <+1-' ' <' A1B 1001' I ' <>10-?01ℊ I ' @<' -<+'1' A10' 0?#.' \' I ' <> 10' A?' & ' 1-B 1 01' I ' 1-@< .1G A1@ <A+'0' I ' <001-' A1<?'0A= \ℊ I ' <' @1' C< 1' 1H?10 ' A10' A' \' &10' C? ' 10BD?1 ' @10' >101 F1=1' 0?'0A' \' <A' & A1' .-1' C' <?=@& ' 1' A?' A' 'C< @1>1-ℊ H1' &? \' ' 10' A1'0<?=B&-A?B ' <' ./?< '1 0' <' @10' 1-1> 10' <A 0< '10' A?' & ℊ &?' <? 1' .1- \' H1B&-HH0ℊ 0&'1-' 1-' &'@1\' 1-' @<' D<?-R'1' A?' & ' A1' 1B& A1ℊ <+/-' H1' '1@L' ' 10' 0&' -' 1-' <0B?D' ><^1' A1@'C1\' <' 1?L' <0' H?1?L' >10>10' @10' ' 10' M &-' .0?- 1\' G 1' H1' &? \' '1@L' ' 10' A1' 0<?=B&-A?B ' 1-' <C0' <' .?- '1 0' C'1-' 1-' &'@1\' A1' 1B& A1' 1C' @<' A' ' D<?C I 1ℊ <+/C ' @1' @' 1' <' 1?L' <='<' 1' 1-' @1' << &'B&>1' 10 ' A' ℊ 0&'1-' +&'A1\' I ' A1' -?@@=& B1' -1' 1==1A ;' 1 ' 1-&? 1' <' 1-' <C0' < 1 -0' F1-0' &?' BD<-A'010' 0&'1-' C '01\' C' @1R' A' \' 0?#.' \' A?' & ' 0? ' @1' >11 ' &?' @10' B&0 10' A'B1@'ℊ BD< .10' 1-' <0B?-' -'1=' &?' <? 1' +1001' ' H1' 10' <CC 1-/-' ' <' @10' 1-1> 10' &?' <A, 0< '10' A?' & ' C? ' @1' 1>C0' 10 1<- \ℊ -'1-' 1'<- \' ' 10' A1' 0<?=1&-A?1 \' 0?=='0<?- \' 1 ' @<' =& >1' 0?@0 F ' 1- &'@1\ℊ H1' B1?L' H' >10>10' @10' F1-0' I ' ' BD<-8' A'010' 1-0" C-A1 &?-' @10' 1- & 1- ℊ 0<?-\' <0B?-' 10 '8' ?B'&C' 1-' <='<' 1' 1-' <0B?-' >< 1ℊ < H1B&CH1' C0& 1' >10>10' @10' F1-0' I ' I D<-A'010' 1-0" C '01\' <@ 1>C0' A10' C '0' A1' 'B1@@10' &?' A1+D' ' =1? 1-' <CC 1-0-\' ? +1?' &? \' =&' \' H1' 80" @10' A' \' 0?#.' \' A?' & ' '.-<-\' '1@\' -'1=0' BD< .1\' &+1' - 1D<C-A'010ℊ F1-' 1'<-\' I ' >&-0 <-\' '1@L' ' 10' A1' 0<?=B&-A?B ' A1'-0' >10>10' @10' -'1=0' <@ 1>C0' A1@ A' ' C '0ℊ @10' <> 08' -1-' C' =& B1' <' ?C' 5;1'-' C& ' &?' @'1?' A1'-0' @1' A' ' &'<@>1ℊ -1' 0&'1-' 1-A<><.1\' 1-' &?' C0&-1' -1' F1-0

' :! !" ' . ' !)#.-] /0 '2 +# ! !-".++!/' &- -#!"@@ ;! ."!';!&-*' /!+&'!"!/'H .'" !@'2 +# ;!' '.&/

b../'2 E!-' ".& ' -!-&!' -.' '&-*' ! !"<.' !L# -/0 ' !-".++!/'2 +# !' ;&7 0# 3"&j!

3". '&2.' ." < .'"2 ; & 2' -. 2 !7&-*' ! k !"2.' ' <!L' B&-A?A@ + .0* ' !0". !/

0K' D ' '# ') ! ' $ #' # , ★ ' $ '

C ' A1@ C '0@ 0'@0 0&'1- ' ?! I' <==<' 1' C@1'-' 10 ' ?B'&<' A1' >10>10 @10 -'1=0 I' ' BD<?-A'010 A1A1'-0 1>C0 10&-@ <#@1' <C20 B1&' H' C@1'-' -& 'B1' 10 ' =<' ' <' 1?L' A1' ' 10 A1' 0<?=B&-A?B '0?=='0<- \' C? ' >10>10 @10 -'1=0 I' ' BD<?-@ A'010@ 1- &@@1\' 1-' @<' A' ' D<?-R'1' A1' 1B& A1' A1+0- ' @1' C '0 A1' B1?L@ ? +1?' <?L" H' B10 ' & A'-<-B1' B&>1-B1' <' 1-' ' 0&-' =& B1' <' @1' =10 ' A1' 1'- ' 'BD1@@ @< BD<-.1@@ C0BD1>' <+1-'

1>' -=1' A' ' 5 ' @1' & ' <A' & A1'.-1' C'$@<?= & ' 1' A10?'0A' @ H1' -? ' A1' 01\' @'1.10 1-, 0 H?1?L' 1L'.1- ' M <' <.< A1' &?' ? @<.< '1' C-?-B'1@ <' @1' 0? ' A?' & ' &-' <@ 0? ' A1' C< '1@ 1-' 1>C0 <+1-' ' 1-' @1' &?- 1' A1' <-B< 1@ =& =1B1' <0B?-0 A1' 01\' #'1-0 C?' BD< 1?L' = 10' &?' 1'' \' 1-' <? 10 &?- 110 1'-R <?- 0&?@>1-' @10 #'1-0 I' BD< 1?L'R 10 I' 1- \' H?1HL' @10 A' \' ? @<.1\@ & ' B1?L' 1-, 0 H?1?L' '1@ 1L'.1-' M <' <.< A1' 1-' @1' A' ' &?- 1' A1' <-B<0 1@ &?- ' 1-' >10>1' @1' &?= 1' ' H' C' 1 &-' A<0B?-' '1@ @<.< '1@ <' @1' 0? ' A?' & ' &?' <' @1' 0? ' A1? 1' C0 -1@ C-?-B'1' A1'-0 @1' A' ' &?- 1' A1' <-B<0 1' -1' 0&' ' < B?-' =& #< 1' -1' A'0<#@1' A<0B?-' ><51' A<BB'&-@ -1' A1' B@< 5' 0B?-' >< 1' A1' 1-D1 ' <?CB1' D& 0 A1' >10>1' @1' &?- 1@ -1' A'0<#@1' <' 0?1 ' BD10B?-' ><51' A<BB'&-@ D& ' A1' >10'-1' @1' &?- 1@ -'1- ' &#0 <- ' '1@ @<.< '1' 0? ' @? ' C-?' B'1;' ? +1?' &? \' =&' \' H' @10 < ? @ & ' <-' C '='1' 1' & ' 1- ' H?< ' ' @ A?' A' ' & @ 1-B&?- 1' C0' .1- \' A1@ ?- 1' A1' ='0 1' H" =&?- ' <0' C@?0&? ' @'1.10 A?' & ' 1-' A'C0' (?- h10 "='-.@1 1' C@?0&? 0' D&>'B'A10' >? A 10' &#& '10' #<R'10' 0C<001 ' I' <? i' '& '0' ><@1=<' \' 10 &'01' A-' 0<' =& B1@ B1 '& A1-<?B1' -'1C ' &#0 <- ;' ' H' 'B10 ' & A1- -B1' 1-@ A? <' 10H10' <@ ='-1' A1' 1C ' <-0' BD1'->1- 1-0? <-

1>' C ' B1&' H' <' @<' . 1+&?01' B&>C@1'- ' =<' ' <C' & ' ?' @10' 10' A?' @10' &?- 110' A1' 1 1=& A' @&?B10 =' I' <@&C@ @10' H?1?L' &?C@10' 0 ?-' <A &'.-0- \' <0' < BD10' A1' E<@10@ I' @1 ' &?- 110' A1' & ' D10 1' ' '0 &K1@ >&-0 1' 0&' ' <-' >10>1' -=1' _ ' @1' & @ H1' A&>1' <? 1' =&' \' 1C' 1>C0' @1' &#@1' & ' 1 ' '1@ -=1' ' @1' & ' H& 10 ' <-' 0BA1' A1' 0&C' 1.-1@ C ' @10' .0?-A10' &C@ C 0'&C0' I' 1L & B'&C0' H' B1?L' A1' E<@ 0' I' A10' < BD10' A1' E<@ 0' ='1 &-' A1' &? ' 1-' <?@ 1@ <0' .1- \' A1> <? \' 1-' @10' A' \' &?- 110' A1' 1 1=& A' @&-1' I' <@&)@ 1-' C '0' <'C10-1 ' I' 1>C& 1 ' A1' =&? ' B#'+<@L' #10 10' I' <?R0' @&' #'1-0 I' 1#< 1?L' D& 0' A1' >10>10' @10' &? 10' 1-' @10@A' \' < BD10@ I' '1@L' #'1-0' B#'+<@L' I' BD< 1?L' '@@&H10' 1 1'.- - \' <-H@ . 11' <' 1 L' 0 '' =<' ' <' @&?' &@?- 1C & A1'.-1' =&'0 ' I' 10 <#@1' H1' 0" <0B?-0 B#'+<@L' #10 10' #'1- ' &?' BD< 1?L' 0&'1- ' C '01\' A1'-0 >10>10' @10' &?- 110@ I' BD<01\' &?' <>1 -1\' D& 0' A10' A' \' &?- 110' 1-' E<@'0' &?' 1-' @10' -BD10' A?' E<@ 0@ H' <A&-H10' @10' '0B&?- \' A?' >10>10' @10' &?- 10' 1' 10' I' <'@@'-0' A1 ' 10' I' ? .D10' &?' <'@@'=0' A10' = <?-BD1'010' @&?' '1@L' C '01\' 0&- - ' =<' \@' ><?-A1- ' =&?' '10' A10&? D' @&C ' 01<@L' <0' E &, -& 0' 8&C <0' 1-10BD<@L' A10' = '10' &?' A1@L' ><?L' =<'0&? 0' 0&?C '= B1<?- \' H'@0' A1@' 1- ' '1@L' A'0 1001@1 0" C '01\' A1'-0 Q+'"\P' & 0' <C0' @1' 1B1 ' A10' A' 1' 10@ I' 0'@0' -1' ='B1- ' H' @10' C '10' 1-0" . 1+1\'

C1- ' H1B&-H@ C0&-1' #'1-0' &?' BD< 1?L' +1' .-=& \' D& 0

@2H ' C ' 5 < 'C5 ' ' \

=& ' 0?BD' <a'-.@ '=' D1 ' #1' 1<A ' &' ><a1' =?@@ 10 'j ? '&-' &=' D1' 0<>1' D'C0' <-A' 1 BD<-A'010@ K' D'-' 1<0&-<#@1' '>1' <= 1 ' D<' =?@@ `' , -&K@1A.1' '0' ><A1' ' ' &' D1>' &=' 0?==B'1-' 1 1 0' &=' <=1' &-A?=@;' =& ' D1' 0<>1' D'C0' <-A' 1 BD<-A'010@ '- &@@1A' '-' D1' 0<'A' D<-B1 ' &=' 1B& A' #1=& 1' D1' <a'-.' &=' D1>;' &+'A1A' <@0&' D<' D'0' A'-<-B1' 0D<@@ #1.'-' &' D&@A' D'0' !& B1' <' D1' !1<0' &=' <'-' 'BD<1@ D1' BD<-.1@ -1L ' B&>'-.

@ ? ' 0<'A' &+1 1'.-' & A' D1' ,'-.' D< D' & A<'-1A' # ' D1' ? D& ' ' <=& 10<'A@ D<' -&-1' &=' D'0' @'1.1' 1&C@1@ <.<'-0 ' KD&>' L'.1-A' 0D<@@ #1' <K< A1A' ' ? @<K ' C &-&?-B1A@ <' D1' ?' '&=' D1' ,'-.' & ' <' D1' ?' '&=' D1' < @ '-' '>1' &' B&>1' '-' D1' &?- ' &=' <-B<0 1 @ 0D<@@ =& =1' ' <- ' &=' D'0' E&&A0' & ' D< 1@0@ <-A0' & ' 1-1>1- 0@ 0)' KD'BD' D1' 0<'A' ? @<K0@ & ' ='1 ' <.<'-0 ' KD&>' 0?BD' L'.1-A' 0D<@@ #1' <K< A1A' ' -' D1' 0<'A' &?- ' &=' <-B<0 1 @ D<+1' '-' D1' 0<>1' &?- ' @ -A' D<' # ' 1<0&-' &=' <- ' 0?BD' ? @<K ' <' D1' ?' ' &=' /)' <-& D1 ' 1 0&-' C &-&?-B1A' K' D'-' D1' 0<'A' &?- ' &=' <-B<0 1 @ & <-' 0D<@@ #1' =& #< 1A' -& ' A'0' <#@1A' &=' <- ' ><--1 ' &=' =@'& -@ & ' & B@<'>' <- ' ><-@ -1 ' &=' -D1 ' <-B1' &? ' &=' D1' 0<>1' &?- @ -& ' A'0<#@1A' & 0?1' <- ' ><--1 ' &=' E'&-' &? ' &=' D1' 0<>1' &?- @ & +A D0 <-A'-.' 0?BD' ? @<K ' ?C&-' D'>' C &-&?-B1A';' &+'A1A' <@K< 0@ D<' D1' < ? 1' ><A1' D1' ! ' 0 ' 1< ' &=' ,'-.' 1- ' D1' !&? D@ E <-A=< D1 ' &=' `' D1' ,'-.' D<' -&K' '0@ 0P' <.<'-0 ' D1' 1&C@1' &=' D1' &?- ' &=' D10 1 @ KD'BD' A&' &' ><- ' &=' D1' ,'-./0' @'1.1' 1&C@1' '-' A'+1 0' &?- '10' &=' -.@<-A' ><- ' <-0@<?.D 1 0@ ? A1 0@ &##1 '10@ < 1 '10@ 10C<0010@ <-A' & D1 ' '& 0' <-A' ==1-B10@ 0D<@@ 0 <-A' '-' D'0' =& B1@ D'0 A'-<-B1' 0D<@@ 1-A? 1' '@@ K' D0 <-A'-.' ' -A' D<' D'0' A'-<-B1' 0D<@@ 1-A? 1' '@@ D1' -A' &=' 1+1-' 1< 0' -1L ' 1-0?'-.

@ !& <0>?BD' <0' <' D1' . '1+&?0' &>C@<'-' ><A ' &' D1' '-.' # ' D1' &> >&-0' ` -' D1' &?- '10' ==' 1 1=& A@ E@&?B10 1 @ <-A' &=' D &C0D' 1@ KD'BD' &?C '10' #1' <A &'-'-.' &' D1' < BD10' &=' F C@10@ <-A' Q'-' D1' &?- '10' &=' &>1 01 @ D10 1 @ <-A' '0 &@@ ' ' K<0' 0D1K1A' &' D1' 0<>1' &?' ' &+1 1'.-' & A' D1' ,'-.@ D<' F D1 1<0' <-& D1 ' '>1' '-' '>1' &=' D1' -&#@1' ,'-.' 1- @ E <-A=< D1 ' &' &?' &+1 1'.-' & A' D1' ,'-.' D<' -&K' '0@ D1' 1B&-A' 1 ' &=' D'0' C@.-@ =& ' D1' . 1<' CC 100'&-0' <-A' L & '&-0@ KD'BD' D1 ' &=' F <@10' <-A' &=' D1' < BD10' &=' F <@10' A<'@ ' ><A1' &' 1&C@1' AK1@@'-.' '-' D1' 0<'A' &?- '10' &=' 1 1=& A@ E@&?B10 1 @ <-A' D &C0D' 1@ '-' <a'-.@ # '-.'-.@ <-A' #1< '-.' <K< ' &=' D< ' & 010@ 1<0 0@ <-A' & D1 ' N)' E&&A0' <-A' D< 1@0@&?' &=' @ 1'0<>1' &?- '10' -' &' D1' <'A' < BD10@ <-A' 0?BD' E&&A0@ & 010@ <-A' D< 1@0@ D1 1' K' DD&@A@ '-.' '@@ E 11' Q#1' ><A1' <' D1' ' F '@@ ' K<0' A<'-1A' <-A' 10 <#@'0D1A' D< ' '=' <-' ' =h)' 1<0 0@ E&&A0@ & ' D< 1@0@ Q#1(' <a1-' K' D'-' D1' 0<>1' &?- '10@ <-A' A '+1-' & ' # &?.D ' &?' &=' D1' 0<'A' &?- '10' '- &' F <@10@ & ' '- &' D1' < BD10' &=' F <@10@ D<' D1-' D1' D1 '=0' &=' D1' <>1' 1>-'10@ < & 0' K' <'@'=0' &=' ' '10' <-A' & &?.D0@& ' <'@'==0&=' ! <-BD'010@ KD1 1' 0?BD' <a'-.0' Q#1(' ><A1@ `0D<@@0 P' 01-A' D1' ' 1 1 0' ?-A1 ' D1' ' D1' ' 1<@0' &' D1' E&+1 -& 0@ & ' &' D1' 1K< A0' &=' D1' 1'.-'& '10@ KD1 1' 0?BD' ==1-A1 0' Q#1' <#'A'-.@ D<' D1 ' `0D<@@/P' A1@'+1 ' 0?BD' "'0 1001@0' 0&' <a1-@ K' D'-' '.D ' "< 0' &=' D1' 1B1'C ' &=' D1' 0<'A' 1 1 0@ <-A' '=' D1 ' `A&OJP' -& @ D<' D1' < '10' 0&' . '1+1A' `0D<@@/P' <a1' <- ' 1 0&-' E&&A0' & ' D< 1@0' B&>'-.' &?' ' &=' D1

)^$ 1 2 ' ' ' M '.$" 'C '$ * ' 9$$% ' %'. * 'L % ' %'! ' ' 'E 1 '$ ' ' " '$ @ ' %'E 1' J <' 'W" ';$ ' ,' $"'%@ '% %

3". '&2.' ." ' ' ' # & ' 2 .' !2 &"!<

.-&-96&#!' .' &Z /&

' '=' 2' .' 0" *!Z ;@V!+2 1!-

0)#)

#! &# #@ .

V!+2 1!-' 7".-* 0+@ E&-*' -@ -*+&2 1!-' &- .' V +!2' =' /! &-&-*' !1' !"!' E0.7 *' !1' .' '!' ;!!-' E!-:' /!#+ "!/' *0&+ @' .

"! 2.-

3".#!22 !"!.-

.-&-0 -#!' . ' &2

!-&j!-2 2 +' @' 02.12 2 +&!-2' .'' +' V..+ !% ." !/'' !%#! ' .' !' <C@1

0<'A' 1'.-'& '10ᵍ KD1 1' 0?BD' '!1-A1 0' 1 P' <#'A'-.ᵍ <-A' D1>' 0D<@@ K' DD&@Aᵍ '@@ D<' D1 ''`#1 P' 10 & 1A' &' D ' ' E&&A0' 0&' <a1-ᵍ K' D' D1"R "<><.10ᵍ &0 0ᵍ <-A'QLC1-B10'ˌ' F D'BD' < ? 1'1'0' -& '0?=='B'1-' 1>1A ᵍ !& <0>?BD' <0' D1' 0<'A' ==1-A1 0' #1' `AK1@@'-.' 0&>1j '>1' '-' -1' 1'.-'& ' <-A' 0&>1 '>1' '-' <-& D1 ᵍ <-A' D<+1' -&' @< 1' B1 <'-' &' < 'G <-A' <' &' D1 ' <a1' &' D1' >&0 ' ?>#1 '&=' 1&C@1'&=' D1' 0<'A' &?- '10' B&>'-.' '- &' F <@10ᵍ <-A' '- &' D1' < BD10' &=' F <@10ᵍ <-A' &?' &=' D1' 0<'A' &?- '10ᵍ <-A' D1>' K' DD&@Aᵍ '@@ E=11' #1' &' D1>' ><A1' <' D1'' F '@@G' <-A' <@0&' &=1-=' -1 ' D1' < '10' . '1+1A' A? 0 ' -& ' ><a1' L1B? '&-' &=' D1' 0<'A' < ? 1'=& ' " &?# ' &=' "1< Dᵍ <-A' >< - ' & D1 ' '0BD'1=1' <-A' -B&-+1-'1-B'10ᵍ KD'BD' D1 1&=' 0D&?@A' 1-0?1ᵍ 0& D< ' D1' 0<'A' ==1-A1 0' #1' D1' >& 1'#&@A' &' <a1ᵍ A '+1ᵍ # '-.ᵍ <-A' B< '<K<' D1' 1&C@1'&=' D1' 0<'A' &?- '10ᵍ D ' ' & 010ᵍ 1<0 0ᵍ E&&A0ᵍ <-A' D< 1@0' 3)' &=' D1' 0<'A' &'> '10' '- &' F <@10ᵍ <-A' '- &' D1' < BD10' &=' F <@10ᵍ `KD' D1 ' D1 '=@1A/P' #1=& 1' D1' <'A' < ? 1ᵍ &' D1' C1 C1 ?<@ "10 ?= '&-' <-A' >C&+1 '0D>1-' &=' D1' 0<'A' &>>&-0ᵍ 1LB1C ' D< ' 0C11A ' 1>1A ' D1 1&=' #1' ><A1ˌ ? ' 0<'A' &+1 1'.-' & A' hᵡ K'@@'-.' <.<'-0 ' 0?BD' '0BD'1=0' <-A' -B&-+1-'1-B'10' &'C &+'A1'<' 1>1A ᵍ '-' D'0' 1D<@=ᵍ D< D' & A<'-1A' # ' D1' ? D& ' ' <=& 1j 0<'Aᵍ D<' '='<-' 1&C@1'&=' D1'0<'A' &?- '10' `'-' F <@10ᵍ & ''-' P' D1' < BD10'&=' F <@10ᵍ `A&' A '+1ᵍ # '-.ᵍ B< ' <K< ᵍ & 'K' DD&@AOPᵡ 0?BD' <a'-.0' 0)' <-A' F ' DD&@Aj '-.0ᵍ ` D1' ' ##1 >1-0' <-A' 1B1'C 0' '-' F <@10ᵍ D1 ' D<+'-.' , -&K@1A.1' WP' &=' 0?BD' ='1-B10' <=& 10<'Aᵍ 0D<@@ #1' <A ?A.1A' '.D' 1<0&-G -A' D1' D<' '0' D1 1&=' < <'- 1Aᵍ ' '0D<@@ #1' A&-1' &=' D'>' <0' &=' <' <' & ' &' &? ' 0<'A' &+1 1'.-' & A' D1' ,'-.'G <-A' D<' D1' ?0 'B10' &=' 1<B1' '-' D1' ' 100'&-0' '-' D1' 0<'A' &?- '10' 0D<@@ D<+1' &K1 ' &' '-H?' 1ᵍ D1< ᵍ <-A' A1 1 >'-1' &=' <@@ 0?BD' =j =1-A1 0ᵍ D1' ' #1 & 0' <-A' '1B1'+1 0ᵍ <-A' &' ><a1' &j B100' <.<'-0' 0?BD' 1 0&-0' '-A'= 1A' # ' K&' <C'<0' <-A' -1' L'.1-Aᵍ 1+1 ' <C'<0' B&- <'-'-.' D1' C<B1'&=' K&' &- D0' < ' D1' @1<0 ᵍ #1 K'L ' D1' " < 1' &=' 1+1 ' <C'<0' <-A' D1' " < '&=' D1' 1 ? -' &=' D1' 0<>1G <-A' D<' 1-j '&-' #1' ><A1' '-' D1' 0<'A' F ' 0' &=' <C'<0' D<' D1' D1j '=0'&=' D1' 0<'A' &?- '10'=& ' D1' '>1'#1'-.' 0D<@@ ``A&' &' #1' C &B@<'>1A' 3P' '-' D1' ' &?- '10ᵍ D<' <@@ 0?BD' 1 0&-0' '-A'=#1A' 0D<@@ <CC1<' #1=& 1' D1' 0<'A' ?0 'B10' '-' D1' ' 100'&-0ᵍ &' <-0K1 ' &=' D1' < 1 0' B&- <'-1A' '-' D1' 0<'A' -A' '1- 0' &+'A1A'<@K< 0' D<' D1' ` 1'.-'& '10 0' P' < BD1 0ᵍ &=' KD&>' 0?BD' ==1-A1 0' D1' ' #1 & 0' <-A' 1B1'+1 0' D&@A' <-A0' <-A' 1-1>1- 0ᵍ 0D<@@ D<+1' D1' =& =1' ' &=' D1>ᵍ <-A' D1' & A0' < BD1 0' D1' !& =1' ? 10' &=' D1' ' E&&A0' <-A' D< 1@0' =&?-A' K' D'-' D1' ' 1'.j -'& '10ᵍ <= 1 ' D<' D1 ' 0D<@@ #1' < <'- 1A' &=' D1' ==1-B10' <=& 10<'A'ˌ -A' D<' D'0' A'-<-B1' 0D<@@ 1-A? 1' '@@ D1' -A' &=' 'L' 1< 0

ᵍ ? ' 0<'A' &+1 1'.-' & A' @'1' ,'-.' D< D' . <- 1A' <-A' & A<'-1Aᵍ # ' D1' ? D& ' '<=& 10<'Aᵍ D<' 1+1 ' 1 BD<-' "1-'\1-ᵍ =& ' F &&@0' F &&@=1@0' <-A' '-ᵍ KD'BD' 0D<@@ #1'BD< .1A'<-A'0D'CC1A''-'<- 'E<'@ ᵍ < <Baᵍ '& D1 ' 1001'ᵍ &' #1' # &?.D ' <-A' B< '1A' # ' D1' 1<ᵍ # ' D1' ,'-./0' 'B1-B1' & '& D1 K'01ᵍ &' & D1 ' @<B10' <-A' & 0' D<-' &' D1' <C@1'&=' D1' ,'-.ᵍ 0D<@@ C< ' &' D1' ,'-.' 0?BD' ?0 &>0' <-A' ?#0'A'10' <-A' & D1 ' "1+&' 0ᵍ <0' 1 j BD<-0' @'1-0') 'C< ' &' D1' ,'-.'=& '0?BD' 1 BD<-A'010'

<@2 ') $"*%' '$ % ⅈ 1')'$" ' ' '$ ')' 'E 1 (' 'F$$%' %'. * ' '$2 $ 1 "** ' * ' ' ' %'.$" ' ' ';** ⅈ %'$"'$ ' ' %'.$" 'C $'O * '$' $)'% "'$D ' %' " ⅈ$ '"""*M $*% ' ,'$' D 1 '6 $ ' %'N 2 ' 'O * 'M 1' $ " ' D' $ * $ ')'}L$ %')' %' 1

A10' A' \' = '10' &-' '1@a' ><? =<0&? 0' 0&?-' 1B1<?-\' I' 1?L' 1 1'.-' <-Hᵍ H'@0' 0&?-' 10 & 1\' <' @&?' #'1-0' 1-0" C '01\' &+10H '@&?' A<><.10' B&0 <.10' I' 1LC1-010' ˌ' @1' H?1@ 10 < ?' 1' -10 ' > 1' 1>1A 1' 0?=='B1<?-ᵍ <' B<?01' H'@10' A' \' ><?L= ''0&0' 0&?-' '+<./+K \' <0B?-' =&' \' 1-' ?-' = '1' I' <0B?-'=&' \' 1-'<? Hᵍ I' &?-' -? '@'1?' <' A1> 1 1' 1-' R 1 -1G I' <?L' C'.-1-' <' C@?'0' .:='-A' -&># 1' A10' .1 @ \' A10' '\' &?-10' +1'.-D \' 1-' E<@ 0' I' 1-' @10' < BD10' A1' E<@ 0' I' D& 0' A10' A' \' &?-10ᵍ I' 1?L' 1 1'.-1-' <CHᵍ . 11' <' 1?L' 0&='' ='''' '<' @&? '+&@?>1G I' <?L" 0&+1-'=&' \' @10' C '10' . +1\' -&01-'=<' 1'1L1B?B'&-' A1@' A@' 10 < ?' 1' C' AC? 1' A?' =@'& ᵍ I' C@?0&? 0' <?R0' >10BD'1=0' I' '-B&-+1-'1-' \' ' A?' 1& 1-0?1=ᵍ '0<-' H' @10' A' \' >< 'L'<'0& 0' 0&?-' C@? 0' #1<@'A1\' 'H' C=&A 1' BD<B1' <>10-1' I' 1>C& 1' @10' .1-' \' A10' A' \' &?-10' @&/' BD'+<@L'#10 1 '#'1-0' 5B BD< 1?Lᵍ D& 0' A10' A' \' &?-10' 1-' E<@ 0' &?' @10' >< BD10' A?' E<@ 0ᵍ H'@0' ='1 &-' A1+J-' @1' A' ' 10 < ?' 1ᵍ <' CC1 ?1@@ A10 ?BB'&-' I' 1-C&, 10018' >1-' A10' A' \' &10' 0'-&-' H' D<0 " 1>1A'1' 1-' 0&=' =<' ˌ' =1' A' ' _ ' = ' &" +&'@@<-' 1-B&?-1' '1@L' >'0BD'1=0' 5B '-&-+1-'1-B10' C? +&'1 ' A1' 1>1A'1' 1-' B10 ' C< '1ᵍ <A' & A1'.-1' C' @<?A@& ' 1' A10?'0A' ᵍ H1' 0" <0B -0' .1-0' A10' A' \' &?-11<' @&' #'1-0' I' BD< 1?L' 0&'1-' <' & ' C 01\' 1-' @10' A' \' &?-10ᵍ C' <0B?-' E<@& 0' I' D& 0' A10' A' \' &?-110' 1-' E<@ 0' &?' 1-' @10' < BD10' A1' E<@ 0' 1-' BD<B10' <>1 -1' 1>C& 1\' &?' 1 1'.-1ᵍ 00&'1 ' '1'L' C '010' &?' C '0' I' 1 1'.-1 0' @&' <##1 &0' 5' 1B1 &0' 1-' E<@ 0' 1'<?-\' B&-'0<?-\' A10' '1DB' ><'==<' \' 0?'0A' 0' <A ?..' .0?- 10&-G I' H" A1' B1& 0&=' < <'-' 0&=' =<' ' A1' @?' B&>1' A?' <' &/' <' -=1' A' ' = '@1' &'G 1' H' @10' ?0 'B10' A?' C110' 1-' @&' 0100'&-0' 1-' @10' A' \' >> 10' 1'1-' C&<' 'A1-H?1 1' &'1' 5B A1R> '1' 8A10' &?\' '1@L' ><'==<'0&? 0' @&?' <#1 &0' B 1B1 &0ᵍ 5B A1' =<' 1'CB1 ' 1-,0' '1@L' 1-A' 10' C' A1?L' <C'<0' 5B 1L'. = ' BD1 B?-' <C'<0' B&-1-W-' @1' C<B1' A1' A1?L' >&0' <?' >1 -0' C1- 1' @1' A< 1' A1' BD1a?-' <C'<0' I' '= ' &' A1' 1&-1' A1' B1 G 1' H1' >1-B'&-' 0&=' =<' ' 1-' @10' A' \' # 1+10' A1' <C'<0' H1' @10' '0B&?-\' A10' A' \' &?-110' C? ' @1' 1>C0' 10 1<?-\' =1B'1-' CB@<> 1 1' 1-' @&?' &?-11\ᵍ H1' &?\' '1?L' 1-A' 11\' B&>C&?-' A1+W-' @10' A' \' ?0 'B10' 1-' @&?' 100'&-1\' I' 10C&-A 1' A1' @10' >< 1 0' B&-1-?m' 1'@ @10' A' \' 1-A' 1>1-\' ? +& ' &? \'=&= \'H1' @10' 1'.-&10' < BD1 0ᵍ A10' H? L' '1?L' >< =10&? 1\' @&?' <#1 &?0' I' 1B1 &0' 1 -& -' '1 \' 5B 1-1>1-\ᵍ 1'1-' @1' =# =1' A10' B1?Lᵍ 1' @10' = 10' < BD1&? 1\' @10' =& =1=&? 10' A1' @&?' #'1-' I' BD< 1?L' A1'-0' @&' 2 ! &+1\ᵍ <C0' B1&' H1' @0' 0&'1-' < 1'- \' A1' >=11 \' 0?'0A' \G 1' H' B10' & A1-<@-B1' 0& ' 1-A? 1' <-Hᵍ <@ = -1' A1' +' ' <-0

1>' -=1' A=' '' = ' @1' & ' <A' ./?-1' 5B & A '.-1' C' @<?B & ' 1' A10?'0A' ' H1' BD10B?-' >< BD<?-' A1-'01-ᵍ C? ' @<'-10' C1@@10' @<-? \' I' 10 1 -1' H' M &?-' BD< 8' .1\' 5B 10a'CC1\' 1-' <0B?-' E<@1 ' < <a' &?' <?@ 1' +1001<@ '10 1'<>10-10' 5B B< '1\' C<' @1' >11 ᵍ C' @'B1-B1' A?' & ' &?' <?@ 1 <1-ᵍ <0' <?@ 1' @'1?L' I' =& \' H' <' @<' 0 <C@1' A?' & ᵍ C<'1 ' <?' & ' '1@L' B?0 ?>00' 0?#0'A110' I' <?@ 1\' A1+&' 0' B&>1' ' BD<?-=\' <@'1-0' 10=?-.'1 0' C<'1 &-' <' & ' C? ' '1@L' ' BD<?-A'010;

W' 1>ℊ !C <0>?BD' <0' # ' D1' <K' & A<'-1Aℊ -&' <-' >'.D ' B< ' -& ' # '-.' &>' &?' &=' D1' 1<@>' &=' -.@<-Aℊ K' D&?' D1' ,'-./0' 'B1-B1ℊ # ' <?01' KD1 1&=' !< >1 0' <-A' & D1 ' 1-ℊ KD'BD' ?01' <ℊ -? 1>1-' =' D1'' <-Aℊ '-< ' -& ' 01@@ D1'' &>' #?' <' <' @&K' 'B1ℊ &' D1' . 1<' <>< .1' &=' <@@ D1' 1<@>;' ? ' 0<'A' &+1 1'.-' & A' D1', -.ℊ K'@@'-.' >' D'0' <0D' &' C &+'A1' 1>1A ℊ D< D' A<'-1A' # ' ?j D& ' ' <=& 10<'A' D<' ' ' D<@@ #1' @<K=?@ &' 1+1 ' 1 j 0&-' &'0D'C' <-A' B< ' <'@ ><--1' &=' &>' <-A'E <'-' &?' &=' D'0' 1<@>ℊ'- &' KD<' @<B1' D'>' 0D<@@ @'a1ℊ 1LB1C' &-@ ' &' D1', '-./0' -1>'10ℊ <0' &= 1-' <-A'<i' @&-.' <0' < ^?< 1 ' &=' F D1< ' 1LB11A' -& ' D1' 'B1' &=' + ' 0 ' +-'' A' <-A' < ^?< 1 ' &=' < @1 ' D 11' D'@@'-.0ℊ '-' D<' & ' KD1 1' D1' F D1< ' & ' < @1 ' '0' 0& 0D'CC1Aℊ <-A' D<' K' Dj &?' 0?'-.' <- ' 'B1-B1' =& ' D1' 0<>1@ < @' & D1 ' A'j -<-B10' ><A1' &' D1' B&- < ' -& K' D0 <-A'-.;' &+'A1A' <@K< 0 ' D<' D1', '-.' #1' B&- 1- 1A' &=' D'0' ?0 &>0' <-A' " ? '10@ -A' D'0' A'-<-B1' 0D<@@ 1-A? 1' '@@ D1' -1L ' < @'<>1- ? '0<'A' &+1 1'.-' & A' D1', '-.ℊ ! & <0j >?BD' <0' D'0' < ? 1' '0' -& ' -&K' '-' D'0' ! & B1ℊ <-A' D<' ><- ' &?- '10' <A &'-'-.' &' D1' 1<ℊ >< ' -& ' 01@@ D1' ?#0 <-B1'&=' D1'' & -ℊ#?'# ' < '<.1'<-A'# '-.'-.'# ' D1' 1<ℊ D<' D' & A<'-1A' # ' D1' ? D& ' ' <=& 10<'A' D<' D1' < ? 1' <-A' A'-<-B1' <=& 10<'Aℊ -&K' 1LC' 1A' <0' <=& 1'0' 0<'Aℊ 0D<@@ #1.'-' &' D&@A' D'0' ! & B1' < ' D1' ! 1<0 ' &=' D1' < '+' '&=' &? ' <A ' -1L ' 1-0?'-.ℊ <-A' 0D<@@ 1-A? 1' = & >' D1''H1' '@@ D1' < @'<>1- ' -1L ' &' #1' D&@A1-' <= 1 ' D1' 0<>1' ! 1<0 ℊ 0&' D<' ' < @'<>1- ' #1' D&@A1-' K' D'-' 1-' 1< 0' -1L ' 1-0?'-.' <= 1 ' D1' =' 0 ' #1.'--'-.' &=' D'0' C 101-' < @'<>1- G' -A' '=' 0&' #1' D<' D1 1' #1' -&' < j @'<>1-' D&@AC-' K' D'-' D1' 0<>1' 1-'1< 0ℊ D<' D1-' ' ' 0D<@@ B&- '-?1' <-A' 1-A? 1' '@@ D1' -A' &=' D1' 0<>1' 1-' 1< 0ℊ

ℊ ' 0' . <- 1A' <-A' & A<'-1A' # ' D1' ? D& ' ' <=& 10<'A' D<' ''=' <- ' D1 1<= 1 ' # '-.' <- ' 1 BD<-A=110' B&>'-.' = &>' <- ' < 0' #1 &-A' D1' 1<ℊ &' <- ' A '& ' C@<B1' K' D'-' D1' <-A' &=' F <@10ℊ <-A' <= 1 ' D1>' 01-A' '- &' -.@<-Aℊ <-A' D1 1' A'0BD< .1' D1>' &?' &=' <- ' D'C' & ' 1001@@ D1' ?0 &>0' <-A' ?#0'A'10' D1 1&=' &' D1', '-.' -& ' C<'Aℊ & ' '=' <- ' 1 0&-' '-' <- ' &=' D1' 0<'A' & 0' <-A' @<B10' '-' F <@10ℊ 0D'C' <- ' F &&@0ℊ F &&@=1@0ℊ & '& D1 ' 1 BD<-A'01' &=' D1' <C@1ℊ &' #1' ``# &?.D P' & D1' < 0' #1 &-A' D1' 1<ℊ -& ' B?0 &>1Aℊ -& ' @'1' ?#<A ' W)' &' D1', '-.' -& ' C< 1Aℊ h)' 0D<@@ =& =1' ' D1' 0<>1' E&&A0' <-A' 1 BD<-A'010' <-A' D<' D1', '-.' 0D<@@ D<+1' D'0' ?' ' -' D'0' 1D<@=' '-' D1' &?- ' -1L ' <A &'-'-.' '-8 -.@<-A' &' D1' & ' S O) '-' D1' KD'BD' 0?BD' 1 BD<-j A'010' 0D<@@ #1' 0D'CC1A' & '# &?.D ' '- &' F <@10;' -A' D<' D'0' A'-<-B1' 0D<@@ 1-A? 1' '@@ D1' -1L ' < @'<>1-

ℊ ' '0' & A<'-1A' # ' D1' ? D& ' ' <=& 10<'A' D<' D1' < ? 10' #1=& 1' D'0' '>1' ><A1' &=' ? +1 & 0' <-A' ? 1 0ℊ 0D<@@ 1' D&@A1-' <-A' a1C ℊ <-A' C? ' '-' A?1' L1B? '&-;' -A' '-' <01' D<' <-' ? +1 & ℊ ? 1 ℊ & ' <a1 ℊ K'@@ <a1' `<-A'/' P' ><a1' ? +1 <-B1ℊ & '#? ' <-' '@'-.' &' D1' <@?1' &=' ! & ' D'@@'-.0' & ' ?-A1 ℊ &=' <-' 1 0&-ℊ <-A' ><a1' -& ' 1<A ' < >1-' '-' <-Aℊ D<' D1-' ' ' 0D<@@ #1' @<K=?@ &' 1+1 ' &=' D1' , '-./0' @'1.1' 1&C@1' &' 1 <'-' D1' ' E&&A0' <-A' D< 1@0ℊ <-A' &' 10'0' 0?BD' ? +1 & 0' `<-A' ? 1 0ℊ 'P' <-A' '-' -&' + '01' 0?=1' D1>' &' ><a1' <-' 0?BD' ? +1 <-B10ℊ ? '-.0ℊ & ' <a'-.0' -A'=& ' D1' 1<B1' #1 1' &' #1' a1C ℊ D<' 1+1 ' &-0 <#@1ℊ D'-.><-ℊ & 'BD'1=' @1A.1' &=' 1+1 ' &K-' & ' <>@1 ℊ KD1 1' 0?BD' <a'-.0' & ' ? +1 <-B10' 0D<@@ #1' ><A1ℊ 0D<@@ #1' <'A'-.' `& /P' <00'0 '-.' &' D1

1>' C? ' B1&' H' C' @1' @1 ' & A1'.-1' -? ' D&>1' C&1 ' B< '1 ' -1' <>10-1 ' #@10' D& 0' A?' &'<@>1' "1-.@1R 1' 0<?-\' @'B1-B1' A?' & ℊ C'B<?01' A1' H?1=' =1 >& 1\' I ' <?R0' D&>10' H" ?01-' > --&?1-' A?' @&? 'R 1' -1' C&1-' +1-A 1' @&? ' #@110' 0'-&-'<' #<0' C 'B1ℊ <' .0?-A1' A<><.1' A1' &?' @1' &'<@>1G R1' '@1' & '+&'@@<-' 1-' B1&' B<0' C? +&'1 ' A1' 1>1A'1' <A' & A1'.-1' C' <?=@& ' 1' A10?'0A' ℊ H1' #'1-' @' <' <' BD101+>' D&>1' 10a'CC1 ' I ' B< '1 ' &? R' << 1\' A10' #@11 ' I '. <'-10 @& 0' A1' B10 ' &'<@>1' <' HB&-Hℊ ,1?' H' @? ' C@1-<ℊ =& C '0' <?- 0&?@>1-' <' B0' 1-1> 0' A?' & ℊ 0 '0&+1-' I ' <?- @&-.1>1-' B&>1' ?-' H?< 1 ' A1' = ?>1-' -1] B1A1' C<0' @1' C 'B1' A1' +' 0' +''' A' I ' ?-' H?< 1 ' A& .1' '' '0' 1-' 'B1@@ C& ' @&?' = ?>1-' &-' & .1' 10 ' '1@@ > -' 10a'CC1ℊ I ' B1&' 0<?-\' < 1+>' @'B1-B1' 0?1 ' C? ' 'B1 I ℊ &? \' <? 08 & A1-0-B10' <+W-' =<' \' 1-B&- 1' -'1-' &#0 <-\G F+1<' &? R' =&' \' H1' @1' & ' 0<@' B&- 1-' A1' 01\' B?0 ?>10' I ' A1-'1 'G 1 ' A?' <' '110 1' & A1'.-/-B1' <-Hℊ <@ C1# '-' C < ' 1 > = 1 - A ' ' ?' @1' & 'C? ' B1&' H' B10 ' 10 < ?' <' & i' -10' 1-' 0<' =& B1ℊ I ' H' C@?0& 0' 1C?- 11\' <A & -0- \' <' @1' >1 ' -1' C&1-' +1-A 1' @<' 0?#@ 0 ?-B1' A1' @&? ' #@110' 0'-&-' C' B< '<.1' I ' <>10-1 ' C' @1' >1 ℊ <A' & A1'.-1' C' @<?= & ' 1' A10?'0A' ' H' @10 < ?' I ' & A1-/-B1' <+W- A' ℊ & 1' 1LC' 1' 1&>1' A10?'0' 10 ' A' ℊ BC>1-B1' <' A 1' 0<' =& B1' < <' =10 ' A1@ < '+ 1' A1' -=1' "<>1' C D1@->1-' 1-0?<- ℊ I ' 1-A? <' ?!' 'B1=' =10 ' 10H10' <@ C< @1>1-' C0BD1->1-' <' 1-'1 ' <C 0' >10>1' @1' =10 ℊ '0i'-' H1' ?-1' C< @1>1-' 0&=' 1-?\' A1'-R' @10' L ' <-0' C0BD1-1>1-' 1-0?<- R' C?'0' @1' B&>1-B18' >1-' A'B10 ' C01-" C< @1>1-G 1 '0'0 -?@@ C< @1>1-' 0&=' 1-?\' A1'-\' >10>10' @10']' <-0ℊ <A&-H10' H'@ 1-A? <' 10H10' <@ =' -1' A1' >10>10' @10' L ' <-0

1>' . <?- 1\' 10 ' I ' & A '. -1\' C' @<?I & ' 1' A10?'0A' ℊ H' 0" <0B?-' 1-<C0' <>10-1' <0B?-0' >1#<-A'010ℊ +1'. -D' \' 10' C< '10' A1' CA1@<ℊ <' <0B?-' C& ' &?' @'1?' A1'-\' @<' R 1' A1' E<@10ℊ I ' C?'0' @10' 1-+&'<' 1-' -.@1 1' I ' '@@&H10' @10' A'0BD< .1<' D& 0' A<0B?-' -'1=' &?' +1001@@ℊ @10' B?0 ?>10' I ' 0?#0'A110' 1-' <' &" -'1-' C<'1\ℊ &?' 0" <0B?' C0& 1ℊ 1-' <0B?-' A10' A' \' C& \' I ' @'1?L' 1-' E<@ 0ℊ 10a'CC<' <0B?-0' @<'-0' C1< L' @<-? \' &?' <?R0' BD<?-A'010' A1@ 10 <C@1' A10 1' <>10-1\' <0' C< '10' A1' CA1@<' -'1-' ?0 ?>1\' & ' @1' 0?#0@A'1' 1-' <' & ' -'1-' C<'1R ℊ =& =1B1' >10>10' @1 ' #'1-0' 5' ' BD<?-A'010' G 1 ' H' @1' & ' 1' ' 0&-' 0? '1-' B1&' C '1' 1-' @1' &?- 1' C0BD1'-' <A & /-' 1-' -.@' 1' <' @1' C& ' &?' @'1?' <' H'@ '1@L' BD<?-A'010' M=' 10a'CC10' &?' <>10-1\' 1-' E<@10;' 1 ' H' B10 ' & A1- ''B1' 1-A? <' <-' f' <@ C0BD1'-' C< 1>1-

1>' & A1@.-1\' 10 ' C' @<?=@& ' 1' A10?'0A' ℊ H1' @10' 10 <@ ? 0' A1+/-' B10' D1? 10' ='' R' A10' ? +1&? 0' I ' BD< 1/0' 0&'1-' 1-?\' I ' .< A1\' I ' > 0' 1-' A?1' 1L1B?B'&-' G ' 1<' B<0' H1' <0B?-' ? +1&' BD< &' C?' C-&? ' +1?@1' C''.-1 ' &?'=<' 1' C +1<-B1' &?' <BD< 1' A<0B?-' BD&01ℊ <' @< +<@?1' A1' Lℊ 0 ' &?' A1A1'-0ℊ A<0B?-' C0&-1' I ' -1' =<B1' C 10 ' C<'1>1-' 1-' C& -ℊ H1' <A&-H10' #'1-' 01' <' BD10B?-' A10' @'1.10' @1' & ' @& ' #'1-0' I ' BD< 1?L' U1'.-1 ℊ I ' '1@L' C? +1& 0' <BD< & 0' &?' C-& 0' 10'0 1 ℊ I ' 1-' -?@@ >< 1' 1?L' 0?== 1 ' A1' =<' 1' '1@L' C +1<-B10' <BD< 10' &?' C '0d ' ' C? ' @<' C1<0' >1?L' <' 10 1' .< A1ℊ H' BD10B?-' &-10 <#@1' D'-.><-' &?' BD'1=' C@1..1' A1' BD10B?-' +' @1' &?' D<>1@'ℊ &?' '1@L' C '010' &?' C? +1<-B10' 01' =1 &-ℊ 0A' ' 1'A<-' I

!' < 0 !' J ' 6ℊ' #.-&-0!/' 0-&=' !'-!%' 3 "+& 1!-'=' .'" '" .' A! "2

B."!& -' 1 BD<-A'01' 22&-*' ".0* ' .'" !% ." ! /' ". 1' V +!2' 7& .0' 02 . 1' &/' 2 +=' !' ." !& ! /

0& ' &- /H.&-&-* .0- @

.-&-0 -#!' . ' &Z /H&J

@ 0 1Z' Z' . 30"' !@ -#! #.-&"1!/

30"' !@."Z E&-*' .' !' +0!' . B." @' &+L' +&-*2. "0-/!" ' 7& .0' 3 @k 1!- ' 1 @ ;.' "!2&2 ! /

.-2 ;+!2' *"#' 2 +=' 22&2' 20# ' 6!2&2 -#!

<00'0 <?- ' <' @1' C&00100&? ' &?' +1 - A&? ' A1' '1@L' BD&010 1 - B&?- 1' @<' =&? >1' A1' B10 ' & A1 - 3 - B1' <CC2 - A 1\ A1' ='''' 1' 10'0 1 - B1' 1 -' @<' =& >1' 0?'0A' ' 1 -' B<0 H' '1@L' &-10 <#@1' D - . > <-' &?' BD'1=' C@1 . . 1' <' B1&' =<' 1' 0&' ' 1H?'0 0? ' C1 -1' A1' 1 - A 1' <' @<' C< '1' 1 - 0" . 1+1' @<' +<@?1' A1' BD&010 '00' - ' C '01\' &+1' 010 A<>< .10 <' A&?#@1' ; ' H' - ?@@ A10 @'1 . 10 A?' & ' 0&' ' > 0 1 -' CA1' ='-1' <?-0&-' &?' B&- 1>C @ &?' 1 - A<>< .1' C' @1' & ' &?' C' <0B?-' A1' 010 '-'0 10 &?' &=='R0 C ' '1@L' 1 1' . 0 @10'0 1 - B10 I ' - &?-0?@!1 <?- B10; ' H' -? ' A10 A' \' '-'0 10 &?' ='B1 0 @1' & ' =<B1' < 10 1 1' +1L1 ' &?' 1>C@1A1 @ 1 -' @<' &? ' A1@ < BD<@B'1' &?' <'@@&? 0@ <0B?-0 A10 @'.10 C? ' '1@L' 1 1'. 0 10'0 1 - B10 &?' -&?-0?=1 <?- B10 <==<' 1@ 0? ' C1 -1' A1' LL'=' ' <' CA 1@ @?-1' >&' 1' A1' B1& <@ & ' I ' @<? 1' >&' 1' <' B1@@? ' H' +&1 ' 1 -' '1@ B<0 0?1 ; ' H' @10 ?0 'B10 A1' @<' C1<0 1 -' BD10B?-' &?- 1' 1'1 - ' C&1 ' C' <?E& ' 1' A1' B10 ' & A1 @ - B1' A1 - H?1 1 ' &'1 ' I ' R>' - 1 @ 0" #'1 @ <@ 0? ' A?' & ' B&>1' A1' B1@@ ' H' +&1 ' 0?1 @ A<0B?-' BD&01' =<' ' 1 - B&?- 1' B10 ' & A1 - W - B1@ I ' A1' V1 - ' =<' 1' A?1' C?- '00D1>1 - ' I ' 1L1B?A&- @ I '<.< A1 ' A<j ><.10 <' @<' C< '1' C@1' - '=' H<?- ' <0B?-' A1=1 - ' <- ' 1 - ' 0&' ' A?1>1 - ' B&- + 'EG ' H1' 1 -' BD10B? " <BA&-' 0? ' B1 ' & A1 - D'B1' <C - A 1' BD10B?-' C< '1' A1=1 - A<- ' 0&' ' <' 1&' A 0' <' 10C&?-A 1' 0<?- \' 1'A1' A1' & ; ' H1' 1 -' '1@L' <BB'&-0 <CC - A 1\' 0&' ' C 1001' =<' ' B&>1' 1 -' # '1=' A1' 10C<001' =1' ' 1 - B&?- 1' @< 110; ' H' 1 -' BD10B?-' B&>'00'&-' <0 ? +1 ? 0 BD< & 0' &?' C - &? 0' <==<' 1' 0&' ' B10 ' & A1 - =' B1' B&- 1 - ?1' I ' 1] C F ; '1<&? 1' H1' ' & A1 - - B1@ 1 - 1' <? 10' 10 < ? 0' A10' ? 1&0 BD<=& 0' &?' C - & ' A1+0 ' ' B10' D1? 10' ='<@ \@ 0&'1 - ' ><?- A1\' 1 - ' BD10B?-' &?- 1' "1 - .@' 1' - 0' '0B&?- \' ==1' B1?L@ C? ' CB@< >1 ' I ' A1@'+1 ' @10' AD\' & 1 - 0 - B10' I ' 10 < ? \@ 1 - ' @1 ' =&? >1' I ' -< '1' B&- 1 - ?\' 1 - ' '10 < ? ' A10' C +1&? 0' I ' <BD< & 0' =<' ' <-' A?' 1.C1' - =1' A ' ' ' @1' & ' C ' >1 @ 0? ' C1 - 1' B&- 1 - ?' 1 - ' >10>1' 10 < ? ' ' &? 1' B1&' @1' & ' +&1 ' I ' B& <<?- A1' H' 10 < ? ' ' <-' LLL+ \' A?' & ' A+ < A@ <A'0' & ')1 - .@1R 1' '1 B1' <C00 @1' B&- j H?10 @ &?BD1<- ' ? 1& 0' A<? 10' C0&-10' H' A1' & ' 0&' ' > 0' 1 - ' A?1' 1L1B?A&-

1>' B&>1' B&- 1 - ?1' 0&' ' 1 - ' @<' .D>A1' BD 1' 1 - 1' << 10' 1 - ' @<' =&? >1' H1 - 0? G Y ?@@?0 ='#1 ' D&>&' B<C'< ' <?' ' >C '0&' 1 ' <'@ ' A'001'0'<=' A1' @'#&' 1 - ' 0?&' <?' ' @'#1 < '# ' <?' ' ='#'0' B&-0?1 ?A'-' @ ' 0?'0' <?' ' ? @<.1 ' <?' ' 1L?@1 ' <?' ' <@'H?&' >&A&' A10 ?< ' -1B' 0?C' 1?>' >' 1>h' -1B' 0?C' 1?>' '#'>h' - '0" C' @1.<@1' ?A'A?' C< '?' 0? ' +1@' C' 1>' = 1 Y -' H?1@1' 10 < ?' ' D10 ' > ' >1 - A&-' =1' ' B&>1 - ' =1><0' "0?-10' A1' A 1' 10 < 1' C' B<1' A1' @&? ' < &-0' C10' A1' @<' R 1' +1 1\' &?' 0&?@<0 B10 <00< 1 ' "?BD10010' &?- 10010' <?' < &-1001 0' &? ' > 0' < 10C&?-A 1@ &?' A1+W- ' H?1?L' ?.10' 1@0' &'1' ' ?. . 1\' 0? ' 1 - A' 1>1 - \' A1' 10&-0' &?' =1@&-'10' C' 1?L' =1' \@ <' A'1' A1' H?1_' '@ 10' ?-1' <>#'.?' 1' I ' A&? 1' 1U' @<' @1 @ A1+W- ' H?1?L' I ' C' H==1?L' '1@\' A<>10' '00=&' 1 - A' 1\' &- ' > 01m' <' 10C&-A 1' I ' 10 1' <A ?. . 1\' ; =1' A' ' = ' @1' & ' &'@@<- ' ?0A1 ' '1@L' <>#'.?' 10' ' A&? 10@ <A' A1B@< 1' C' @<?A& ' 1' A10?@0A' @ H' '1@L' A<>10' '00' - ' 1 - A' 1\' &? &- ' <GC0' <' 1 - A'A1 \' A1

K - 1 ' & ' 1@@1 ' &=' 0?BD' D' - . 0@ &' #1' <a1 - ' <.<' - 0 ' D1' ! & >' &=' D'0' A' - <- B1@ &' >< a1' 10'0 <- B1' '-' D1' ! & >' <=& 10<'A@ '-' B<01' D<' 0?BD' &-0 <#@10@ D' - . 8' >1 - @ & ' BD'1=' @1A . 10' #1' 1H?' 1A' D<' &' A & G ?C&-' <'-' &' '1@A' &' D1' < ' 0& . '1+1A@ D1' <@?1' &=' D1' D' - . 0' 0&' <a1 - @ K' D' D'0 "&?#@1' "<>< . 10 ' - A' D<' - &-1' &=' D1' , '- ./0' @'1 . 1' 1&C@1' #1' C?' &' &0 0' `& ' "<>< . 1'\ P' # ' D1' , '- .' & ' <- ' ` ==' B1 ' f P' =& ' 0?BD' /)' 10'0 <- B1@ /)' ; -A' D<' - &-1' &=' D1' , '- ./0 /)' ==' B1 0' 0D<@@ A&' &' #1' < 10 1A@ +1L1A@ & ' '>j C@1<A1A' '-' D1' &? ' &=' D1' < 0D<@01< & ' 1@01KD1 1@ <- ' &=' D1' , '- ./0' @'1 . 1' 1&C@1' =& ' 0?BD' K' DD&@A' - . 0' \ )' & ' -& ' 0?==1 '- . ' &' #1' A&-1@ ?C&-' <'-' &' @&01' K1 - ' &?-A0@ D1' &-1' &'1 '&=' D<' &' D1' , '- . @ <-A' D1' & D1 ' &'1 ' &' D'>' KD'BD' K'@@ '-' 0?BD' <01' 0?1 ; -A' D<' D1' ?0 'B10' &=' 1<B1' '-' 1+1 ' &?- ' 0D<@@ D<+1' &K1 ' # ' ? D& ' ' &=' D'0 A' - <- B1@ &' '-H?' 1@ D1< @ <-A' A1 1 >'-1@ <0 K1@@ <' D1' ?' '&=' D1' , '- . @ <0 &=' D'>' KD'BD' K'@@ 0?1@ &=' <- ' D' - . ' A&-1' <.<' - 0 ' D'0 A' - <- B1@ <-A' D1 1&=' &' ><a1' A?1' ?j - '0D>1 - ' <-A' L1B? '&-@ <-A' &' <K< A' "<>< . 10' &' D1' < ' @<' - '=@ KD1 - ' <- ' "1=1 - A<- ' '0' D1 1&=' A?@ ' B&-+'A' ; -A' D<' '-' 1+1 ' =@'&-' &' #1' <a1 - ' ?C&-' D'0 A' - <- B1@ 1+1 ' < ' "1=1 - A<- ' 0D<@@ #1' C?' & <-0K1 ' & D<' K' D&?' 'A' &=' D1' , '- . ; -A' /)' '-' 0?BD' E'C - 0' &' #1' <a1 - @ &B100' 0D<@@ #1' ><A1' <0' '-' < F ' ' &=' 10C<00' A&-1' <.<' - 0 ' D1' 1<B1; -A' D<' '-' 1+1 ' &>>'00'&-' &=' ? +1 & 0@ ? 1 0@ &' <a1 0' & #1' ><A1@ D'0 A' - <- B1' 0D<@@ #1' B&- <'-1A' <-A' 1Lj C 1001A' G -A' >& 1&+1 @ D<' D'0 A' - <- B1' <>&-.' & D1 ' <? 10' &=' ? +1 & 0@ ? 1 0@ &' <a1 0' #1=& 1' D'0 '>1' ><A1@ 0D<@@ #1' 01 - ' &' D1' D1 '==0' &=' 1+1 &?- ' &=' -.@<-A@ &' C &B@<'>' <-A' A1@'+1 ' D1' 0<'A' < ? 10' <-A' A' - <- B10@ '-' D1' <--1 ' <-A' ! & >' B&-j <'-1A' '-' D1' < ? 1' &=' ? +1 & 0' <-A' ? 1 0@ ><A1' D1' ! ' 0 ' 1<' &=' D1' 1' . -' &=' ? ' 0<'A' &+1 1' . -' & A' D1' , '- . ' D<' - &K' '0@ ?C&-' D1' <'-' B&- <'-1A' '-' D1' 0<>1' < ? 1 ' -A' >& 1&+1 ' D1' '- . ' K'@@ <-A' B&>8@ ><-A1 D@ D<' D1' < ? 1' ><A1' D1' 'L' <AA' D' '1 D' 1< ' &=' , '- . ' AK< A' @< 1' , '- . ' &=' -.@<-A@ D1' D' A' <= 1 ' D1' &-H?10 @ &?BD'- . ' ? +1 & 0' &=' & D1 ' 1 j 0&-0' D<-' &=' D1' , '- . @ 0D<@@ #1' C? ' '-' A?1' L1B? '&- @ F D1 1<0' ' '0' B&- <'-1A' '-' D1' E 1<' D< 1 @ <>&-.0 ' & D1 ' D' - . 0@ '-' D1' ! & >' KD'BD' =&@@&K1 D' ; W' & ! 11><-' 0D<@@ #1' <a1 - ' & ' >C '0&-1A@ & ' #1' A'001'01A' &=' D'0 ! 11D&@A@ & ' '#1 '10@ & ' = 11' ?0j & >0@ & ' #1' &? @<K1A' & ' 1L'@1A@ & ' <- ' & D1 ' K'01' A10 & 1AG -& ' K'@@ F 1' -& ' C<00' ?C&-' D'>' @ -& ' B&-j A1>-' >@ #?' # ' =1 F I @ ?A.1>1 - ' & =' D'0 11 0@ & ' # ' D1' <K' &=' D1' <-A; J' '-' KD'BD' <? 1' '0' -& = '&-' ><A1' #&K' F & >1 - @ <A'10' &=' . 1<' 0 < 1@ `' '-' 10C1E' &'0 ' D1 ' ? i#<-A0@ 11 0' &=' D1' <-A@ >< '1A@ & ' 0&@1@ D<' '0' &' 0< ' "?BD10010@ &?- 10010@ & ' < &-10010@ 0D<@@ #1' C? ' &' <-0K1 @ & ' #1=& 1' KD<' ?A.10' D<' D1 ' 0D<@@ #1' ?A.1A' ?C&-' -A'^>1 - 0' &=' 1<0&-0' T2' ! 1@&-'10' # ' D1>' B&>>' 1A' & ' A&-1@ '-' 1. < A' KD1 1&=' ' '0' < "&?# ' '-' D1' <K' &=' -.@<-A@ #1=& 1' KD&>@ 0>A' # ' KD&>' 0?BD' <A'10' 0&' '-A'E1A' 0D<@@ #1' C? ' &' <-0K1 @ <-A' #1' ?A.1A; ? '0<'A' & A' D1' , '- . @ K'@@' - . ' &' C? ' &? ' 0?BD' >#'.?' '10' <-A' "&?# 0@ D< D' A1B@< 1A@ # ' ? D& ' ' <=& 10<'A ' D<' 0?BD' <A'10' 0&' '-A'E1A@ & ' D1 1<= 1 ' &' #1' '-A'E1A@ &=

' P 7 ' - ' . $ -*' $
'$ ' ' '$ ' ' j 0 $% 1 '
@ %' $' " 1' j % '$ '
' N ' i
' 1 -% $

. ;+!' /&!2'
2 +' ; !' "&!/'
2' 3!!"2 . '
!' 6. +-&
"!' "&!/)

<- ' 1<0&-' & '!1@&- ' # ' D1>'A&-1@ & ' D1 1'= 1 ' &'
#1' A&-1@ KD1 D1 ' D1 ' #1' >< '1A' & ' 0&@1@ D<' D1 '
D1 1&='0D<@@ #1' # &?.D ' &' <-0K1 @ <-A' C? ' &' <-0K1 '
<-A' ?A.1A' #1=& 1' 0?BD' ?A.10' <-A' 11 0' &=' D1' 1<@' @
<0')' 11 0' &=' D1' 1<@>' 0D&?@A' #1@ '=' D1 ' F1 1'
'-A'=@1A' & ' >C1<BD1A' &=' 0?BD' 1<0&-0' A ' !1@&-'10'
A&-1@ & ' D1 1<= 1 ' &' #1' A&-1@ <-A' '-' @'a1' <- -1 ' <-A'
!& >@ <-A' -&-1' & D1 K'01

& K'BD'
-/' ." .+E'
V ."2 !/2

@ F D1 1<0' <0' K1@@ '-' D1' ' ' &=' & K'BD' <0'
>' D1' &?- ' &=' & =&@a' D1 1'#1' A'+1 0' 1 0&-0' KD'BD'
><a1'=<@01' @& D0' &='<@@ <- -1 ' &=' F & 0 1A0@ -& '#1'- .'
&=' D1' 00'010' '-' 1 - . D' <-A' 1<A D' 0 D1 ' &?.D ' &'
#1' <-A' K1 1' &=' &@A' '>1' <BB?0 &>1A@ <-A' D1' < 0'
<-A' ` D 1<A0/P' C1 <'-'-.' &' D1' 0<>1' #1' -& ' '.D j
=?@@ ' ><A1' <-A' K &?.D @ '-' . 1<' "1B1' ' <0' K1@@ &='
"1-'\1-0' &=' D1' , '-.' <0' &=' D1' <-.1 0' 1C<' '-.' '- &'
D'0' 1<@>' `&=' -.@<-A9P' KD'BD' #? ' <-A' ? 1' 0?BD'
1 BD<-A'01@ ?0 '-.' D<' ' ' 0D<@@ #1' K' D'-' <0' ' '
0D1K1 D' K' D&? @ KD1 1@ &=' ? D' ' ' '0' B&- < ';' -A'
F D1 1<0' F & 0 1A' K<0' 0&>1 '>1' <' .&&A' 1 BD<-A'01'
<-A' . 1< @ ' A10' 1A' <-A' @& 1A' '-' D1' < 0' #1 -A' D1'
1<@ -&K' #1B<?01' D<' ' ' '0' &='=<@01' F & a' <-A' &='=1@01'
?==@ - ' <-' D1 1&=' <a1 D' 1.< A@ KD'BD' '0' . 1<'
"<>< .1' &' D1' , '-./0' ?0 & >0@ ` &' D10P' . 1<' "<>< .1'
<CA' 1 ?A'B1' &=' D1' , '-./0' =1' D='' @ '1.1' 1CC@1;

V "/!-Z'2 #'
; !' # .2!-'
B.0"; @' !'
V ."2 ! /L'
V ! '!"Z &-'
."7&# ' -/'
7 .'&-' !'
.0- @' ;'
&#
.'&-2 !<'
V ."2 !/2

? '0<'A' &+1 1'. -' & A' D1' , '-.@ K'@@'-.'<.<'-0' 0?BD'
"<>< .10' <-A' 1 ?A'B1' &' C &+'A'1' <' 1>1A ' '-' D'0'
1D<@=@ D< D' & A<'-1A' # ' D1' ? D& ' '<=& 10<'A ' D<'
1-'&=' D1' <= '&=' F '& 0 1A' F 1<+1 0' K' D'-' D1'0<'A' ' @
0D<@@ D<+1' &K1 ' 1+1 ' 1< ' < ' D1' ! 1<0 ' &=' 1- 1B&0 '
&' BD&&01' '' ' F < A1-0' K' D'-' D1' 0<'A' ' @ &=' D1' <>1'
<= @ <-A' D1' 0<>1' F < A1-0' &' D<+1' &K1 ' &' BD&&01'
& D1 ' ' ' 1-' &=' D1' 0<>1' <= ' '-' D1' 0<'A' &?- '
`&=0P' D1' 0 ?A' ' @ <-A' <@@ D1' 0< @1' F < A1-0' &' B&>1'
#1=& 1' D1' < & ' &=' D1' 0<'A' ' ' =& ' D1' '>1' #1'-.@
D1' &-A< ' <= 1 ' D1' " < ' &=' & C?0' D '0 " D1-' 1-j
0?'-.@ <-A' D1 1' &' #1' 0K& -' #1=& 1' D1' /)' < & @
` &' A&' '.D ' <-A' ><a1' A?1' 1< BD'\'P' &='<@@ ><-- 1 ' &='
F & 0 1A0@ <-A' &=' D1' ?==' #1@&-.'-.' &' D1' 0<>1@
><A1' & ' &' #1' <A1' K' D'-' D1' 0<'A' ' ' & ' &?- ' '
<CA' D<' 1+1 ' '1B1' &=' F & 0 1A' 0D<@@ #1' C? 0?'-.'
` D &?.D/P' D1' @& D' &=' '.D ' F & a' h)' .&&A' <-A'
B&-+1-<#@1' ?==@ <-A' D<' D1 ' D<@@ D&@A' D1' 1-. D'
<-A' 1<A D' < ' D1' 00'01' D< D' &='&@A' '>1' #11-' '.D @
= '@@ '<BB?0 &>1A@ D<' '0' &'0< @ D1' 1A0' &=' D1'. 1< 10 '
00'01' '-' 1-. D' L''' ' < A0' @< .1@ @ <-A' '-' 1<A D'
=&? ' < A0' /)' ` D &?.D/P' D1' 1B1 ' <-A' 1A0' &='
D1' >1<-' 00'01' L' ' < A0' '-' 1-. D' <-A' D 11' < A0'
'-' 1<A D' ` D &?.D/P' D1' '1B1@ <-A' 1A0' &=' D1'
@1<0 ' 00'01' L ' < A0' '-' 1-CD' @< .1@ @ <-A' K&' < A0'
<-A' <' <@=' '-' 1<A D' @ C-A' @& D0' B<@@1A' &-a0'
@& D0@ L' ' < A0' '-' 1-. D' <' D1' @1<0 @ <-A' !'+1'
^?< 1 0' '-' 1<A D@ `<-A' @& D0' B<@@1A' <-&-' @& D0@
+1' < A0' '-' 1-. D' <-A' +' ' ^?< 1 0' '-' 1<A D' @
<-A' @& D0' B<@@1A' @& D0@ + ' < A0' '-' 1-. D' <-A'
K&' < A0' '-' D1' 1<A D' @ WOP' <-A' A&?#@1' F & 0 1A'
W' < A0' '-' 1-. D@ <-A' !'+1' ^?< 1 0' '-' 1<A D'
@< .1@ '@ <-A' D<@=' "&?#@10@ + ' < A0' '-' 1-. D@ <-A'
!'+1' ^?< 1 0' '-' 1<A D@ <-A' &@@ F & 0 1A@ LLL'
< A0' '-' 1-. D@ <-A' <@=' <' < A' '-' 1<A D' @< .1@ @
<-A' D<' -&' <>#0' F &&@@ -& ' F &&@' B<@@1A' ` 1@ '
F &&@3P' 0D<@@ #1' C?' '-' <- ' &=' D101' F & 0 1A0@

<0B?-' 10&-' &-'=1@&-'1' C' 1?L' =<' \' &?' 1-<=D' D='<' 1\@
B&>1C ' H' 1@1 ' 0&'<' ' B&, 1\' A1' < &-' &?' 0&?@10@ H'
1@10' 1-' '1-' >10-1\' 1-' =-01' I ' < 0' <' 10C&?-A 1' I '
<A ?. .1m' A1+W- ' '1@L' -.1 ' I ' 10' A1' @1' &'<@^'1@ 0'B&>1'
<? 10' 10' A1' @1' C'<@>1'=' &'1 ' 0'@0' =?@ 01- ' 1-A' 1\' &?'
1>C1 BD1\' A1' '1@L' 10&-0' &?' =1@&-'10' ='' \' &?' 1-' < 0'
<==D' 1\@ I ' 1-' <?A1@ >< 1' I ' =& >1' I ' (-' -?@@ <? 1'
1>' B&>1' '#'1-' 1-' @<' ' 11' A1' & K'BD' B >1' 1-'
@1' &C- 1' A1' & ==' 0&?- ' A'C0' C0&-10@ @10' H 1?L' =<B1- '
=<?L' A <C0' A1' &- \' > < ' K& 0 1A10@ -'1- ' 1 1<- \' A10'
<00'010' 1'@ @&-.1'' 1' I ' @<1? 1' 0'' B&>1' '@0' 10 1' AB<1- @
I ' =? 1- ' A<?-B'1-' 1>C0' <BB?0 ?>1\@ I ' @10' 0@< 10' I '
='@1' 0C1= <- \' <' 'B1 ' -'1- ' A &@ 1>1- ' 0&'1C ' =1' \' I '
& 1\@ 1C' . ?-A1' A1B1' ' 0'#'1-' A10' A1'-01'-0' A?' & '
B&>1' A1' @10' 10 <?-.'1 0' 1C<' <- \' <' 'B10 ' &'<@>1@ @10'
H? ?L' <BD< 1- ' I ' ?01= ' '1@ B#<?-A'01' B&-='<- \' H'@
,&' ' A1A1'-0' B&>1' '@' >&-0 1' A1D& 0' ? A1' + ' 1' '@ 10 '
1&-= '1G' I ' @&?' F & 0 1A'=?'0 '<0B?-' 1>C0' D1<@ ='BD<-8'
A'01' I ' . ?-A1>1- ' A10' 1' I ' <>11' ' @10' C< '10G A1'
C< A1@<@ & 1' C' @<' B<?01' H'@ 10' A1' = ?L' & . 1' I ' A1'
=<?L' 0 ?==1' -? ' D&>1' 1- ' =<B1' B&?- 1@ '1' H?1= ' 10 '
.&? A1' A<><.1' <' @10' B?0 ?>10' A?' & @ I ' .0?-A1'
A<><.1' I ' CP?A'B1' <' @1' =&'< ' @'1.1' C1&C@1' A?' & ;'
+1' A' ' = ' @1' & ' +&'@@<- ' 1-B&- 1' '1@L' A<><.10' I '
C0 ?A'B1' C? +&'1 ' A1' 1>1A'1' 1-' B10 ' C< '1' <A' & A1'. -1'
C' @<? & ' 1' A10?'0A' @ H1' D >10' A1@ < ' A1' 1L &? 10' A1'
F & 0 1A' A1' -0' @<' Aa' ' 1B' 1'1- ' C&< @ BD10B?-' <-' <' @1'
= 0 ' A1' 1- 1B&0 @ A1' 10@'1 ' H?< 1' E< A1' -0' A1'?0' @<' A' '
' 11' A1' > 0>1' @<' < @ I ' 'B1@@10' E< A1' -0' A<, ' C&<' ' A1'
10@'1 ' <?R0' A1?L' D&>10' A1' >10>1' @<' < ' 1-' @1' A= '
&?- 1' D& 0' A?' A' ' ' 11@ 1 ' &? \' 'B1@@10' E< A1' -0' A1'
+1 'A1+3- ' @1' <' 1' A?' A' ' ' 11' C ' @1' 1>C0' 10 1<- @'@1'
@?-A ' <=#' @1' &? ' A?' & C?0'] C" <A&-H10 ' C0BD1' -' 1-8'
0?<- @ I ' '@@1&0H10' A10 1' ? 1\' A1 3-' @1' A' ' <' 1' A1'
='? 1' A &' 1' I ' A?1' 01 BD1' A1' &? \' >< 0' K 0 1A10' I '
A1' @<' 0 ?==0' 0C1=@<- \' <' 'B1@@10' =<' \' &-' <==''' 1\' A1'-0'
@<' A' ' ' 11' &?' &' > 11G 1 ' H' BD10 ?-' C1B1' A1' K& 0 1A'
0&=' C 0?<- ' C > ' &? ' @1' A <C' A1' A &' 1' &, <'.-1' I '
#&-1' U' B&+1-<#@1' 0 ?==1@ I ' H'@0' 1'.-1- ' @10' @&-.1? 1'
I ' @<1? 1' 0'' B >1' @<00'01' <A' 10 1' A< -B'1-' 1>C0' A &' 18'
>1- ' <B1?0 ?>1G B10 <00<+&' '#1AA10' A1' @1' C@?'0' . >%1'
<00'01' 1-' @&-.1? 1' L''' ' <@-10' @< .1>1- @ I ' 1-' @<1? 1'
''' ' <@-10' @< .1>1C ' C > ' &? 1' @1' C1B1@ I ' #1AA10' A1' @<'
> -1' <00'01' L' ' <@-10' 1-' @&-.1? 1' I ' 1-' @<1? 1' C > '$
&? ' @1' C1B1' ''' <@-10@ I ' #1AA10' A1' @<' C@?'0' C1 ' ' <00'01'
] ' <@-10' 1-' @&-.1/' @< .1>1- ' I ' ' ' <@-10' I ' A" 1-' @<1? 1@
I ' A <C0' <CC1@@1\' <@-a10' B@& D10' L' ' <@-10' 1-' @&-.1' <'
a' >1 -0' I ' +' H< R01-' @<1? 1@ I ' A <C0' <CC1@@1\' BD<-@'"
B@& D10' ' <@-10' 1-' @&-.1' I ' +' ' H?< 0' 1-' @<1? 1@ I '
A <C0' <CC1@1\' `BD<-@-P' B@& D10' +' <@-10' 1-' @&-.1? '
I ' ' ' <@-10' 1-' @<1? G I ' A&?#@1' K& 0 1A' L ' <@-10' 1-'
@&-.1? ' I ' + ' H?< R0' 1-' @<1? 1' @< .1>1- @ I ' A'>" A&?#@10' +' <@-10' 1-' @&-.1? ' I ' + ' H?< 0' 1-' @<1? @ 1'
 &@@1' K& 0 1A' LLL' <@-10' 1-' @&-.1? ' I ' A'>" <@-1' 1-'
a 1? 1' @< .1>1- G 1' H' 1-' -?@a' A1' 'B1@@10' K& 0 1A10'
0@=' > 0' <'-' A1' .-1=' -'1' @<>' <CC1@1' C1=' F &@@1

0 S&# #'.$- '&>'' D'0 F& A' D1 1

1 ' H' @1 0' E< A1' - 0' A1' @< A' ' < ' C ' @1' <- C0' 10 1<- \' 1'1- ' C & K ' I ' <?= & ' 1' A1' 01'01 ' &? \' '1@L' A <C0' 5B 0 ?==1' '00' - ' &+1\' A1=1A '=1G 1 ' H' @1' <' 1' A?' A' ' @ 11' C? ' @1' 1 > C0' 10 1<- ' < ' C&<' ' C' @< ' A' ' <?= & ' 1' A1 - H?1 1 ' &'1 ' 5f , > ' - 1 9 <?- ' < @1' 0? 1' A?' & ' B& > 1' <@ 1 -=& > <B' &-' A1' @10' A' \' E< A1' - 09 A1' &? \' B1?L' H" =&?- ' @1' B&- '1' A'B10 ' & A1 - 0 - B1' A1' - 0' @< ' A' ' ' 11G 1 ' 1 -' 01 > ##@1<##@1' =& > 1' @10' ?0 'B10' A1' @< C1<0' 1 -' @1' A' ' &? - 11' D& 0' A?' A' ' ' 11' 1'1 - ' C&<' ' A1 - H?1 1 ' &'1 ' B A1R > ' - 1 ' A1' &? \' 'B1?L' H" =&?- ' 1 - B&?- 1' @10' C > '0010' 1 -' @1' A' ' &?- 1' D& 0' A?' A' ' ' 11G ' 0" <0B?- ' D& > 1' 1 - ' A1 + W- ' @1' A' ' <' 1' &?' ?0 'B1' A1' @< C1<0' 0& ' ' A?1 > 1 - ' B&- 8 +' = ' B < 1' - 9 H1' <A&- H10' 'B1@@10' K& 0 1A10' 5B 0 ?==1' '00' - ' &+1\' A1=1= '=0' 0& '1 - ' =& =<' \9 B10 <00<+&' ' @?- 1' >&' 1' A1' '1@ =& =<' ? 1' <?' & ' 5B @<? 1' >&' 1' < @10' E< A1' - 0' C? ' @1' 1 > C0' 10 1<- ' \' A?' A' ' < 1,' 1 ' H' @1' <' 1' C ' @1' 1 > C0' #0 1<- ' A?' A' ' ' 11 9 5B @10' ?0 'B10' A?' @< C1<0' 1 -' @1' A' ' &?- 1 9 1'1 - ' C&< ' A1' =<' ' '1@L' C 1001' 01 <@ > 1 - ' 1 - +00' '1@ C0& - 1' &?' C0& - 10' H1' M & - ' &+1\' A1=1 '=0 9 C' 1 - H?1 1' A1+0 - ' 1?L' < 10 =1' C '\9 A1' <0B?-' BD& 1' =<' ' 1 - B&?- 1' @10' C > '0010 9 0" B& > 1' @10' ?0 'B10' A?' & ' A?' C1<0' =&?- ' 0? ' 1CA' 1 > 1 - \' C 'R' A1+J- ' 1?L' A1' 0C<0' =<' ' +1' =& B1' 5B < > 10' 1 - B&?- 1' @1' C1<0' A?' & ;' 1 ' H1' B10 ' & A1 - <?- B1' & > 1 - B1' < C 1 - A 1' 1=1B ' < @1' =10 ' A1' <@ ' 'BD1@9 C0BD1 -' <+1 - @ 9 5 ' H' 9 1 - A? < 10H10' <9 =' - 1' A1' &'0' <- 0' C0BD1D' 1 - ?<- \' > 10 > 1' @1' =10 ' A1' 1' - ' 'BD1= '

= 1 > ' B& > 1' & A1' - 1' 0&' ' 5B A1B@< 19 C< ' 10 < ? ' =<' ' <-' A?' 1' .=' 1' @1' & ' 1 - ' @1' H? D ' C' 1 ' < -=1' _ ' @1' & ' H& 10 ' 0BA19 C? ' B1&' H1' A1+0 - ' @1' A' ' & A1 - 3DB1' A' 0' .1 - \' B& > C '0' A1' - \' @10' ?10' 0'#-' =1' \' C' @1' A' ' -<A.<' 0' & ' B& > 1' C' @1' & ' 1C " @1' H?< ' '1@ < -=1' A' ' ' @1' & ' H& 10 ' B <?L" <?R0' A'C0' 1'<- \' 0<?=8 B&<A?' 09 0" #'1 - ' A1' A' ' - <A.<' 0' & ' = 1 - " @1' H? - ' B& > 1' W' A' ' - <A.<' 0' " 1 - " @1' HD< 9 &?- ' 10 1' <0B?-0' ?1\' <0B?-0' &##1\' 5B A'0C&' @@1\' C' @10' @'1.10' 5B 0 - #.'1 0' A?' & 9 0'#'1 - ' 0 ' ' @1' D<?@ > 11 ' B& > 1' A1' - 0' @10' C& '0' 5 ' B&0 '0' A?' > 11 ' " 1 - .@@ 1' " ' <-A' 5B A1' E<@109 C&?- ' @10' A' \' ?10' 5B <?=B& - A?'= 0' ?- ' 10 10' ? DC1 ' 5 ' &==1 - A?m' < . ?- A' A'0='& - &' I ' A'0B@<?- A 1' A?' & ' 5 ' 1 - B&?- 1' 0<' A' ' 1G 4 ' @10' A' \' ?1 0' A10' D&C'109 &##& 0' 0C&'@@&? 0' 5 ' &==1='A&? 0' A1' @10' A' \' =1+10' 5B 0<?=B& - A?' ^ 0' A?' & 9 B& > 1' A10?'0' 10 ' A1B@< 19 &?- ' 1 1\' C' A'C0' @'1.108 I ' 0?#.@1 0' A?' & ' A1' - 0' @10' B&0A0' A1' A'C0' &?- 10' 1B1 1\' <#1 1\' I ' CB? 1\' B&? - 01' @@1\' @& F1\' ?0 1 - ?\' 5B > <'- 1 - ?\9 H' '1@L' ?1 '1' &##1 @1' 10C&' > '1' ? > C@1' A10' '1?L' 5B 0<?=B& - A A= 0' A?' & 9 5B +&@?- < '1\' 010B1 ' ' <#1 1 > 1 - ' CB? 1 > 1 - ' B&?- 01= ' @&K1 ' 0?0 1 - W - B1' 5B > <'- 1 - 0 - B1' A1' '1@L' C0& - 109 <==<' 1\' 1 - ' 1 > C0' <+1 - ' ' C' <0B?- 0' A10' @'1.10' 5B 0?#.'1 ' A?' & 9 A1' - 0' @1' &'<@ > 1')1 - . ''R 1 " ' @<- A' I ' A1' E<@10' &?' 0? ' @1' D<?@ > 11 9 0B<1 - ' <A ?. . 1\' 5B A1 > @ - 1\' C? ' D<? ' 1 &-' =1@ ' 1 - B&?- 1' @<' & &-1' 5B A' . - ' 1' A?' & ;' ' C? ' B1&' H' @10' C< - 10' B& - 1 - ?\' 5B 10C1B'=' 1\' 1 - ' @10 < ? ' <8 ' ' Aa' 0&?- ' 0 ' . & &?0' 5B . 1+&?0' 1 - 0' $ ' @'1.10' 5B 0?#.'1 0' A?' & 9 5B 1?L' B ' 0 <' > 1 - ' @'1 - 9 H' @10' <A 0< '10' 1 - 1 > 10' A?' & ' A1' ? 1' .?1 1

- A' D< ' D1' F < A1 - 0' &=' D1' 0<' A' <= ' =& ' D1' ' > 1' #1' - .9 0D<@@ D<+1' &K1 ' <- A' ? D& ' ' &' 01'01' <@@ 0?BD' @& D0' <- A' ?==' 0&' =&? - A8A1=1A' +1G <- A' D< ' D1' < & ' &=' D1' 0<' A' ' '=& ' D1' A > 1' #1' - .9 0D<@@ D<+1' &K1 ' # ' D1' 0<' A' ? D& ' ' &' - H?' 19 D1< 9 <- A' A1 1 > ' - 1' <0' K1@@ < ' D1' , ' - ./0' ?' ' <0' < ' D1' -=& > < '&-' &=' D1' 0<' A' F < j A1 - 09 &=' <@@ D1 > ' KD'BD' A&' B&- < ' &' D'0' A' - <- B1' K' D' - ' D1' 0<' A' ' G - A' ' - ' @'a1' !& > ' D1' ?0 'B10' &=' 1<B1' ' - ' D1' 0<' A' &?- ' &? ' &=' D1' 0<' A' ' 9 0D<@@ D<+1' &K1 ' &' - H?' 19 D1< 9 <- A' A1 1 > ' - 19 &=' <@@ D1 > ' KD'BD' A&' <.<' - 0 ' D1' 1 > '010' ' - ' D1' 0<' A' &?- '&?' &=' D1' 0<' A' ' 'G <- A' '=' <- ' <-' #1=& 1' D1') ' < & ' & ' ?0 'B1' &=' D1' 1<B1' #1' D1 1&=' A?@ ' B& - +' A' <- A' < <' - 1A9 D< ' D1 - ' D1' 0<' > 1' F & 0 1A0' <- A' ?==0' 0&' =&?- A' A1=1A' +19 0D<@@ #1' =& =1' 9 D< ' ' 0' & 0< 9 D1' & - 1' <@=' &=' 0?BD' ! & j =1' ? 1' &' D1' , ' - .9 <- A' D1' & D1 ' <@=' &' D1' F < A1 - 0' =& ' D1' ' > 1' #1' - .' &=' D1' 0<' A' <= ; - A' D< ' D1' < & '=& ' D1' ' > 1' #1' - .' &=' D1' 0<' A' ' 9 <- A' D1' ?0j 'B10' &=' 1<B1' `=& '0 ' D1' 0<' A' &?- 9 0D<@@ D<+1' &K1 ' &' > <a1' 0?BD' &B100' 01+1 <@@ ' <.<' - 0 ' 0?BD' 1 0& - ' & ' 1 0& - 0' KD'BD' 0D<@@ #1' =&?- A' &' #1' A1=1B '+19 # ' - j H?' ' #1=& 1' D1 > ' &' #1' <a1 - 9 &=' <- ' D' - .' A&- 1' <.<' - 0 ' D1' 1 > '0010 9 <0' D1' , ' - ./0' ?0 'B10' &=' 1<B1' A&' ?C&-' - A'B > 1 - 0' <a1 - ' #1=& 1' D1 > ' &=' 10C<00' A&- 1' K' D' ! & B1' <- A' > 0' <.<' - 0 ' D1' , ' - ./0' 1<B1;' - A' D<' D'0' A' - <- B1' 0D<@@ #1.' - ' &' <a1' ==1B ' < ' D1' !1<0 ' &=' <' - ' 'BD<1@ - 1L ' B& > ' - .G <- A' D< ' ' ' 0D<@@ 1 - A? 1' '@@ D1' - A' &=' D 11' 1< 0' - 1L ' 1 - 0?' - .' <= 1 ' D1' 0<> 1' ! 1<0 ' &=' <' - ' 'BD<1@

9 F D1 1' ' ' K<0' & A<' - 1A' <- A' A1B@< 1A' # ' D1' < ? 1' > <A1' D1' 1B&- A' 1< ' &=' D1' 1' . - ' &=' , ' - .' 1 - ' ' ! < D1 ' &' &? ' &+1 1' . - ' & A' D1' , ' - .' D< ' - &K' 0 9 W' ! & <0 > ?BD' <0' #1=& 1' D1' 0<' A' A' - <- B1' A' 1 0' 1&C@1' B& > C '01A' K' D' - ' D1' `0<' A/ P' ?B10 9 > <A1' <0' 3K1@@ # ' D1' 0<' A' @< 1' , ' - .' <0' # ' , ' - .' 1 - ' D1' ! &? D9 E <- A= ' D1 ' &' &? ' ` &+1 1' . - ' & A' /' P' D< ' - &K' ' 0 9 <- A' <@0&' A'+1 0' & D1 ' D< +' - .' <=18 &- A?U0' <0' K1@@ &=' D1' 0<' A' @< 1' , ' - .' 1 - ' D1' ' <0' &=' D1' 0<' A' @< 1' , ' - .' 1 - ' D1' ! &? D9 0& > 1' D< +1' #11 - ' 0@<' - 9 0& > 1' &##1A' <- A' A10C#' @1A' # ' D1' , ' - ./0' @'1.1' 1&C@1' <- A' ?# 1= 0 9 <0' K1@@ ?C&-' D1' > <'-' 1<' <0' K' D' - ' D1' & 0' <- A' &<0 0' &=' D1' 1<' &=' - .@<- A9 &=' 1@<- A9 <- A' &=' F <@109 KD1 1# ' D1' 0<' A' ?B10' <- A' <=18 &- A?B 0' D< +1' #11 - ' # &a1 - ' <- A' =1 - A1A9 &' D1' . 1< ' " ' 0D&- &?' ' <- A' @<- A1 ' &=' D1' , ' - .9 <- A' <.<' - 0 ' D'0' " ' . - ' 9 <- A' D1' 0<' A' <- 8 0@< 1 09 &##1 09 C&' @1 09 <- A' ==1 - A1 0' &=' D1' 0<' A' ? 10' <- A' =18 &- A?& 0&=' D1' , ' - .G <0' <=& 1' '0' A1j B@< 1A9 D< +1' #11 - ' # ' A' +1 0' &=' D1' , ' - ./0' @'1.1' 1&C@1' <- A' ?# 1B 0' K' D' - ' D1' &<0 0' &=' A' 1 0' &?- '10' 18' 1<+1A9 <##1 1A9 <- A' C &B? 1A ' &?- 01@@1A9 D' 1A9 0?08' <' - 1A9 <- A' > <'- <' - 1AG' D< ' 0?BD' <- 0@<?. D 1 9 &#j #1 9 C&'@' - .9 1<a' - .' &=' ?B109 <- A' <=18 &- A?B 0' &=' D1' , ' - .9 <- A' +&@?- < ' 1B1' C 9 #1 > 1 - 9 = 8&B? 18' > 1 - 9 &?- 01@@' - .9 ' ' - .9 ?0 <' - ' - .9 <- A' <' - <' - j ' - .' &=' 0?BD' 1 0& - 09 &' =11' A& - 1' ' - ' > 1' &' B& > 1' # ' <- ' &=' D1' , ' - ./0' @'1.1' 1&C@1' <- A' ?# 1B 0' K' D' - ' D1' 1<@ > ' C=' - .@<- A9 &=' 1@<- A9 <- A' &=' F <@109 &' ?C&- ' D1' > <'- ' 1<9 0D<@@ #1' ?A.1 ' <- A' A1 1 > ' - 1A' =& ' .D' 1<0& - 9 A&-1' <.<' - 0 ' D1' , ' - ./0' &K - ' <- A' D'0' " ' . - ' - A ' W' ! & <0 > ?BD' '0' D1' <' - 0' B& - <- 1A' <- A' 0C1B' =' 1A' ' - ' D1' 0 <a@ ' #' - A9 D< ' D1' , ' - ./0' A+1 0< '10' <- A' -1 > '10

V "/ ! - 2' 1 @' 2!@2!' / ! ! &' !' +. 2

@ ." . ' ." 7&# ' -/' 02 &#!2 . ' 3! #!' . ' . " . +E '2 +' ! - ." #!' &2 <

. 1 1 ! - #!)' %- ! - ' C#' ' <

] 6!#& +' . ' 5 ' ' ' # ' ' * &-2 ' 4"! E72' . ' "0#!2 ' -/' !L' &-A?<0G

1B' <@ &=' ' *%

0?0C1-A'- .' @X1' < ? 1' 6 ' 5 *' BD<C ' (' =7 ' 1+1-' 1< 0'

01 . 1< @ ' 1-B&? <.1A <-A B&>=& 1A &' ><a1 F < ' <.<'-0 ' D1>@ <-A ><- ' &= D1 , '- ./0 @'1.1 1&C@1 <-A ?# 1B 0 <0 K1@@ ?C&- D1 1< <-A &<0 0 &= D1 1<@ <0 '- D1 < BD10 &= D1 1<@>' `&= - .@<- A9P &= 1-8 D-10 D<+1 #11-@ 0&>1 &##1A <-A 0C&'@1A@ <-A 0&>1 0@<'-@ KD1 1# ' ><- ' &= D1 , '- ./0 @'1.1 1&C@1 '-D<j #' '-.' '- D1 < BD10 <CA &<0 0 <=& 10<'A@ #1 . 1< @ ' D'-A1 1A <-A ' >C&+1 '0D1A@ <-A '- &'- ' &' #1 =' -<@@ ' A10 & 1A@ <-A D1 1 BD<- 0 <-A < '-1 0 &= D1 , '- .' #1 . 1< @ ' D1 1# ' A'0B&? <.1A <-A <#<0D1A &' C<00 ?C&- D1 1< K' D' D1' ' D'C0 <-A 1001@0@ K' D' D1' ' 1 BD<-A'010@ & ' & D1 K'01' &' ><a1 F < ' =& ' D1' <=1j .?< A &= D1 1<@ <-A D1 <+ ' &= D1 1<'- ' A=' &? ' 0<'A &+1 1' .-' & A D1 , '- .' '- &'- ' &' #1'A10 & 1A@ <-A D1 1 BD<- 0 &= D1 , '- .' B@1< @ ' A'0B&>=& 1A &' ><a1' & ' 1-1K' <- ' D'C0 & ' 1001@0@J' < ' D1 < @'<>1- ' D&@A1-' < ' F 10 >'-0 1 @ D1' 1- D' " < ' &= B &#1 @ D1' L''' ' 1< '#=' D1' 1' .-' &=' &? ' 0<'A &+1 1 ' & A' D1' , '- .' D<' -&K' '0@ D1' 1-<@ @ ?A.1>1- @ <-A' " 1 1 8' >@-< '&-' 'C' D1' 0<>1' < ? 1' B&- <'-1A' K<0' C? ' '-' ?0j C1-01' <-A 10C' 1' # ' +' ' 1< 0' D1-' -1L ' 1-0?'- .G <0' # ' D1' < ? 1' D1 1&=' ><A1' '-' D1' 0<>1' < @'<>1- ' C@<'-@ ' <CC1< 1 D;' D1' 0<>1' &? ' &+1 1' .-' & A' D1' , '- .' D<' &K' '0@ B&-0'A1 '- .' D1' 1>'010@ <-A' D<' D1'0'?A '>1'&=' 1+1-' 1< 0' '0 K1@@?. D'C<0 @ & A<'-1 D' # ' ? D& ' ' <=& 10<'A@ D<' -&C1' &=' D'0 @'1.1' 1&C@1' <-A ?# 1B 0@ # ' ! & B1' &=' D1' 0<'A < ? 1@ =& ' -& D'- .' # ' D'>'< 1>C 1A ⅈ)' & ' D1 1<= 1 ' &' #1'A&-1'<.<'-0 ' D1' ! & >' <-A 1-& ' &=' D1' 0<'A < ? 1@ <0' &' D1' 0<'A <'-' &= 1<0&-@ 0D<@@ #1' '-' <- ' K'01' C?-'0D1A@ >&@10 1A@ -& ' . '1+1A@ -& ' 0D<@@ '-B? ' -&' <'-'=& ' D1' 0<>1@ & D1 j K'01' D<-' D1' &?. D ' #1=& 1' D1' ><a'-.' &=' D1' 0<'A <j ? 1'G #? ' D<' D1@ D'0 1' 0' <-A' L1B? & 0' &='<@@ <'-0' <-A' !& =1' ? 10' &=' 1<0&-@ #1B<?01' &=' D1' 0<'A < ? 1@ <.<'-0 ' D1' , '- .@ '0' 1' 0@ <-A' ?BB100& 0@ 0D<@@ #1' B@1< @ ' H?' ' <-A' A'0BD< .1A' G -A' D<' D'0 A'-<-B1' 0D<@@ 1-A? 1' '@@ D1' -1L ' < @'<>1-

@ F D1 1<0' # ' D1' A'-<-B1' &=' < ' '&-' ><A1' ?C&-' F &C@0' <-A' F &&@=1@0' '-' D1' <C@1' `&=0'P ' <@<'0@ <-A' # ' D1' @&- .' <-A' 0 <'.D ' &- '-?<-B1' &=' D1' 0<>1@ . 1<' '-A1 <-B1' <-A' " 1B 1<01' D<+1' B >1' &' D1' , '- .' &=' . 1<' -& <#@1' ?>0' &=' D'0' . 1<' ?0 &>0' <-A' ?#j 0'A'10@ <0' K1@@ '-' D'0' 1<@>' &=' - .@<-A' <0' <'D'0' &K -' &=' <@<'0@ <0' <CC1< 1 D' 0?==' B'1- @ ' &=' 1B& A' '-' D'0' LBD1H?1 @ =& ' D1' KD'BD' D1' &>>&-0' &=' D'0' U'@>' D<+1' #11-' &= 1- '>10' BD< .1A' &' D1' ' . 1<' " <>< .1@ D1' , '- ./0' &@A'1 0' &=' <@<'0@ <-A' &=' D1' < BD10' D1 1@ D1' K& 01' C<'A' &=' D1' ' F <.10@ D1' 0<'A' &K -' <-A' <0 @1' &=' <@<'0' -& ' 1C<' 1A@ <-A' D<' <@0&' D1' 0<'A' <'.D ' ?@1'D< D' B<?01A' `>< - 0P'  1 BD<- 0'  <-.1 0' &' @<#&? ' &'  D1' ' & A0' &=' D1' ' <  ' &' ><a1' =<0 0P' . '1+&?0'<-A' 0  <'.D '  1< BD' ?C&-'  ?@@'&-' B&>'- .' &'  D1' , '- ./0'  '- ' ` &'/P ' <@<'0@ 0&' D<' 1-'&='A'+1 0' &?- j '10' '-' &-+1 <-B1' &=' ?@@'&-' D<+1' #11-' . 1< @ ' D'- j A1 1A@ <0' K1@@ '-' D1' ' 1 0&-0' <0' '-' D1' ' E&&A0@ 0&' D<' D1'0<'A '- ' '0 =<@@1 -' `'- 0P'  .  <' " 1B< @ <-A'  >< ' -& ' #1'0?0 <'-1A' <0' ' ' K<0' '-'  D1'  '>1'&='  D1'  1' .-'&=' , '- .'  1-  ' D1' ! '= D@ ! < D1 ' &' &? ' 0<'A'  &+1 1' .-'  & A' D1' , '- .'  D<' -&K' '0@ <-A' >< - '  1< 0' #1=& 1'  D<' D1' 0<'A'  <  ' '&-' K<0' =' 0 ' & A<'-1A' `<-A' > <A1 0P G' -A' D<' >& 1&+1 ' D1' 1 BD<- 0' &=' D'0' 1<@>' #1' `'# '  D<' 0P' . 1< @ 'D'-A1 1A@ <-A' D1' >&0 '  <  ' &=' D1>' &='+1  '  1j B100'  '#1' 1-=& B1A' &' @1<+1' D1' '  1 BD<-A'010' &=' F &&@0' <-A'  F &&@=1@0@ #1B<?01'  D<'  D1 '  >< '  -& ' `< 1-A0P

)%$ ' :' ≠ .&0E2
Ø<' ⅈ 0&' ⅈ' - & V D1 # ' , ,
/' #1' ?@1 0' &=' #1' ' K1-' .&&A1 ' -A' D<' ' [
A' 01' >1-@ #1' F#'B# >< ' -& ' <#'A1' ' 0000-0' Z

A1 , 0' 1?L' 0&?- ' .#' A1>1- ' 1-#<?@A1\' I ' B&>=& 1\@ I ' C@?0& 0' A10' @'1.10' I ' 0?#.'1=0' A?' & @ <?L #'1-' 0? ' @1' >11 ' I ' B&0 10' A?' >11 'B&>1' 1-' @10'='BD10' A?' &'<@>1' " 1- .@'R 1@ 0&+1- '#?- '10 1' <0B?-0' A'0 &##1\' I ' A@0C&@@@1\' I ' <0B?-0' ?1\@ C&?- ' C@?0&? 0' A10' @'1.10' A?' & '1- '8 <- 0' 1-' >< BD10' I ' B&0 10' 0?'0A' \' 0&?- ' .0?-A1>1- ' <-'1- '01\' I ' 1>C&, '01\' I ' 1-' C&'- ' A10 1' ='-<@>1- ' A10 ?1\@ I ' @10 1 BD<?- 0' I >< '5&A?' & ' A?' C<001 ' 0? ' @1' >11 ' &+1' @&? ' -'1=1' I ' +10R1#0' &+1' @&' D& - 'A'010@ & ' <?. >1- ' 1-' =1' 1' A1' .?1 1' C? ' @1' 0<?=' .< A' A?' >11 @ 0&?- ' .0?-A1>1- ' 1- ' A101& <.1\' I ' 1-#<00D10@ I ' @<' -<+1'1' A?' &'<@>1' - 1' A'=' _0' @1' & ' 1-' C&'- ' A10 1' A10 ?1\@ I ' @10' < BD<?- R' A?' & ' A?' =''' 1' &?' 1-&@ +1@@1 ' <0B?-0' -'1=0' &?' +1001?@L' &?' &? 1>1- ' A'0B&>@ =& \@ <@ C< @1>1- ' 1-?\' <' F 10 >' @1' L[' &?' ' " #= &D ' <-' A?' 1'. -1' -=1' A' ' ⅈ @1' & ' H& 10 '_''' /W@ @1' C1-<@ 1' ?. .1>1- ' I ' A1R> -<B'&-' 1-' > 0>1' @10 < ? ' B&- 1-?\' = <0 ' > \' '-' 0?0C#-0' I ' 10C' 1' ' ' <-0' <A&-H10' C0BD1'-' 1-0?<- @ B&>1' C' @10 < ? ' 1- ' =' ' ' 1-' =-1 >1' @1' ' C< @1>1- ' C -1>1- ' <C'# ;' '-10>1' -=1' ⅈ @1' & ' H& 1 @ B&-0'A1 <- ' @10' >'011 0' I ' ' @1' A' ' 1>C0' A1' +' ' <-0' 10 ' #'1-' C0' C<001@ <A' & A1' . -1' C' <?= & ' 1' 0?'0 ' A' ' H' -?@@ A1' 010' @'1.10' I ' 0?#.' 1\' C' =& B1' A?' A' ' 10 < ? @ C? ' -?@@ BD#01' C' @? ' < 1>C 1' ' ' &?' <==<' 1' 1-' <C0' 1-B&?- 1' @<' =& >1' I ' 1-&/' A1@ A' ' 10 < ? @ H/?- ' <' @1' A' ' C1 -1' A1' 10&-@ 0&'@ 1-' <0B?-' ><51' C?-'00D1' >&@10 1' &?' . 1+1@ -1' -?@@ C1 -1' 1-B< .1' C? ' 'B1@@ <?R8' >1- ' H' '@ A?'0' A1+ - ' @1' =1'0<-B1' A1@ A' ' 10 < ? G 1'-0' H' '@ 010' D1' 1m' I ' 1L1B? 1 0@ A1' &? 0' C=1 -10' I ' =& ='' a 10' A1' 10&-' <' B<?01' A1' @1' A' ' 10 < ? @ 1-+00 @1' & ' 010' D1' 10' I ' 0?BB100&? 0' 0&' ' &? ' &? 1>1- ' H?' 1\' I ' A'0BD< .1\;' 1 ' H' B10 ' & A1- -B1' 1-A? <' <-H1' <@' C0BD1'-' C< @1>1-

1>' B&>1' C' @& A' -<-B1' A1' C< 'B'&-' =<' 0 ' @<'-10' I ' C1<@L' @<-? \' 1-' @10 <C@1' <' <@1=0@ I ' C' @1' @&- .' I ' 0 =1' 1' B&- '-?<-B1' A1' B1&@ ./?-A1' <-'1- '0>1- ' I ' A1B 1B1' &?- ' +1-?\' <?' & ' A1' . ?-A10' -& <#@10' 0&>10' A1' 010' .3?-A10' B?0 ?>10' I ' 0?#0'A'10@ 0'#'1-' 1-' 0#-' &'<@>1' " 1 .@'C 1' B&>1' <' 0<' +'@@1' A1' <@1'0@ 0" B&>1' '@' <CC'1 ' 0?=='B1<- >1-' A1' 1B& A1' ?-' 0#-' 0BD1H1 @ C ' @1' H?1=" @10' &10' A'B10 ' &'<@>1' &?- ' 10 1' 0&+1- ' BD< .1\' <' @&' .W- - 10' A<><.10@ @10' 0&@A1& 0' A?' &" A1' <@1'0' A1' @10' ' BD10' '@@1&0H10' @1' C'\' C<'1\' A1' @&' .<.10@ @<' A' '+'@@1' I ' @1' D<0 1=' A?' & ' A?' <@B 0' -'1- ' 1C<' 1\@ I ' '<?L" @1' A' ' 10 1' 1' ?@1' <A' B< 01' ' BD1<?- \' I ' 10 0?- .'1 0' A1' @<#& 1 ' <' @&? ' ?!' A1' @&? ' C< '1' A1=<' 1' 0 ' . 1+&?0' I ' 10 1' 1' 01 BD1' 0? ' #?@@'&-' +1' . -/- ' <' @1' > - ' A?' & ' <' <@1 0@ '00' - ' H' D&>10' A1' A'+0' C<''0' 1-' B&-+1'8 <-B1' A1' #?@@'&-' &?- ' 10 1\' . ?-A1>1- ' <-'1- '01\' 0' -' 1-' @&? ' CO&-10' B&>1' 1-' @&' #'1-0@ C'00' - ' H' @1' A' ' > - ' 10 ' 10BD1?' 1-' .0?-A1' A1B< @ I ' -1' C&1 ' 10 1' 0?0 1- \' 0" &>1' '@ ='''0 ' 1-' @1' 1>C0' A1' 1' . -1' A?' & ' 1- " @1' H?'- @ C'1 ' <' -=1' A' ' ' @1' & ' H& 10 @ I ' C@?0&? 0' <-0' A1+3- ' @<' A' ' C< 'B'&-' C '='1>1- ' & A' -1\G ' H1' &? 1' B1&' @10' ' BD<?- \' A'B10 ' &'<@>1' 0&?- ' C' B1&' .D' -A1@ >1- ' <-'1- '01\' I ' A1' , <'1' -1&1 00' 1' @<' . 1'-A 1' C<R 1' A1' 1?L' 10 ' 1-=& B1' A1' @1001 ' @&' - 1D<?-A'010' A1' @<'-0' I ' C1<@L' @<-? \' C' B<?01' H'@0' -1' C&1-' ! ' ?@1 0' A1' @&? ' CC 10' #'1-0@ ' H' A' , 0' D&>10' @10' H?1?L' -1' C&1-' '< 1-A 1

@<' 10 1' 1' ?@1' A?' A' ' C< 'B'&-' 1>#@11- ' D& 0' A'B10 ' &'<@>1' @<'-0' I ' C1<a' @<-? \@ 0<?- \' C<'1>1- ' A<0B?-' B?0 ?>1' &?' 0?#0'A'1' <?' & ' C? ' B1D@ @1' H?1= ' <A' 10 1' I ' 10 ' & -1>1- ' .0?-A1' A1B 1B1' I ' <-'1- '0'-1- ' < @<' -<+'1' A'B10 ' &'<@>1' I ' < @10' ><'0 10' A10' -'1=0' I ' >< ' 0@ C' B<?01' H' @&? ' +'+1 ' I ' <- -?1'@ <+<'@e' 10 ' .0?-A1>1- ' A1B 1B1' I ' <>10- ?01' C' @<' C1 ' ' 10a'CC10&-' A10' @<'-0' I ' C1<a' @<-? \' 10H10' < @<' A' ' 10 <C@1' C? ' @10' B<?01 0' <+W- A' \@ I ' H1' @1' C 'B1' I ' +<@?1' A10' @<'-0' I ' C1<a' @<-? \' C' @10' A' \' 10 1' 10' ?@10' I ' & A1-0-B10' A1' C< 'B'&-' 10 ' &C' .W?-A1>1- ' A1B 1B1' I ' <>10- ?01;' I ' B&>1' 0? ' B1&' 0&' ' C '1' < >10>1' -=1' ' @1' & ' H" & 1' 10 ' C' 01O' A' \' &C0@ C' @&' C1 'B'&-' =<' ' < @? @ H' '@ @? ' C@1<01' A1' 0< -&#@1' . <B1' B&-0'A1 1 ' @10' C>'0010@ I ' C? ' @1' ?D'+/01@" #'1-' <+<'@e' I ' 1-H 1B1' A1' 'BD10' A'B10 ' &'<@>1@ .0?-A& ' I ' & A1'. -1 ' C' @<?A@& ' 1' A10? 0A' @ H1' &? \' @<' 1R' I ' C1<a' @<-? \' H1' M &- ' 10a'CC1\' 1-' <C0' 10H10' < @<' A' ' 10 <C@1' A1' <@1'0' C' BD<?- ' A1'-0'-0' A'B10 ' #'<@>1@ 0&'1- ' > \' < +1-A1' C' @10' C&0010 &- 0' A1' -10>10' @10' @<'-10' I ' C1<a' @<-? \@ &?' C' @&' < & -10' '@@1&0H10@ A10&?#0' A?1' =& >1' I ' ?@1' A?' A' ' 10 <C@1' < @1' C 'B1' I ' +<@?1' A10' A' \' @<'-0' I ' C1<a' @<--? \@ 0" & -1' '@ 10 ' C' @<' & A'-0-B1' A?' A' ' 10 <C@1' < 'B10 ' 1>C0' > \' I ' ?01@ #?' <' '1@ C 'B1' H&>1' C' @<' ?@1' A?' A' ' 10 <C@1' < & A1'. -1' I ' <CC&'- 1' < <- \' A1' =&' \' ' ?- ' '@ C@1 < ' < >10>10' @10' BD<?- \' &?' C >8< & -10' A1 B1' C< A1' A1' @<' C 'B1' I ' +<@?1' C? ' &? \' '1@ <@ C1<a' @<-? \@ <' @1' A' ' 10 <C@1' 1-' <C0' < +1 A'1 0@ < @1 1>C0' A1' a' +1-A1' I ' A1+/- ' @1' @' 1' A'B1?L' A1' @<' A' ' 10 <C@1' 0&'@ <CC& '1' I ' 1?' 1-' #?@@'&-' A< .1- ' < @1' > - ' A?' a1 ' < <@1 0@ '@'1#0H10' A10 1' B?-11' C' @1' 0? +'1?' A?' @10' 1' ' &-0 <#@10' I ' &>8' C<'. -'1' A?' A' ' 10 <C@1' C '@1' 1 &C ' 10 1<- \@ A10 1'@ ', 1' <C0' H'@ 10 ' '0<- ' B?-1' < @10' A' \' < &D< - \' C&00100&? 0' A10' TA@\' @<'= 0' I ' C1<a' @<-? a' '00 - ' +1-A?\' &?' @&? ' < & -10' I ' C' 1?L' A10 1' <CC& 1' I ' 1?' 1 ' @1' A' ' &'<@>1' "1-.@' 1@ C' @& A'-<= B1' I ' ? +'1?' A1' @10' A' \' 1' ' 8 &-0 <#@10' I ' & -C<'. -'1' A?' @< Aa' 10 <C@1' C? '@1' 1>C0' 10 1<- \@ 0<?-\'= <?A1' 1 -#101@ -1- ' &?' 0?# <BB'&-' A1' B1&' U ' < B?-' >< 1@ 1 ' 0<?H\' <0B?-' C< 'B'&-' A1' @< >&-1 ' H1' +'1-A < A1' @< A' ' #?@@'&-@ ? A1' < B?-' C< 1@ >1-@ A1' @10' <? 10' C< '10' A1' @1' +<@?1' A10' A' \' @<'-0' C1<a' @<-? \' A10 1' 1K1\' & ' =1a\'C 1' H' B10 ' & A1 ' O3O (' 1-A? 1 &' ' <-H1' <@ ='=@1' A1' +' ' <-0' CBD1-'1-0?<- \;' 10>1' '=1' _ ' @1' & ' B&-0'A1 <- ' @10' C>'0010' <A' . D> 1' I ' & A1'. -1' C' @<?=@& ' 1' A10>0A' @ H1' H/?- ' < @< @ C< 'B'&-' A1 ?'0A' ' @10' 1' ' I ' & >C<'. A 1' A?' A' ' 10 <C@1' A1' <@ '0' &1&' 1=& 1-' 1- 1' 1?L' >10>10' <BB& A<- ' <' @<' A' ' C1 'B'&-' A1+0- ' @1' C ' 1' & ' A<?0@ CBD1'-' <+1@ -' G Td1' '@ 0&' ' '00< ' &#01 +1\' 1-' <C0' A? <- \' @10' A' \' 01C ' <-0;' 1 ' 0'# 1&' -U aB1- ' <A&-H10' @1' & ' <A' .#'- 1' I ' & A1'. -1' C' @<? C ' 1' A10?'0A' @ H1' HW -' < @< C< 'B'&-' I ' <' @1' 1>1-<&' 1-' >10>1' @<' C1 'B'&-' B&- ' 1-?\' a0&' ' '=<' ' B& -1A' 10 ' A10' 1

D1' 0 <'.D ' ?@1' &=' D1' 0<'A' Q < ' '&-G <-A' KD1 1# ' 0&>1' A&' 0 1<@ P' &?' &=' D'0 1<@>' F &&@0' <-A' F &&@=1@0' K' D&?' ' < >1- ' &=' <- ' ?0 &>' & ' ?#0'A ' &' `&? ' &8 +1 1'. -' & AP' D1' , '-.' =& ' D1' 0<>1@ KD'BD' D< D' #11-' <-A' '0' A<'@ '<' . 1<' " 1B 1<01' <-A' '-A <-B1' &' D1' <+ ' &=' D'0' 1<@>' `&=' -.@<-A@P' <-A' &' D1' <0 1 0' &=' D'C0' <-A' < '-1 0@ #1B<?01' D<' D1' ' '+'-.' <-A' 1< @ ' +<'@ '0' . 1< @ ' A1B 1<01A' <-A' >' ?0D1A' # ' D1' @' @1' D'CC'-.' &=' F &&@0' <-A' F &&@=1@0' `&=3P' D1' 0<'A' <C@1@ =& ' D1' <?01O' <=& 10<'A@ <-A' D<' D1' 'B1' <-A' <@?1' &=' D1' F &&@0' <-A' F &&@=1@0' # ' D1' 0<'A' 0 <' ' ?@10' <-A' A'-<-B10' &=' < ' '&-' '0' +1 ' . 1< @ ' A1B 1<01A' <-A' >'-'0D1A;' -A' F D1 1<0' ?C&-' D1' 0<>1' ' ' K<0' C < 1A' &' D1' 0<>1' &?' &+1 1'. -' & A' D1' ,'-.' D<' -&K' '0@ # ' D'0' 0<'A' &>>&-0' # ' D1' ' 1 ' '&-' &' D'>' ><A1@ D<' ' ' K&?@A' C@1<01' D' >' &=' D'0' -&##@1' E <B1' &' B&-0'A1 ' D1' 1>#10@ <-A' =& ' D1' ?-'+1 0<@ F 1<@@ +<'@@ <-A' -B 1<01' &=' 'BD10' &=' D'0' 1<@>@ &' . <-' <-A' & A<'-' # ' D1' ? D& ' '<=& 10<'A@ D<' <@@ F &&@0' <-A' F &&@j =1@0' KD'BD' D1 1<= 1 ' 0D<@@ #1' 0D'CC1A' # ' 1 BD<- 0' " 1-'\1-0' &=' D'0' 1<@>' `&=' -.@<-A'P' &' D1' /)' <C@1' &=' <@<'0@ 0D<@@ #1' C? ' &' <@1' # ' D1' K-1 0' &=' D1' 0<>1' F &&@0' <-A' F &&@=1@0@ & '# ' D1' ' &>'10' D1 1@ ?-A1 ' A?1' ! & >' <-A' ?@1' &=' D1' 0<'A' <C@1@ ` &' OP' D1' 'B1' <-A' <@?1' &=' D1' 0<'A' F &&@0' <-A' F &&@=1a@ <0' ' '0' # ' D1' A'-<-B1' &=' D1' 0<'A' <C@1' < ' D=1' '>1' `C? OP' <-A' ?01A@ & ' < ' 0?BD' a1' <0' # ' D1' ?@1' &=' D1' 0<'A' <C@1' 0D<@@ #1' & A<'-1A' <-A' <CC&'- 1A@ <0' &= 1-' <-A' KD1-' ' ' 0D<@@ C@1<01' D1' 0<>1' 1 BD<- 0' & ' D1' ' &>'10'@ 0& D<' D1' D' A' < ' &=' D1' 'B1' <-A' <@?1' =& ' <@@ 0?BD' F &&@0' <-A' F &&@=1@0@ ' #1' 0&@A' D1 1<= 1 ' ` &OP' D1' 0<'A' <C@1@ <' D1' '>1' &=' D1' <@1' <DA' #1=& 1' D1' " 1j @'+1 '&=' D1>' `0D<@@ #1' # &?.D '= &>' D1' 0<'A' <C@1\' <-A' D<A' '-' ?@'&-' &=' '@+1 ' &' D1' , '-./0' '-' <' <@<'0@ D1 1' &' '1' &'-1A' # ' D1' ? +1 '-.' &=' D1' < & @ &-0 #@1 @<-A' &>C<- ' &=' D1' 0<'A' <C@1'=& ' D1' 0>1' #1' -.@ &' #1' A1@'+1 1A@<= 1 ' D<' ' ' '0' 0&' B&' -1A@ &' D1' 0<'A' 1 BD<- 0' K-1 0' &=' D1' 0<'A' F &&@0' <-A' F & @=&@0 0&' 0&@A@ @ <-A' # ' D1>' & ' D1' ' &>'100P' &' #1' # &?.D ' <-A' D<A' `' -'/P' D1' 0<'A' 1<@>' &=' -.@<-A' # ' D1' A'-<-B1' <-A' ?= 1 '-.' C=' D1' 0<'A' < & ' <-A' &-0 <#@10' <-A' &>C<- ' &=' D1' 0<'A' <C@1'=& ' D1' '>1' #1' -.@ K' D&?' 5 -' 1>#1\\@'-.' & ' ?# <^'&-' `&=' D<' 3 ' '-' <- ' K'01@ <-A' K= D&@' <- ' C< ' '&-' &=' D1' &-1 ' KD'BD' 0D<@@ B&>1' &=' D1' 0<'A' ?@@'&-@ & ' &=' <- ' <+>1- ' &=' ` D101' 3P' & D1 ' < '10' &=' D1' <@?1' &=' D1' 0<'A' F &&@0' < A' F &&@=1@0' &' #1' D<A' & ' > <A1;' <-A' D<' D'0' A'-<-B1' 0D<@@ 1-A? 1' '@@ D1' -A' &=' 1+1-' 1< 0' -1L '1- -'-.;' D1' 0<>1' &? ' &+1 1'. -' & A' `/3)' B&-0'A1 '-.' D1' 1j >#10@ D< D' . <- 1A' >'A'C A ?-1A' # ' D1' ? D& ' ' <=& 1@ 0<'A ' W D<' <' =# D1' < ' '&-'<=& 10<'A@ D1' & ' `<-A' &-0 <#@10P' <-A' &>C<- ' &=' D1' 0<'A' < A1' &=' <@<'0' 0D<@@ 1=& >' D1' 0<>1' <>&-.' D1>01@+10' <BB& A'-.' &' D1' 0<'A' 1 ' '&-'#1=& 1' D1' ! ' 0 ' " < '&=' ?.?0 '-1L ' B& >'-.G <-A' D<' ' ' 0D<@@ #1' 0&' &#01 +1A' D1 1<= 1 ' A? '-.' D1' <'" H' 1< 0;' -A' '=' D<' #." A&' -& ' D1-' ` D1' 0<>1@ &? ' &+1 1'. -' & A' ' D1' ,'-.' D< D' . <- 1A' <-A' & A<'C1A' # ' D1' ? D& ' ' <=& 10<'A@ D<' <'0' &' D1' `C1 ' '&-U) ' <-A' &' D1' 1><-1- ' '-' D1' 0<>1' 1 ' '&-' B&- <'-1A@ 4' 0D<@@ #1' A&-1' <0' '0 A1< 1A

V C< 'B'&-@ # '#1@ <-A' 0 1@1' 0' &
0<'A' 0<' N' 01 1
U= &>' D1' 0<'A' i <C 1' #1' # 1?=@' ' `' = '
: 3'" !"!' . -!& ' -/' ;@' !"-' Y] : %%H R K
' '- &' 15 #' =11 &
&' D1' 'C< 'B'&-'

!' 2 &/'
3! & &. -'
"! !""! /' !'
!' .@. "'
' . ' !'
+!= -/'
*" - ! /

Anno 23° HENRICI, VI. A.D.1444-5.*

HERE BEGIN THE STATUTES
Made at Westminster in the Twenty-third Year.

AT the Parliament holden at Westminster the Twenty-fifth Day of February, the Twenty-third Year of the Reign of (1) King Henry the Sixth after the Conquest, the same our Lord the King, by the Advice and Assent of the Lords Spiritual and Temporal, and the Commons being in the said Parliament, (2) by the Authority of the same Parliament, made to be ordained and stablished divers Ordinances and Statutes in the Manner and Form following.

Recital of St. 36 Ed. III. stat. 1. ch. 2. relating to Purveyors.

FIRST, Whereas in the Parliament holden the xxxvj. Year of King Edward the Third, for the grievous Complaints made against Purveyors of Victuals, It was ordained and established, that no Man of the Realm should have any Taking but only the King and the Queen his companion: And that upon such Purveyances to be made for the Houses of the King and the Queen, ready Payment should be made in Hand, that is to say, the Price for which such Victuals should be commonly sold in the Markets about; and that the heinous Names of Purveyors should be changed, and named Buyers: "And if the Buyer cannot well agree with the Seller, of that which he shall need, then the Takings, which shall be made for the said two Houses, shall be made by the View, Testimony, and Appraisement of the Lords, or their Bailiffs, and Constables and Four good Men of every Town, and that by Indenture to be made betwixt the Buyers and the said Lords or Bailiffs, Constables, and Four Men, containing the Quantity of their Takings, and the Price, and of what Persons; And that the Takings be made in convenient and easy Manner, without Duress, Compulsion, Menace, or other Villainy: And that the Takings and Buyings be made in Places where greatest Plenty is, and that in a meet Time: And that no more be taken than shall be needful in the Season for the said two Houses: And that the Number of the said Buyers be diminished in as much as well may: And that such be Buyers which be sufficient to answer to the King and his People, and that none of them have Deputy: And that the Commissions be sealed with the Great Seal, and every Half-year re-delivered into the Chancery,

(1) *our Lord* (2) *and*

Ex MS. Cott. Nero. C. I. †

INCIPIUNT STATUTA apud Westñ edita anno xxiij°.

AU Plem̃t tenuz a Westñ le xxv^e^ jor de Fev̄er lan du reigne nr̃e f^r^ le Roi Henry le vj^e^ ap̄s le conquest xxiij, mesme nr̃e f^r^ le Roi del advys & assent de lez f's esp̃uelx & temporelx & lez Cões estea^ez^ en le dit plem̃t & p auc̃to^re^ de mesme le plem̃t fist ordeigner & establier div̄sez ordeign^e^ncez & estat^z^ le maner & fo^r^me q̃ ensuist.

Prim̃ement co^rs^ en le pleme^t^ tenuz lan xxxvj^e^ le Roi E. le tierce sur lez g^r^vous compleinz faitz s' p^r^ dez vitaill estoit ordeigne & establie q̃ null hõme de Roiat av̄oit pris forsq̃ soulem̃t le Roi & la Roigne compaigne; Et q̃ sur tielx p^r^veauncez diverses Hostielx le Roy & la Roigne ꝺroit pr̃et paiem̃t en poigne, ꝑ. le price p^r^ quele autiel's vitaill ꝺroie^t^ venduz cõeme^t^ en marchez environ; Et q̃ lez heinous nouns dez p^r^veio's ꝺroie^t^ chaungez & nõmez achato's; & si lachato^r^ ne p^r^roit bonem̃t accorder ove le vendo^r^ de ceo q̃ busoigneroit adonq̃s lez prisez q̃ se ferroie^t^ p^r^ lez ditz deux hostielx ꝺroie^t^ faitz p viewe & tesmoign^e^ns & app̄ciac̃on dez f's ou (1) Baillifs & Constablez, & quatrez pdez hõmez de ch̃un vill, & ceo p endentur affair pentr̃ lez achato's & lez ditz f's ou Baillifs Constablez [ou^2^] quat̄ homez, conteign^e^ntz le q^a^ntite de lo^r^ prise & la price & de lez queux psonez; Et q̃ lez p'sez ꝺroie^t^ faitz en covenabl̃ & ease mañe s^e^unz duras reddo^r^ manasse ou aut^re^ vilanie; Et q̃ lez prisez & achatez ꝺroie^t^ faitz en lieux [en^3^] placez ou greindre pleinte y ad & ceo en te^s^ covenabl̃; Et q̃ pluis ne serroit prise q̃ ne busoigne en sa season pur lez ditz deux Hostielx; Et q̃ la nombre d[illegible] achato's ꝺroie^t^ amenusez en taunt co^rs^ home p'[illegible] me^t^; Et q̃ tielx ꝺroie^t^ achato's q̃ ꝺroie^t^ suffices[illegible] rñdr̃ a Roi & a poeple & q̃ null de eux av̄oit dep[illegible] Et q̃ lez Cõmissions ꝺroie^t^ ensealez du g^a^und seal [illegible] ch̃une di an restituitz en la Chaunc̃ie & autre[illegible]

(1) lour (2) & (3) ſ } *Stat. 36 Edw. III. c. 2.*

* This Parliament, which began on 25th February, 23 Henry VI. A. D. 1444-5, was by divers Prorogations continued to 9 April 24 Henry VI. A. D. 1446. The Statute made in this Parliament has always been cited as 23 Henry VI.

† No Statute Roll, nor any Transcript of the Statute of this Year, is preserved in the Tower of London: The Statute was first printed from this Cotton Manuscript in Cay's Edition of the Statutes. The Various Readings marked *Lib. Scacc.* are from the Entry in *Lib. IX.* in the Exchequer at Westminster; wherewith the Old Printed Copies agree, unless the contrary is noted. The Petitions entered on the Parliament Roll of this Year, on which Chapters I. IV. V. and XIV. of the Statute are framed, are in French; those on which the other Chapters are framed are in English.

novell faitz; & q̃ en lez ditz Cõmissions ſront comp'sez to' la matier & mañe de lo' p'sez & achatez; & q̃ null home ſroit tenuz dobier as achato's dauꝰ ſ's countre lo' gree & voluntee, ne (') lez achato's dez ditz Hostielx sils ne firent ꝑst paieñt en poigne co' dev'nt est dit; ne q̃ null home ſroit mys en contempt p cause de disobeisaunc̃e faite en tiel ptie; Et q̃ lez prisez dez to'z mañs dez blees & brees p' lez ditz deux Hostielx ſroie' mesurez p mesure accord'unt al estandard rase & nient comble; Et q̃ p' lez cariagez dez ditz bleez & breez & p' to'z auꝰ mañs dez prisez & achatez affairez p' lez ditz deux Hostielx ſroit ꝑst paieñt fait en poigne, en mesme le maner co' p' p'sez & achatz suisditz; Et q̃ pluis de cariage ne ſroit pris q̃ ne busoigne & ſroit necessarie en cell ptie; Et si null achato' face ascuns prisez ou achatez ou ꝓnour de cariage en auꝰ mañe q̃ nest comprise deinz lo' Cõmissions aꝺoit punisheñt de vie & de membr, co' en aut' estat' est ordeigne dez p'veio's: * Item q̃ null achato' dez vitaillez ne ꝓno' [de cariage[2]] ꝑigne ne resceive de nulluy doñ ne aut' bien fait p' dispte fair, ne charge ne greve null home p cause dez ditz p'sez achatez & cariagez p' haiour [enemyte[3]] male volunte [&[4]] ꝓcureñt; & sil face & de ceo ſroit atteint al suite de ptie rendra a la ptie sez dañ a treble, & aꝺoit la p'sone de deux ans, & serroit reint a la volunte le Roi & puis forjure la Co' & si la ptie ne vorroit suer aꝺoit celluy q̃ le voudra suer p' le Roi le tierce denier de ceo q̃ ſra recoꝺe pur son travaill, & nientmayns aꝺoit lachato' & ꝓno' la pen'nce co' dev'nt est dit en mesme cell article; Et q̃ chune achato' sur son accompt ferroit declarer & distinguer seꝺalment to'z sez prisez & achatez de chune Countee ville (5) & psone:—Nr̃e dit ſ' le Roi q̃ orest considera' les ꝑmissez ad ordeigne & cõmande p lauc̃to' de son dit pleñt q̃ lez ditz estat's desore enav'nt soit dueñt gardez & mys en execuc̃on; Et oustre ceo ad ordeigne p mesme lauc̃to' q̃ chune p'veio' & achato', dev'nt q̃il eit ascun Cõmission, ferra ſeñt en la Chaunc̃ie qil ne ꝑndra rien de la poeple a cont'rie dez ditz ordegn'ncez. Et oustre p' ceo q̃ lez poꝰ gentz ne sont de power ne ne osent fair resistenc̃ enꝰ lez ditz p'veio's & achato's, ne eux suer p la ley, come' qils font a cont'rie as ditz estat's, ad ordeigne p mesme lauc̃to' q̃ lez ditz apꝑisours, & auxint to' la vill ou villez adjoign'ntz si busoigne soit, soie' tenuz de fair lo' devoir & poier de resister lez ditz achato's & p'veio's a fair a contrarie de lez ditz estat's, & en tant co' en eux est dexecuter lez ditz estat's sur mesmez les p'veiours sils soie' requis; Et q̃ celluy q̃ est greve de sez biꝰ p'sez a cont'rie dez ditz ordeign'ncez & estat's, p'ra eslier davoir acc̃on de dette enꝰ les ditz apꝑisours vill ou villez & chune de eux q̃ ne [sount[6]] lour devoir en resisistenc̃ des ditz p'veio's ou achato's en la fo'me av'ntdit q'unt ils sont requis, ou aut'ñit enꝰ

ij.

[1] a ou [2] des cariages [3] envie } *Stat. 36 Edw. III.*
[4] ou [5] villee
[6] font *Rot. Parl. nu.* j. (25.): *Lib. Scacc.*

and other newly made; and that in the said Commissions be comprized all the Matter and Manner of their Takings and Buyings; and that no Man be bound to obey to the Buyers of other Lords against their Agreement and Will, nor to the Buyers of the said Houses, unless they make ready Payment in Hand, as before is said; and that no Man be put in Contempt because of Disobedience made in this Behalf; and that the Takings of all Manner of Corn and Malt for the said Two Houses be measured by Measure according to the Standard, striked, and not by heap; and for the Carriages of the said Corn and Malt, and for all other Manner of Takings and Buyings to be made for the said Two Houses, ready Payment be made in Hand in the same Manner as for the Takings and Buyings aforesaid; and that there be no more Carriage taken than needeth and shall be necessary in this Behalf; and if any Buyer make any Takings or Buyings, or Taking of Carriage in other Manner than is comprised in their Commissions, he shall have Punishment of Life and of Member, as in other Statutes is ordained of Purveyors:"—"Item, That no Buyer of Victuals, nor Taker of Carriages, take nor receive of any a Gift or any other thing for Sparing to be made, nor shall not charge nor grieve any Man by Occasion of such Takings, Buyings, and Carriages, for Hatred, Envy, Evil Will, or Procuring; and if he do, and thereof be attainted at the Suit of the Party, he shall yield to the Party his Treble Damage, and shall have Imprisonment of Two Years, and also be ransomed at the King's Will, and after forswear the Court; and if the Party will not sue, he that will sue for the King, shall have the Third Penny of that which shall be recovered, for his Labour, and nevertheless the Buyer and Taker shall have the Pain as before is said in the same Article; and that every Buyer upon his Account shall declare and distinguish severally all the Takings and Buyings of every County, Town, Village, and Person:" Our said Lord the King that now is, considering the Premisses, hath ordained and commanded by Authority of his said Parliament, That the said Statutes from henceforth shall be duly kept and put in Execution; And also hath ordained by the same Authority, that every Purveyor and Buyer, before they shall have any Commission, shall be sworn in the Chancery, that he shall take nothing of the People contrary to the said Ordinances. And Moreover, because the poor People be not able, nor dare make Resistance against the (') Purveyors and Buyers, nor sue them by the Law, though that they do contrary to the said Statutes, [It is[2]] ordained by the same Authority, That the (') Praisers, and also all the Town or Towns adjoining, if need be, shall be bound to do their Endeavour and Power to resist the (') Buyers and Purveyors doing contrary to the said Statutes, and as much as in them is, to execute the said Statutes upon the same Purveyors, if they be required; And that he which is grieved for his Goods taken contrary to the said Ordinances and Statutes, may choose to have an Action of Debt against the said Praisers, Town or Towns, and every of them, which do not their [Industry[3]] in Resistance of the said Purveyors or Buyers in the Form aforesaid, when they shall be required, or

36 Ed. III. stat. 1. ch. 3.

Recited Statutes confirmed.

Purveyors shall be sworn.

Resistance against Purveyors acting illegally.

Action of Debt by the party grieved.

[1] *said* [2] *he hath* [3] *Duty*

* *Lib. Scacc.* and all the Printed Editions previous to Cay's, agree in numbering the Remainder of this Chapter as Chapter II. of this Statute; but improperly.

else against the said Purveyors and Buyers, and every of them, to recover the Treble Value of his Goods so taken, and moreover his Costs and his Treble Damages. And if any Purveyor or other the King's Officer do trouble or vex any of the King's liege People, in the Marshalsea or elsewhere, by any evil Suggestion or Cause feigned, imagined, or coloured upon them, because of Execution of the said Ordinances, he shall incur the Pain of xx l. to be paid to the Party grieved, over his Damages and Costs in this Behalf sustained, and that he thereupon shall have a Writ of Debt; and that every Issue triable in this Action, shall be tried in the County where the Taking of the said Goods was made; and that the Defendants in all the said Cases shall not be admitted to wage their Law, and shall be put to answer without Fourching, and no Essoin, Aid of the King, nor Protection shall be to them allowed; and that the Serjeant of the Catery shall satisfy all the Damages, Debts, and Executions which shall be recovered against every Purveyor and Buyer under him in all the Cases aforesaid, if the Purveyor or Buyer be not sufficient to satisfy; and the Party Complainant shall have a Scire facias to have Execution against the said Serjeant in that Case; and that these Ordinances and Statutes shall be sent to the Justices of the Peace in every County to proclaim them every Year, and thereof to inform the People.

Treble Damages.

Serjeant of the Catery shall pay Damages in Default of Purveyor.

II. Export of Thrums and Woollen Yarn prohibited for Three Years.

ITEM, Our said Sovereign Lord the King hath ordained by the Authority aforesaid, That no Man hereafter shall pack nor ship any Thrums nor woolen [Threads[1]] in any wise to be had or to pass out of his Realm of England beyond the Sea, during the Term of Three Years next ensuing, upon Pain of Forfeiture of the same Thrums and woolen [Thread,[1]] or the very Value of the same to the King; the King to have the one Half thereof, and he which shall the same espy, find, and prove the same to be forfeit, to have the other Half: And that he that packeth to ship beyond the Sea, any such Thrums or woolen [Thread[1]] hereafter, contrary to this Ordinance, shall have One Year's Imprisonment, and moreover shall make Fine and Ransom (*) for his Offence in this Behalf; Saving always to the King his Advantage by the Statute made in the Parliament holden at Westminster the viij. Year of his noble Reign touching this Matter.

Saving for the King under the Statute 8 H VI. c. 23.

III. Recital of the Statute 20 Hen. VI. c. 10 touching Deceits in the making of Worsteds in Norwich and Norfolk.

ITEM, Whereas in the last Parliament of the King holden at Westminster, among other Things it was enacted and granted by Authority of the same Parliament, That where there were divers Persons as well within the City of Norwich as in the County of Norfolk which made [false Work[2]] of all Manner of Worsteds, not being of the Assise in Length and Breadth as they ought to be, and were of old Time accustomed, and the Slaies and [Thread[1]] [to that[3]] pertaining were falsly made and wrought, to the great Deceit as well of Denizens as of Strangers repairing to this Realm, which use to buy such Merchandises, trusting that they be within as it appeareth outwardly, where of Truth it was contrary; and where Worsted was sometime a good Merchandise and greatly desired and loved in the Parts beyond the Sea, because it was of false Work and of false Stuff no Man doth set by the same, to the great Damage of the King's Customs, and great Damage and Prejudice to his faithful People, [it was also ordained[4]]

[1] yerne *Rot. Parl. nu.* iij. (28.)
[2] *to the King*
[3] untrue ware
[4] therto
[5] yern
[6] that
} *Rot. Parl. nu.* v. (30.)

les ditz p'veio's & achato's & chune de eux a recover le treble value de sez biens issint p'sez, & oustre ceo sez costagez & dañi as treblez: Et si ascun p'veio' ou aut're Officer nre f' le Roi face troubler ou vexer, en le Marchalsie ou aillo's, ascuns des liegez nre dit f' le Roi p ascun [male[1]] suggestion cause feyne ymagine ou colo' sur eux, a cause dexecucon dez ditz ordeignncez, enco'ge la peyne de xx li. a paier a la ptie greve oustre sez dañi & costagez en cell ptie susteignuz, & qil aya sur ceo br de dette; Et q chune issue triable en cest accion sra trie en le Countee ou le prise des ditz biens soy fist; Et q les defendauntz en tes lez ditz casez ne soient admys de gager lo' ley, Et soie' mys a respons s'unz fourcher, Et q essoin eide du Roi ne pteccion a eux soit allowe; Et q le sgeaunt de la chalie satisfiera tes lez dañi dettez & execucons queux serront recovez vs chune p'veio' & achato' desouth luy en tes lez casez suisditz, en cas q le p'veio' ou achato' ne soie' sufficie' de satisfier; Et eit la ptie pleignnt Sciri fac dav execucon vs le dit Sergeant en ceo cas: & q cestz ordeignncez & estatuitz soie' mys as lez Justic de la peas en chescun Countee de eux pclayn chune an & dent enfo'mer le poepl.

Item nre dit f' le Roi ad orde[illegible] iij. ditz q nuff home en ap's face pakker [illegible] ascuns thrommez ne filez de leyn en [illegible] destre euez ou de passer hors de [illegible] doustr la mear, durant le tme de tro[illegible] ensuat s' peyn de forfaitur dez ñia [illegible] de layn ou le veray value dicell a Roi; [illegible] lune moite de ceo & celluy q espiera tro[illegible] ceo forfaitable davoir laut' moite: & q celluy q pakka a eskipper doustr la mear ascuns tielx thromez ou file de laine en ap's a cont'rie dicest ordeignnc eit emprisonemt dun an, & oust' ceo face a Roy fyn & raunsom p' sa offens en cest ptie: savnt tes foitz a Roi son avntage p lestatuit fait en le plemt tenuz a Westñ lan oeptisme de son noble reigne touchant cest matier.

iij.

iiij.

Item come en le darreign plem' du Roy tenuz a Westñ ent' aut's fuist enacte & g'untee p laucto'e de mesme le plemt, q lou furent sibn deinz la Citee de Norwich co' deinz le Countee de Norff divsez psonez q firent [faux ordeigne ou ovaigne[3]] dez tes manez dez worstedez, nient esteantz dez lassisez en longieur & laieur si co' ils duisse' estre & furent dauncien te' accustumez, & lez slaiez & filez a ceo specta' fauxemt fure' faitz & ovez, en g'unde disceit sibn dez Deinzeins co' dez est'ungez repairantz a icest Roiat q usoient dachatier tielx mch'undisez confiantz qils sroie' dedeinz co' [il mra[4]] dehors, lou de verite il fuist cont'rie; Et lou worstedez fure' en ascun te' beal mch'undise & g'undemt desirez & ameez en lez ptiez de p de la, p cause qil fuist de faux ovaigne & de faux stuffe nul home ent face cont a g'und damage de lez custumez du Roy & g'und damage & pjudice a son foial p[illegible] q

[1] mavis *Rot. Parl. nu.* j. (25.)
[2] & *Lib. Scacc.*
[3] faux draps
[4] il monstre
} *Stat.* 20 *Hen. VI. c.* 10.

a la destruccion dez tielx defaultz q̄ lez hōmez de la dit art [de[1]] la di Citee a͛oie' poiar c̄hun an a le feste de Pentecost deslier quatre Gardeinz deinz la dit Citee de mesme lart; & icell gardeinz davoir poiar deslier au͛s deux homez en le dit Countee hors de la dit Citee, & to͛s lez (2) Gardeinz de venir dev'nt le Mair de la dit Citee p' le te' esteant le lundy ap̄s le jo' de Corpus X̄pi adonq̄s pschein ensuant, & illoq̄s destr̄ jurrez dev'nt le Mair de fair veray & due ſche dez to͛s mañs Worstedez, & de la stuffe spectantz a ycell faitz ou affairs deinz la dit Citee ou Countee; & q̄ c̄hune pece de worstede soit p'suant pmye to' le drap̄ de droit o͛aigne bon & covenabl stuffe, & q̄ils teigne' lez longieur & laieur sico' lassise ad este daun'n te' droiteñit accustume; s. beddez de le pli⁹ g'und assise en longieur xiiij aulnez largeñit & en laieur iiij aulnez largeñit p my to' la pece; & beddez de la mesne assise xij aulnez en longieur, & en laieur p my to' la pece iij aulnez; Et beddez de la pluis petit assise x aulnez en longieur largeñit & deux aulnez & di en laieur; & draps appellez Monkez clothes xij aulnez en longieur a le meyns & v. quar͛s en laieur; Et draps appellez Chanoñ Clothez v. aulnez en longieur & vij quar͛s en laieur, Et draps (3) Chanon clothez vj aulnez en longieur & deux aulnez en laieur; & double worstede x. aulnez en longieur & v. quar͛s en laieur; & di doublez vj aulnez en longieur & v. quar͛s en laieur; & rolle worstede xxx. aulnez en longieur & di aulne en laieur largeñit; & q̄ en null dicell worstedez soit mys layn de agnell ne layn appelle pelle woolle: & q̄ lez Gardeinz de la dit art p' le te' esteantz a͛oient poiar & auct'e de seiser to͛s tielx draps & stuffe issint trovez defectifs, & q̄ le Mair du dit Citee p' le te' esteantz a͛oit poiar denquerer oier & t̄mīer, t'unt a la suite du Roy come al enformac̄on de lez ditz Gardeinz, de to͛s ceux q̄ font encount' la dit ordeign'nc̄ deinz la dit Citee; & en semblable fo'me lez Justic̄ de la peas en le dit Countee hors de la dite Citee a͛oient poiar denquerer oyer & t̄mīer dez to͛s ceux q̄ [sont[4]] encount' lez p̄missez en le dit Counte hors du dit Citee; Et si ascun home ent dev'nt le dit Mair ou Justic̄ de la peas serroie' duen̄it convic̄ & atteint q̄ adonq̄s icell worstedez & stuffe issint trove defectifs serroie' forfaitz s. lune moite de tiel forfaitur a le Roi & laut' moite a lez Gardeinz du dit art p' le te' esteantz; Et q̄ le Mair p' le te' esteant de la dit Citee & lez Justic̄ de la peas en le dit Countee a͛oient poiar de fair tielx pcesse se͛alñit en͛s tielx psonez ou psone q̄ ſront trovez defectifs p enquerre dev'nt eux destre pris [co'[5]] ascun chose faite encount' lez p̄missez si co' lez Justic̄ de la peas [sont[4]] s' enditeñitz pris dev'nt eux, de [t'nš[6]] faitz ove force & armez encount' la peas du Roi; & q̄ la dit ordeign'nc̄ cōmenc̄oit app̄ndre effect a la feste de Seint Michell pscheinañit ensuant le dit pleñit, a endurer tanq̄ a la fyñ de trois ans: le Roi considerant lez p̄missez ad ordeigne p lauct'e de son dit pleñit tenuz le dit xxv' jour

[1] deinz
[2] ditz
[3] appellez
[4] fount
[5] de
[6] ſspas
} *Lib. Scacc.*
} *Stat. 20 Hen. VI. c. 10.*

to the Destruction of such Defaults, that the Men of the said Craft within the said City should have Power every Year at the Feast of Pentecost, to choose Four Wardens within the said City of the same Craft; and the same Wardens to have Power to choose other Two Men in the said County out of the said City, and all the said Wardens to come before the Mayor of the said City for the Time being, the Monday after the Day of Corpus Christi then next ensuing, and there to be sworn before the Mayor, to make true and due Search of all Manner of Worsteds, and of the Stuff pertaining to the same, made or to be made within the said City or County; and that every Piece of Worsted shall be pursuing through all the Cloth of right Work, good and convenable Stuff, and that they shall hold the Length and Breadth as the Assise hath been of old Time (1) accustomed; that is to say, Beds of the greatest Assise in Length xiiij. Yards largely, and in Breadth iiij. Yards largely through the Piece; and Beds of the mean Assise xij. Yards in Length, and in Breadth through the Piece iij. Yards; and Beds of the least Assise x. Yards in Length largely, and Two Yards and a Half in Breadth; and Cloths called Monks Cloths xij. Yards in Length at the least and v. Quarters in Breadth; [and Cloths called Cannon Cloths of the one Assise v. Yards in Length and vij. Quarters in Breadth, and of the other Assise, vj. Yards in Length and ij. Yards in Breadth;[2]] and Double Worsted x. Yards in Length, and v. Quarters in Breadth; and Half Double vj. Yards in Length and v. Quarters in Breadth; and Roll Worsted xxx. Yards in Length and Half a Yard in Breadth largely: And that no Lambs Wool nor Wool called [Peltwool[3]] shall be put in any of the same Worsteds: And that the Wardens of the said Craft for the Time being shall have Power and Authority to seize all such Cloths and Stuff so found defective; and that the Mayor of the said City for the Time being have Power to enquire, hear, and determine as well at the King's Suit as at the Information of the said Wardens, of all them that do contrary to the said Ordinance within the said City; and in like Form the Justices of the Peace in the said County out of the said City, shall have Power to inquire, hear, and determine of all them that do contrary to the Premises in the said County out of the said City; And if any Man (4) before the said Mayor or Justice of the Peace shall be duly convict and attainted, that then the same Worsteds and Stuffs so found defective shall be forfeit, that is to say, the one Half of such Forfeiture to the King, and the other Half to the Wardens of the said Craft for the Time being; And that the Mayor for the Time being of the said City, and the Justices of the Peace in the said County, shall have Power to make such Process severally against such Persons or Person, which shall be found defective by Inquiry before them to be taken of any Thing done contrary to the Premises, as the Justices of Peace do upon Indictments taken before them of Trespass done with Force and Arms against the King's Peace; and that the said Ordinance shall begin to take Effect at the Feast of Saint Michael next ensuing the said Parliament, to endure till the End of Three Years: The King considering the Premises, hath ordained by Authority of his said Parliament, holden the xxv. Day of February, for

[1] truly
[2] And Chanon Clothes v. yerdes long and vij quarters brode; And Chanon Clothes vj yerdes long, and ij yerdes brode;
[3] Pell Woll
[4] therof
} *Rot. Parl. nu.* v. (30.)

Worsted Weavers shall choose Four Wardens yearly in Norwich, and Four in Norfolk.

the Weal of all his People of his said Realm, and in Amendment of the said Worsteds, [for] and in Destruction of all Manner of Deceit to be done and wrought in Worsteds by them that [have them by [1]] the Means of the same, that the Men of the said Craft within the said City shall have Power every Year at the Feast of Pentecost to choose Four Wardens within the said City of the same Craft; and also in like Manner that the Artificers of the same Craft, dwelling out of the said City, that is to say, in the County of Norfolk, shall have Power every Year at the ([2]) Feast of Pentecost to choose Four Wardens within the said County of the same Craft; ([3]) and that the said Wardens in the said County and City shall be sworn before the Mayor of the said City, and the Steward of the Dutchy of Lancaster within the said County for the Time being, [if he be present within the said City,[4]] or else before the Mayor alone, the said Steward being absent at such Time: And that all the said Wardens, as well within the said City as without, or else the most Part of them, under the same Form before rehearsed chosen and sworn, shall have full Power to survey the Work of the said Artificers, and that they shall make and work well and lawfully; and [do to be ordained [5]] such Rules and Ordinances within the said Craft, [as shall seem to them necessary for [6]] the Amendment of the said Worsteds and Craft; and that such Rules and Ordinances, by them so made and ordained, to be by the said Artificers obeyed and observed, or else ([7]) such of the said Artificers that break or do contrary to their said Rules and Ordinances, to [be punished [8]] by the Discretion of the said Mayor and Steward: And also that no Man of the said Craft shall make any Worsted, except he put upon the same his Sign by the Ordinance of the said Wardens, or otherwise the said Worsteds shall be forfeit to the King; and that the said Wardens as well within the said City, as within the Counties of Norfolk and Suffolk, shall have full Power to search or do to be searched all Manner of Worsteds, as well within the Looms as without the Looms; and that all Manner of Worsted and Stuff pertaining to the same found by them for any Cause ([9]) recited defective, by the said Wardens, to be forfeit; that is to say, the one Half to the Mayors and Bailiffs of Cities, Boroughs, or Towns, or to the chief Lords of the Fee, of and in such Places where such Worsteds and Stuff by the said Wardens shall happen to be found defective and forfeitable for any Cause aforesaid, and the other Half to the Wardens of the said Craft; and that all manner Mayors, Sheriffs, and Bailiffs, and all other Officers shall be attending, aiding, and supporting the said Wardens in their Searches, as often as they or any of them shall be by the said Wardens or any of them ([10]) required: and that this Ordinance shall endure till the End of Three Years next ensuing. Provided always, That if ([11]) the Wardens of the said Craft, as well within the said City of Norwich as without, or otherwise the greater Part of them, in Manner and Form aforesaid [happen to be [12]] chosen and sworn, to make any such Rules and Ordinances as afore is said, that the same

Oath of the Wardens;

and their Authority.

Weavers shall put their Marks on their Worsteds.

Defective Worsteds forfeitable.

Continuance of this Ordinance.

Rules of Wardens shall be certified to the King and Council.

de Fever, p' la bñ de tout son poeple de son dit Roiat & en amendemñt dez ditz Worstedez & en destruccion de to' mañe desceit destre fait & ove en Worstedez p ceux q̃ lez ovont & lez mesnez dicell, q̃ homez de la dit art deinz la dit Citee eie' poiar chun an a le feste de Pentecost deslire quat' Gardeinz deinz la dit Citee de mesme lart; Et auxint en semblable mañe q̃ lez artifics ([1]) hors du dit Citee, s. en le Counte de Norff eient poiar chune an a la dit feste de Pentecost deslire quatre Gardeinz deinz la dit Counte de mesme lart; & q̃ ils ne ascun de eux destre eslieux p lez Gardeinz de la dit art deinz la dit Citee, ascun act de plemñt dev'nt cest te' fait a cont'rie nient obst'unt: Et q̃ les ditz Gardeinz en les ditz Countee & Citee soie' jurrez, dev'nt le Mair du dit Citee & le Seneschall del Duchie de Lancastr̃ deinz le dit Counte p' le te' estea', sil aveignera [la deinz dit Citee & [2]] estr̃ psent, ou autremñt dev'nt le Mair t'unt soulemñt le dit Seneschall esteant absent a tiel te': Et q̃ to's les ditz Gardeinz si bn deinz la dit Citee co' dehors ou autr̃mñt la greindre ptie diceux desoubz icell fo'me av'nt reherce esluz & jurrez eient pleyñ poiar de s'veier le ovaigne de lez ditz artifics, & q̃ils face' & ovent bn & loialmñt, & de fair & dordiner autielx rulez & ordeign'ncez deinz la dit art si sove' come il semblera a eux [illegible] serront a le amendemñt de lez ditz Worstedez & arte; & q̃ autielx rulez & ordeign'ncez p eux [illegible] faitz & ordeignez destre p lez ditz artifics [illegible] obfvez, ou aut'me' lez ditz Gardeinz, [illegible] artifics q̃ a ascun de lo' ditz reulez & ordeign'ncez enfreyne' ou font le cont'rie, p lez discrecons dez ditz Mair & Seneschall de punir: & auxint q̃ null ho' de la dit arte face ascun Worstede sanz ceo qil metta sur ceo son signe p la ordin'nc̃e de lez ditz Gardeinz, ou autr̃mñt les ditz Worstedez soie' forfaitz a Roi; & q̃ lez ditz Gardeinz sibn deinz la dit Citee co' deinz lez Counteez de Norff & Suff eient pleyn poiar de scher [toucher [3]] to's mañs Worstedez, ou de fair scher, sibn deinz lez lomez co' dehors lez lomez; & q̃ to' mañe Worsted & stuffe spectantz a ycell trove p eux p ascun cause av'nt recite defectif, p lez ditz Gardeinz destre forfaitz, s. lun moite as lez Mairs & Baillifs dez Citeez & Burghs ou Villez, ou as chiefs s's de le fee de & en tielx lieux sico' il avieghña autielx Worstedez & stuff p les ditz Gardeinz destre t'vez p ascun cause av'ntdit defectif & forfaitablez, & laut' moite a lez Gardeinz de la dit arte; & q̃ toutz Mairs Visc̃ & Baillifs & to's aut's offics soie' entendantz eidauntz & support'untz lez ditz Gardeinz en lo' schez, si sove' co' eux ou ascun de eux soie' p lez ditz Gardeinz ou ascun de eux [soie' p les ditz Gardeinz ou ascun de eux [4]] resonablemñt requis: Et q̃ cest ordeign'nc̃e endurera tanq̃ al fyn de trois ans pscheinemñt ensua's. Purvie' to's foitz q̃ si il aveigne lez Gardeinz de la dit arte [illegible] deinz la Citee de Norwiche co' dehors, ou [illegible] greind' ptie de eux, en mañe & fo'me av'nt dit [illegible] & jurrez, de fair ascuns tielx reulez & ordeign'nc̃ez co' desuis est dit, q̃ mesmez lez reulez & ordeign'nc̃ez

[1] worken hit, and [2] saide
[3] and that thei nor noon of hem to be chosen bi the Wardeyns of the forsaid Craft, within the forsaid Citee; ony act of Parliament afore this tyme made to the cont'ry notwithstandyng;
[4] if it shall happe hym within the said Citee to be psent [5] to make and ordeyne
[6] as often as it shall seme to them nedeful, as shall be to
[7] the saide Wardeyns
[8] punysshe [9] afore [10] resonabely
[11] it happen [12] *omitted.*

Rot. Parl. nu. v. (30.)

[1] de mesme larte dem'antz *Lib. Scac.*
[2] luy deinz la dit Citee *Lib. Scacc.*
[3] *Lib. Scac.* omits. [4] An erroneous Repetition.

ne soie' en ascuns mañe mys en execuc̃on, dev'nt ceo q̃ le Roi et son Counsaill soie' de eux certifiez, & q̃il sembla a Roy & son Counsaill ñre lez rulez & ordeignnauncez expedientz & necessariez p' la bien du Roi & son Roiat.

iiij. (1) Item co' div̄sez psonez dem'antz en Galez & en le Marche de Galez, enditz & utlagez dez treasons & feloniez, veigne' en le Countee de Hereford as lez Citeez & Burghs villez fairez & marchez & as aut̄ lieux deinz le dit Countee, [ascun foitz p jo' &[2]] ascun foitz p nuyt, & illoquez vendont & achato' mch'undisent & dem'ount p deux trois quat' jo's ou pluis a lo' volunte, & puis reto'nent a lo' ppre pays, s'unz grev'nc̃ empescheñt ou execuc̃on de ley sur eux fait p le Visc̃ du dit Countee & sez ministrez, ou p ascun aut̄ psone, p' ceo q̃ le Visc̃ & sez ministrez sove' foitz nont conisance de lo' psonez ne de lour estre deinz le dit Countee, & lez aut̄s psonez ascuns p' favo' & amiste & ascuns p' doubte de male a cause de quele nounfes'unc̃ de due execuc̃on de la ley lez ditz psonez enditz & utlagez, & aut̄s meffaiso's de Galez & de le marche av'ntditz, ne doubte' mye de venir de tuer arder robber & aut̄s malez fair en le dit Counte, a ppetuel destruccon & empov̄sheñt dez lez Cões du dit Counte: Ñre dit f' le Roi considera' les p̄missez ad g'unte p laucto'[e] desuisdit q̃ (3) le Visc̃ Southvisc̃ ou ascun minist' de Visc̃, Mair & Baillifs des villez & burghs, ou ascun aut̄ psone conv̄sant deinz le dit Counte, conisoit & veisoit ascun tiel endite ou utlage en ascun lieu deinz le dit Counte, q̃il luy arresta p̄ndra & amesna a Gaole deinz le dit Counte & illoquez luy deliv̄a al Gaoler solonq̄ la ley du Roiat; & si ascun tiel endite ou utlage voille disobeier [a aler[4]] en la fo'me av'nt dit a fair, q̃ cestuy env̄s q̃ tiel disobeis'unc̃ est fait leva hue & crie, & q̃ chune q̃ est conv̄sa' deinz le dit Counte q̃ [ne[5]] le hue et crie viend' & eidera cestuy q̃ leva le hue & crie de p̄ndre le dit mesfaiso', & ferront lo' poiar de ceo fair, & si ils ne p'ront luy p̄ndre qils luy enchace' & p'sue' hors du dit Counte ove hue & crie: & q̃ le Visco' Southvisco' & lo' Minist'z Mair & Baillifs, conv̄sauntz & oiers dez tielx huez & criez ferront due execuc̃on du dit ordeign'nc̃ solonq̄ lo' poiar sur la peyne, s̃. le dit Visco' Southvisc̃ & lo' Ministrez Mairs & Baillifs de fair fyn & raunceon a Roi; & lez ditz conv̄santz & oiers, s̃. un chivaler C s. un Esquier xl s. & to'[s] aut̄s dem'rantz xx s. & q̃ lez Justic̃ du peas en le dit Counte p' le te' esteantz aie' poiar denquerer oier & t̄mīer sur lez defaultz & necligencez du dit Visco' Southvisc̃ Ministrez Mairs Baillifs conv̄santz & oiers dez huez & criez av'ntditz. Et oust' ceo le Roi voet q̃ lestatuit de Westñ prim̄ toucha' semblable matier soit mys en execuc̃on.

vj. Item co' au pleñt tenuz a Westñ lan du reigne le Roi q̃orest xv' p' la cõe pfit de to' le Roiat ordeigne fuist & establie en la fo'me q̃ensuist. Item p' ceo q̃ p la ley (6) [es' q̃'] null hõme poet carier ne mesner blees hors du

[1] v. *Lib. Scacc.*

[2] *Lib. Scacc.* and the *Old Printed Copies* omit these Words. *Rot. Parl. nu.* vj. (31.) inserts them.

[3] si
[4] al larrest
[5] oye
} *Rot. Parl. nu.* vj. (31.)

[6] vij *Lib. Scacc. in Marg.*
[7] ordeinee *Stat.* 15 *Hen VI. c.* 2.

Rules and Ordinances shall be in no wise put in Execution before that the King and his Council be certified of them, and that the same Rules and Ordinances shall seem to the King and his Counsel expedient and necessary for the Weal of the King and of his Realm.

IV. Welshmen indicted or outlawed may be taken in Herefordshire, or pursued there by Hue and Cry.

ITEM, Whereas divers Persons dwelling in Wales and in the Marches of Wales, indicted and outlawed of Treasons and Felonies [coming'] into the County of Hereford to Cities and Burghs, Towns, Fairs, and Markets, and to other Places within the said County, (2) sometime by Night, and there sell (3) buy, merchandize, and tarry by ij, iij, iv. Days or more at their Will, and after return into their own Countries without Grievance, Impeachment, or Execution of the Law made upon them by the Sheriff of the said County, (4) his Ministers, or by any other Person, by reason that the Sheriff and his Ministers oftentimes have no Knowledge of their Persons, nor of their being within the said County, and other Persons, some for Favour and Amity, and some for Doubt of Hurt; by reason of which non doing of due Execution of the Law, the said Persons indicted and outlawed, and other Offenders, of Wales and of the Marches aforesaid, doubt not to come, slay, burn, rob, and to do other Offences in the said County, to the perpetual Destruction and Impoverishment of the Commons of the said County: Our said Sovereign Lord the King, considering the Premises, hath granted by Authority aforesaid, That if the Sheriff, Under Sheriff, or any Sheriff's Minister, Mayor and Bailiffs of Towns and Boroughs, or any other Person conversant within the said County, know and see any such Person indicted or outlawed in any Place within the said County, that he shall arrest, take, and bring him to the Gaol within the said County, and there shall deliver him to the Gaoler, after the Law of the Realm; and if any such Person indicted or outlawed will disobey the Arrest to be made in the Form aforesaid, that he against whom such Disobeisance is made, shall levy Hue and Cry; and that every Person that is conversant within the said County that heareth the Hue and Cry, shall come and aid him that levieth the said Hue and Cry, to take the said Offender, and shall do their Power that to do, and if they cannot take him, they shall follow and pursue him out of the said County with Hue and Cry: And that the Sheriff, Under Sheriff, and their Ministers, Mayor and Bailiffs, [conversant and hearing[4]] of such Hue and Cries, shall make due Execution of the said Ordinance according to their Power, upon Pain, that is to say, the said Sheriff, Under Sheriff, and their Ministers, Mayors and Bailiffs, to make Fine and Ransom to the King; and the said Persons conversant and Hearers, that is to say, a Knight a C s. an Esquire Forty Shillings, and all other Inhabitants Twenty Shillings: And that the Justices of Peace in the said County for the Time being, shall have Power to inquire, hear, and determine upon the Defaults and Negligences of the said Sheriff, Under Sheriff, Ministers, Mayor and Bailiffs, [conversant[5]] and Hearers of the said Hues and Cries. And moreover the King will, that the Statute of Westminster primer, touching like Matter, shall be put in Execution.

Penalty on Sheriffs, &c. not executing this Ordinance.

Justices of the Peace may inquire.

St Westm. 1. chapter 9.

V. The Statute 15 Hen VI. c. 2, as to Export of Corn, recited.

ITEM, Whereas at the Parliament holden at Westminster the xv. Year of the Reign of the King that now is, for the common Profit of all the Realm, It was ordained (6) in the Form as followeth: "Item, Forasmuch as by the Law ordained, no Man might carry nor bring

[1] come [2] *sometime by Day, and* [3] *and*
[4] the Conversants and Hearers [5] Conversants
[6] *and established*

Corn out of the Realm of England, without the King's Licence, by reason whereof Farmers and other Men which use Manurement of their Land, may not sell their Corn but at a low Price, to the great Damage of all the Realm: Our Sovereign Lord the King, willing in this Case to provide a Remedy, hath ordained by Authority aforesaid, That it shall be lawful to every Person to ship and carry all Manner of Corn and Grain out of this Realm, to any Place that pleaseth him, except only to the Enemies of our Sovereign Lord the King, as often and as long as a Quarter of Wheat doth not exceed the Price of vj s. and viij d. and a Quarter of Barley iij s. in that Port where the Wheat or Barley is so shipped; and that without suing any Licence for the same; all other Ordinances before this Time made to the contrary notwithstanding: Provided always, That the King be contented of his Customs and Duties; and this Ordinance shall endure till the next Parliament:" And Forasmuch as this Statute is not now in his force, and that many Counties adjoining to the Sea may not sell the Substance of their Corn, but by Carriage to be carried by the Sea; Our said Sovereign Lord the King, considering the Premises, hath ordained by Authority of his said Parliament, holden the said Five and-twentieth Day of February, that the Statute and Ordinance aforesaid by Authority of the same Parliament shall be perpetual, and stand in his Force for ever (1).

The said recited Statute made perpetual.

VI. The gathering of Head-pence by the Sheriff of Northumberland shall cease.

ITEM, Whereas the poor Commons, and the King's faithful liege People of his County of Northumberland, have been of long Time oppressed and surcharged, by the Sheriffs of the said County for the Time being levying or causing to be levied of their Goods and Chattels, to the Sum of [Forty Pounds,2] and more, called Head-pence, Two Times in Seven Years; that is to say, every Third Year and every Fourth Year, to their own (3) Avail, without any Account, Profit, or [Advantage4] to the King, and without any lawful Cause or Ground, but of their great Extortion; which causeth divers Men to labour and expend great Goods to be Sheriff, when the said Years come, to the great Oppression of the said Commons: Our said Lord the King considering the Premises, hath ordained and granted by the Authority aforesaid, That the said Gathering of the said Head-pence shall be clearly [put out5] for ever, any Use or Custom (6) to the contrary notwithstanding; upon Pain of an C li. to be paid, the one Half of the same to the King, and the other Half to the Party which will sue for the Forfeiture against the Sheriff: This Ordinance to begin at the Feast of the Nativity of Saint John Baptist, which shall be in the Year of our Lord M. CCCC. xlvj.

VII. Recital of the Statutes against the Continuance of Sheriffs in their Office, viz. 14 Edw. III. st. 1. c 7;

ITEM, Whereas King Edward the Third, for divers and special Causes, in his Parliament holden at Westminster, the Wednesday next after Midlent, the Fourteenth Year of his Reign, for that several Sheriffs in divers Counties of England then being, had their Offices, some for Term of Years of the King's Grant, and some trusting of longer Continuance in their Offices, by Procurement, &c. were greatly encouraged, and did take upon them to do many and divers Oppressions to the King's liege People, unduly, and evil and falsly [to serve7] the King and his People, did ordain and stablish, That no Sheriff should tarry nor abide in

1 *hereafter* 4 avayll 7 ved *Rot. Parl. nu.* x. (35.)
2 lx li. 5 put awaye
3 ppre 6 *Lad* } *Rot. Parl. nu.* ix. (34.)

Roiał Dengt s^unz licenč du Roi; p cause de quele fermo's & aut's homez q̃ usent maynureñit de lo^r ťre ne poie^t vend^e lo^r bleez sinoun a bas p's, a g^aund damage de to^t le Roiał, Nře f^r le Roi voilla^t en ceo cas p^rvoier de remedie ad ordeigne p auct^te suisdit q̃ bien lirra a chune home eskipper & carier to^tes mań dez bleez & greinez hors dicest Roiał a q̃conq, lieu q̃ luy plerra, forsp's ta^souleñit a lez enemyes nře f^r le Roi; si sove^t & tantlongeñit q̃ un quart de fruñit ne excede pas le p^ce de vj s. viiij d. & un quart dorge iij s. en ycell porte lou frume^t & orge est tieleñit eskippe; & ceo s^unz ascun licenč suir p^r ycell; to^tes aut's ordeign^ncez av^nt sez hoeurez faitz a cont^rie nie^t obst^auntz: Purveu to^tes foitz q̃ le Roi soit conte^t de sez custumez & devers: & durera cest ordeign^nčč tanq, al pschein pleñit: Et p^r ceo q̃ cest estat^t nest pas a ore en sa force, & q̃ pluso's Counteez adjoign^ntz a le mear ne poie^t vend^e le substaunč de lo^r bleez sinoun p cariage & amesner p la mear, Nře dit f^r le Roi considera^t lez p̄missez ad ordeigne p lauct^te de son dit pleñit, tenuz le dit xxv^e jo^r de Fe^ver, q̃ lestat^t & ordeign^nčč av^nt dit p lauct^te de mesme le plement soit ppetuel & en sa force to^tes jo's en ap's.

Item co^r lez po^vez Cões & foialx liegez du Roy de son Counte de Northumbr ount este d^r lonqz t^rmz p̄ssez & surchargez, p lez Visco^tes du dit Counte p lo^r te^r esteantz lev^ntz & facentz leve de lo^r biens & chateux a la sōme de lx li. & pluis, appellez hede penioz, deuz foitz en vij ans, s. chune tierce an & chune iiij an, lo^r ppre availl, s^unz ascun accompt pfit ou availl a Roi, & saunz ascun loial [avyce8] ou foundeme^t sinoun de lo^r g^aund extorcōn; le quele causa di^vsez homez de laborer & expender g^aundez bīs dest^r Visč q^aunt lez ditz ans veigne^t, a le pluis greind^e opp^ssion de lez ditz Cões: Nře dit f^r le Roy considera^t lez p̄missez ad ordeigne & g^aunte p lauct^te suisdit, q̃ le dit collect de lez ditz hede penyez soit to^r oustreñit oustez p^r to^tes jo's, ascun use ou custume eue a le cont^rie nie^t obst^aunt; sur payn de C. li. destre paiez lune moite dicell a Roi & laut^e moite dicell a la ptie q̃ sua la forfaitur en^vs le Visč: cest ordeign^nčč a cōmencer a la fest de la Nativite de Seint John le Bap̄te q̃ ^sra en lan nře f^r M^l CCCC. xlvj^e.

Item [q̃9] le Roi E. le tierce p^r di^vsez & notablez causez en son pleñit tenuz a Westñi le meskerdy pschein ap's le di quaresme, lan de son reigne xiiij^e, p^r cause q̃ di^vsez Visco^tes en di^vsez Counteez Dengt adonqs esteauntz avoie^t lo^r officez, ascuns p^r ťme dans de g^aunte du Roi, & ascuns confiantz en pli^s longe continuanč en lo^r officez p pcureñit &c. [feyne^t10] g^aundeñit esbaudez & p^steront s^t eux de faire pluso's & di^vsez opp^ssions a le liege poep^l du Roy, meyns d^reint & maleñit & fauxeme^t servoie^t le Roi & son poep^l ne deigna & fist q̃ null Visco^t dem^eroit ne exp^ecteroit en

8 cause *Lib. Scacc.*
9 furent *Lib. Scacc.*
10 come *Lib. Scacc.*

1 viij *Lib. Scacc.* and the subsequent Chapters accordingly.

son offic̃ oustr̃ un an, & q̃ adonq̃s un aut̃ covenabl & sufficie' ho' ꝺroit ordeine en son lieu p le Chaunceller & Tresorer Dengl & le chief Baron del Eschequer & aut̃s, chune an en lendemayn dez to's almez; sico' il appiert en le dit estat': & ap̃s cell estat' issint fait p un aut' estat' fait a Westm̃ en le plem̃t du dit Roi tenuz le p'm̃ jo' de Maij lan de son reigne xlij^de, ordeigna & fist q̃ null Visco' Southvisco' ne Clerk de Visc̃ dem'eroit ou expecteroit en son Offic̃ oustr̃ un an, sico' est ordeigne p aut̃s estat's faitz dev'nt cell te'; sico' il pli̇ pleinem̃t appiert p le dit estat' del xlij^de an: Et oustr̃ ceo p un aut' estat' fait a Westm̃ en le xv^e de Seint Michell lan du reigne du Roy Richard la sc̃de prim̃, fuist ordeigne & fait q̃ null home q̃ avoit estee Visco' dascun Counte p' un entier an ne ꝺroit eslieu aut̃foitz ne mys en la dit Offic̃ deinz trois ans adonq̃s pscheinz ensuantz, sinoun q̃ ne soit ascun aut' sufficea' deinz le dit Countee; sico' il pluis pleineme' appiert p le dit estat' du Roi Richard: & co' en diṽsez Counteez Dengl ap̃s la fesaunc̃ dez ditz estat's pluso's diṽsez Visc̃ ont estez faitz & ount occupiez deinz lez ditz Counteez ascuns x. ans, & ascuns xij. ans & pluis a le g'und damage du Roi q̃orest, sez pgenito's & lo' poeple deinz lez ditz Counteez, cont'rie a lez ditz estat's & to' aut' bon rule, & veraie semblablem̃t en te' avenir destr̃ imptabl damage ov̇t dish̃itaunc̃ & supportac̃on domicidie & pjurre & g'and opp̃ssion as pluso's du liege poepl du Roi, considerez lez g'undez consanguinite alliaunc̃ lez [famulers '] dez Visc̃, sib̃n de ceux q̃ ount estee dev'nt cest te' co' de ceux q̃ ore sont en lez ditz Counteez: N̄re dit f' le Roi considera' lez p̃missez ad ordeigne p loucto's suisdit q̃ lez estat's dev'nt recitez & chun de eux soie' dueme' obfvez en chune Countee Dengl; lez Southvisc̃ & to's lez aut̃s offic̃s deinz la Citee de Loundrez q̃ore sont ou ꝺront to' te' exceptz; & autielx Counteez ta' soulem̃t exceptz en queux diṽs de le liege poepl du Roi en loffic̃ de Visco' a cest jo' sont enheritez; & auxint tielx psonez q̃ ont estate de frank ten̄t en loffic̃ de Visco' mesme cest jo' & trez patentz a eux faitz del offic̃ de Visco' & lor Southvisc̃ & Clerks exceptz: Et si ascun Visc̃ (1) ou Clerk de Visc̃ occupia offic̃ de Visc̃ Southvisc̃ ou Clerk de Visc̃ cont'rie a ascuns de lez estat's av'nt recitez, ou encount' leffect ou entent dascun de eux, exceptz dev'nt exceptz, q̃ adonq̃s cestuy q̃ issint occupia forfaira la s̄me de CC li. annuelm̃t auxi longem̃t come il occupia contrarie al effect dez ditz estat's; & q̃ chune pdon en te' aveignir destre fait p' tiel [Offic̃s [3]] ou occupac̃on, forfaitur dez s̄mez av'nt recitez ꝺroit voidez & nie' advailablez: & to's patentz faitz [& [4]] affairs de ascun de lez ditz Offic̃s p' t̄me dans, t̄me de vie, en fee simple ou fee taill a ascun de lez liegez du Roi exceptz dev'nt exceptz soie' voidez & de null value p mesme lauct'; ascun clause ou parole de non obstante en ascun (5) mys ou a mett' en tielx patentz destre faitz nient obst'untz.

[1] familiez
[2] offence
[3] maſſe
[4] Southvis
[5] ou
} *Lib. Scace.*

his Office above a Year, and that then another meet and sufficient Man should be ordained in his Place by the Chancellor and Treasurer of England, and the Chief Baron of the Exchequer, and other, every Year in the Morrow of All Souls; as it appeareth in the said Statute: And after the said Statute so made, by another Statute made at Westminster, in the Parliament of the said King, holden the First Day of May, the Forty-second Year of his Reign, he ordained and made, that no Sheriff, Under Sheriff, nor Sheriff's Clerk, should tarry or abide in his Office over one Year, as it is ordained by other Statutes before [this [1]] Time; as it appeareth more plainly by the said Statute of the same Forty-second Year: And moreover, by another Statute made at Westminster, the Fifteenth of Saint Michael, the First Year of the Reign of King Richard the Second, It was ordained and made, That no Man which [hath [2]] been Sheriff of any County by one whole Year, [shall [3]] be another Time chosen nor put in the said Office within Three Years (4) next ensuing, except that there be not other sufficient within the said County; as it appeareth more playnly by the said Statute of King Richard: And Whereas in divers Counties in England, after the making of the said Statutes, many and several Sheriffs have been made, and have occupied within the said Counties, some Ten Years, and some Twelve Years and more, to the great Damage of the King that now is, his Progenitors, and their People within the said Counties, contrary to the said Statutes, and all other good Rule, and very like in Time to come to be [to their [3]] importable Damage, open Disherison, and upholding of Manslaughter, Perjury, and great Oppression to many of the King's liege People, considering the great Consanguinity, Alliance, and [Familiars of the Sheriffs, [6]] as well of them that have been before this Time, as of them which now be in the said Counties: Our said Lord the King, considering the Premises, hath ordained, by the Authority aforesaid, That the Statutes before recited, and every of them, shall be duly observed in every County of England; the Under Sheriffs and all other Officers within the City of London, which now be, or shall be, at all Times excepted; and such Counties only except, in which divers of the King's liege People be inheritable [to [7]] the Office of [Sheriffs [8]] at this Day; and also such Persons as have Estate of Freehold in the Office of [Sheriffs [8]] at this Day, and [except [9]] the Letters Patents made to them of the Office of [Sheriffs, [8]] and their Under Sheriffs and Clerks (10): And if any Sheriff, Under Sheriff, or Sheriff's Clerk, occupy the Office of Sheriff, Under Sheriff, or Sheriff's Clerk, contrary to any of the Statutes afore recited, or against the Effect or Intent of any of them, except before excepted, that then he which doth so occupy, shall forfeit the Sum of CC li. yearly as long as he occupieth contrary to the Effect of the said Statutes; and that every Pardon hereafter to be made for such Offence or Occupation, or Forfeiture of Sums before recited, shall be void, and not available; and all Patents made, or to be made, of any the said Offices for Term of Years, for Term of Life, in Fee Simple, or in Fee Tail, to any of the King's liege People, except before excepted, shall be void, and of no Value, by the same Authority; any Clause or Word of Non obstante in any wise put or to be put in such Patents to be made notwithstanding:

42 Edw. III. chapter 9;

1 R. II. c 11.

Recited Statutes confirmed:

Exceptions, London, &c.

Penalty for occupying the Office of Sheriff above One Year £200 per Annum.

All Pardons and Patents made to the contrary, void.

[1] that
[2] shuld
[3] *omitted.*
[4] in
[5] *omitted here.*
[6] hadde
[7] thenne
[8] meyne of Sherryffs
[9] Sherreff
[10] except
} *Rot. Parl. nu.* x. 35.

And moreover, whosoever will take upon him or them, to [have [1]] or occupy the said Office of Sheriff, by virtue of such Grants or Patents now to be made for Term of Years, for Term of Life, Fee Simple, or Fee Tail, shall stand for ever and at all Times disabled to be, or bear the Office of, Sheriff within any County in England by the same Authority; and that every liege Man which will sue for the said Sum forfeit, against him or them which in such Manner [doth forfeit or shall forfeit,[2]] shall be received and admitted to sue an Action of Debt in his own Name, our Lord the King to have the one Half of all that shall happen by the same Action to be recovered by such Suit, and he or they that so pursue to have the other Half.

Action for the Penalty.

VIII. Recital of the Statute 6 H. VI. c. 5 relating to Commissions of Sewers.

ITEM, Whereas in the Parliament holden at Westminster at the xv. of Saint Michael, the Sixth Year of the Reign of the King that now is, for the great Damages and Losses that happened by the great Inundations of Water in divers Parts of this Realm, and that many greater Losses were like to have come, if Remedy had not been hastily provided, Wherefore by Authority of the said Parliament, It was ordained and granted, that during Ten Years then next ensuing, several Commissions of Sewers should be made to divers Persons, by the King's Chancellor of England for the Time being named, in all Parts of this Realm where need is, after the Form following in the same Statute; by reason whereof the said Mischiefs were greatly reformed and amended: And Whereas now of late in divers Parts of this Realm, by great [rising [3]] of Water, many Towns and Lands to a great Quantity be [drowned [4]] and destroyed, to the great [Hinderance [5]] of this Realm, and great Prejudice, Damage, and Mischiefs, be very likely to fall, if Remedy be not hastily for the same provided; The King considering the Premises, and how the Ten Years be passed, hath ordained by Authority aforesaid, That during the Term of xv. Years next ensuing, the Chancellor of England for the Time being shall have Power to make Commissions of Sewers out of the King's Chancery, under the King's great Seal, in such Form as it was granted to be made by the Statute made the said Sixth Year.

Like Commissions may be granted for 15 Years.

IX. No Sheriff shall let his County, &c. to Ferm.

ITEM, The King, considering the great Perjury, Extortion, and Oppression which be and have been in this Realm by his Sheriffs, Under Sheriffs, and their Clerks, Coroners, Stewards of Franchises, Bailiffs, and Keepers of Prisons, and other Officers in divers Counties of this Realm, hath ordained by Authority aforesaid, in eschewing of all such Extortion, Perjury, and Oppression, that no Sheriff shall let to ferm in any manner, his County, nor any of his Bailiwicks, Hundreds, nor Wapentakes; nor that the said Sheriffs, Under Sheriffs, Bailiffs of Franchises, nor any other Bailiff, shall return upon any Writ or Precept to them directed [to be returned [6]] any Inquests, in any Panel thereupon to be made, any Bailiffs, Officers, or Servants to any of the Officers aforesaid, in any Panel by them so to be made; nor that [any [7]] of the said Officers and Ministers, by Occasion or under Colour of their Office, shall take any other Thing, by them nor by any other Person to their Use [Profit [8]] or Avail, of any Person by them or any of them to be arrested or attached, nor of none other for them, for the [omitting [9]] of any Arrest or Attachment to be made by their [Body,[10]]

No Sheriff's Officers or Bailiffs shall be returned upon Inquests.

Such Officers shall not take any thing of Persons arrested, for Ease and Favour, &c.

[1] accept *Rot. Parl. nu.* x. (35.)
[2] *doth or do forfeit*
[3] *Inundations*
[4] *Destruction*
[5] so'rounded *Rot. Parl. nu.* xij. (37.)
[6] to reto'ne
[7] none
[8] *Rot. Parl.* inserts this Word.
[9] forbering
[10] bodies
} *Rot. Parl. nu.* xiv. (39.)

Et oustre ceo q̃conq, p̃sume sur luy ou s' eux daccepter ou occupier la dit Offic̃ de Visco' p v̂tue dautielx g'untez ou patentz ore affairez p' t̂me dans a t̂me de vie fee simple ou fee taill destoier disable ppetuelm̃t & to' te' destre ou porter loffice de Visco' deinz ascun Countee en Engt p mesme lauc̃to'e; & q̃ chune liege home q̃ voet suer p' la dit sōme forfait envs celluy ou ceux q̃ en tiel mañe forface ou forface', serra resceu & admys de suer accion de dette en son ppre noun, le Roy davoir lune moite de to' ceo q̃ aveigña p icell acc̃on destre recovez p tiel suite, & celluy ou ceux q̃ issint p'suera ou p'suero' dav̂ laut̂ moite.

Item co' en le pleñt tenuz a Westm̃ a la xv'e de Seint Michell lan du reigne le Roi q̃orest yj'e, p' lez g'undez dañ & pdez q̃ viendroient p lez g'undez creteyns del eawe en div̂sez ptiez dicest Roiat, & q̃ pluso's greindrez dañ fure' semblablez dav̂ venuz si remedie ne avoit este hastifñt p'vieu, p' q̃ p auc̃to'e de [nr̃e'] dit pleñt fuist ordeigne & g'unte, q̃ p x. ans adonq̃s pscheins ensuantz sev̂alx cōmissions dez Sewers serroie' faitz, as div̂sez psonez p le Chaunceller du Roy Dengt p' le te' estea' nōmez, en to'as ptiez dicest Roiat lou [necessarie ferroit [2]] solonq, la fo'me q̃ ensuist en m̃ lestat'; p q̃ lez ditz meschiefs fure' g'undem̃t reformez & amendez: & co' jatarde en div̂sez parties dicest Roiat p g'undez creteyns del ewe pluso's villes & t̂rez a g'und q'ntite sont surounduez & distroiez, g'und anientisme' dicest Roiat, & g'undez p̃judic' damage & mischiefs sont visemblablez de aider si remedie ne soit hastifme' p' ceo p'veu; le Roy considerez les p̃missez, & com̃t lez x. ans sont passez, ad ordeigne p lauc̃to'e suisdit q̃ dura' le t̂me de xv'. ans pscheins ensua'as, le Chaunceller Dengt p' le te' estea' eit poiar de fair hors du Chaunc̃ie du Roy Cōmissions dez Sewers desuis le g'und Seal du Roy, en tiel fo'me sico' il fuist g'unte destre fait p lestat' fait le dit an vj'e.

viij.

Item le Roi considera' lez g'undez pjure extorc̃on & opp̃ssion queux sont & ont esteez en cest Roiat, p sez Visco'as Southvisc̃ & lo' Clerks Coron̂s Seneschall dez f'unchisez Baillifs & Gardeinz dez prisons, & aut̂s Offic̃s en div̂sez Counteez dicest Roiat, ad ordeigne p lauc̃to'e suisdit, en eschuyng dez to'as tielx extorc̃ons pjurie & opp̃ssion, q̃ null Visc̃ lesse a ferme en ascun mañe son Counte, ne ascun de sez Baillifwiks Hundredez ne Wapentakez; ne q̃ lez ditz Visc̃ Southvisc̃ Baillifs dez f'unchisez ne ascun aut' Baillif reto'ne s' ascun b̃r ou p̃cept a eux direct de reto'ner ascuns enquestez, en ascuñ panell sur ceo destre fait, ascuns Baillifs Offic̃s ou Serv'ntz a ascun de lez Offic̃s suisditz en ascun panell p eux issint affair; ne q̃ null de lez ditz Offic̃s & ministrez p occasion ou south colour de lo' offic̃ p̃igne ascun aut' chose, p eux ne p ascun aut̂ psone a lo' oeps ([3]) ou availle, dascun psone p eux ou ascuns de eux destre arrestuz ou attachez, ne de null aut' p' eux, p' le lesser dascun arrest ou attachem̃t destre fait p lo' corps; ou de ascun

ix.

[1] *Lib. Scacc.* omits.
[2] necessite est *Lib. Scacc.*
[3] pfit *Lib. Scacc.*

psone p eux ou ascun de eux p force ou colo' de lo' offic̃ arestuz ou attachez, p' fyn [ne [1]] sewet de prison maymp's lessance a baill ou monst'unce ascun ease ou favo' a ascun tiel psone issint arrestuz, ou arrestier, p' lo' regard ou pfit sinoun tiel co' ensuist; s̃. p' le Visco' xx d. le Baillif q̃ face larrest ou lattachem̃t iiij d. & le Gaoler si le p'soner soit cōmis a sa garde iiij d. Et q̃ le Visc̃ Southvisc̃ Clerk de Visc̃ Seneschall ou Baillif de f'unchis̃ Serv'nt ou Baillif ne Coron̄, pigne p colo' de son offic̃, p' luy ne p ascun aut̄ psone a son use, dascun psone p' la faisur dascun reto'ne ou panell ascun chose, & p' la copie dun panell iiij d.: & q̃ lez ditz Visco'z & to's aut's Offic̃s & ministrez av'ntditz lesseront hors du p'son to's mains dez psonez p eux ou ascun de eux arrestiers, ou estea' en lo' garde, p force dun br̃ bill ou garr'unt en ascun acc̃on psonell ou p cause denditem̃t de pspas, s' resonabl̃ suerte dez sufficea's psonez eia' sufficieaunte deinz lez Counteez lou tielx psonez sount issint lessez a baille ou maympris, de garder lo' jo's en tielx lieux co' lez ditz br̃s billes ou garr'untz require'; tiel psone ou psonez q̃ sont ou ſront en lo' garde p condempnacion execuc̃on capias utlagatū ou excōicatū, suerte de peas & to's tielx psonez q̃ sont cōmys a gard p espeal cōmaundem̃t dascun Justic̃, s' wager'untz refus'untz de ſvir solonq̄ la fo'me del estat' dez laborers, t'unt soulem̃t exceptz. Et q̃ null Visco' ne null dez Offic̃s ou Ministrez suisditz pigne ou face de pndr̃ ou fair ascun obligac̃on p ascun cause suisditz ou colo' de lo' offic̃, sinoun t'unt soulem̃t a lo' mesmez, dascun psone ne p' ascun psone q̃ soit en lo' garde p le co's de la leye, forsq̄ s' le noun de lo' offic̃, & s' condic̃on ([2]) q̃ la dit p'soner appierg̃a a le jo' conteignuz en le dit br̃e bill ou garr'unt ([3]) requiert. Et si ascuns de lez ditz Visc̃ ou aut's Offic̃s ou Ministrez suisditz pigne ascun obligac̃on en aut' fo'me p colo' de lo' officez q̃l soit voide; Et q̃l ne pigne pluis p' la fes'unc̃ dascun tiel obligac̃on garr'unt ou pcept p eux destre fait forsq̄ iiij d. Et auxint q̃ chune de lez ditz Visc̃ face annuelme' un depute en lez Co'tz du Roi de sa Chaunc̃ie Bank du Roy cōe Bank & leschequer de recorde dev'nt ceo q̃ils reto'ne' ascuns br̃s, de resceiv to's mains dez br̃s & garrantz a eux destre deliv̄ez; Et q̃ to's lez Visc̃ Southvisc̃ Clercs Baillifs Gaolers Coron̄s Seneschall Baillifs dez f'unchisez, ou ascuns aut's Offic̃s ou minist'z, queux font le cont'rie dicest ordeign'nc̃ ou dascun point dicell, pde a la ptie en ycell endamage ou greve sez treblez dam̃i; & forface la sōme de xl. li a chune te' q̃ eux ou ascun de eux fo' le cont'rie dicell en ascun point dicell, dont le Roi davoir lune moite ceo destre emploiez a le use de son hostiel & en null aut' maner, & laut' moite a celluy q̃ ceo voet suer.

[1] fee *Lib. Scacc.* [2] escrie *Lib. Scacc.*

[3] & en tielx lieux co' le dit br̃s billes ou garrantz *Lib. Scacc.*

or of any Person, by them or any of them by Force or Colour of their Office arrested or attached, for Fine, [Fee,[1]] Suit of Prison, Mainprise, letting to Bail, or shewing any Ease or Favour to any such Person so arrested or to be arrested, for their Reward or Profit, but such as follow; that is to say, for the Sheriff xx d. the Bailiff which maketh the Arrest or Attachment, Four-pence, and the Gaoler, if the Prisoner be committed to his Ward, Four-pence: And that the Sheriff, Under Sheriff, Sheriff's Clerk, Steward or Bailiff of Franchise, Servant [of[2]] Bailiff [or[3]] Coroner, shall not take [any Thing[4]] by Colour of his Office, by him nor by any other Person to his Use, of any Person for the making of any Return or Panel, ([5]) and for the Copy of any Panel, but iv d: And that the said Sheriffs, and all other Officers and Ministers aforesaid, shall let out of Prison all Manner of Persons by them or any of them ([6]) arrested, or being in their Custody, by Force of any Writ, Bill, or Warrant in any Action Personal, or by Cause of Indictment of Trespass, upon reasonable [Sureties[7]] of sufficient Persons, having sufficient within the Counties where such Persons be so let to Bail or Mainprise, to keep their Days in such [Place[8]] as the said Writs, Bills, or Warrants shall require; such Person or Persons which be or shall be in their Ward by Condemnation, Execution, Capias Utlagatum or Excommunicatum, Surety of the Peace, and all such Persons which be [or shall be] committed to Ward by special Commandment of any Justice, and Vagabonds refusing to serve according to the Form of the Statute of Labourers only except. And that no Sheriff, nor [any[9]] of the Officers or Ministers aforesaid, shall take ([10]) or cause to be taken or [make,[11]] any Obligation for any Cause aforesaid, or by Colour of their Office, but only to themselves, of any Person, nor [by[12]] any Person which shall be in their Ward by the Course of the Law, but [by[13]] the Name of their Office, and upon Condition [written,[14]] that the said Prisoner shall appear at the Day contained in the said Writ, Bill, or Warrant, [and in such Places as the said Writs, Bills, or Warrants[15]] shall require. And if any of the said Sheriffs, or other Officers or Ministers aforesaid, take any Obligation in other Form by Colour of their Offices, that it shall be void; and that he shall take no more for the making of any such Obligation, Warrant, or Precept by them to be made, but Four-pence. And also that every of the said Sheriffs shall make yearly a Deputy in the King's Courts of his Chancery, the King's Bench, the Common Place, and in the Exchequer, of Record, before that they shall return any Writs, to receive all manner of Writs and Warrants to be delivered to them; and that all Sheriffs, Under Sheriffs, Clerks, Bailiffs, Gaolers, Coroners, Stewards, Bailiffs of Franchises, or any other Officers or Ministers, which do contrary to this Ordinance [in[16]] any Point of the same, shall lose to the Party [in this Behalf[17]] indamaged or grieved, his Treble Damages, and shall forfeit the Sum of xl. li. at every Time that they or any of them do the contrary thereof in any Point of the same, whereof the King shall have the one Half, to be employed to the Use of his House, and in no other wise, and the Party that will sue the other Half:

Fees on Arrests, Attachments, &c.

No Fee for Returns or Panels.

Fee for Copy of a Panel.

Sheriffs, &c. shall let to Bail all Persons arrested.

On Sureties;

Except Persons in Execution, &c.

How the Bond shall be taken, on such Bailing;

the Condition thereof.

Bonds in other Form void.

Sheriffs shall make Deputies in the King's Courts.

Penalty on offending against this Act.

[1] *Rot. Parl. nu.* xiv. (39.) inserts this Word.
[2] *nor* [3] *made* [4] *omitted here.*
[5] or [6] any thing [7] to be [8] Suerte [9] places [10] none [11] or make [12] for [13] under [14] or [15] therinne
Rot. Parl. nu. xiv. (39.)
[16] *Rot. Parl.* inserts these Words.

Justices of Assizes, &c. may inquire of Offenders.

And that the Justices of Assises in their Sessions, Justices of the one Bench and of the other, and Justices of Peace in their [County,[1]] shall have Power to inquire hear and determine, of Office without special Commission, of and upon all them that do contrary to [these Ordinances[2]] in any Article or Point of the same. And if the said Sheriffs return upon any Person, Cepi Corpus, or Reddidit se, that they shall be chargeable to have the Bodies of the said Persons, at the Days of the Return of the said Writs Bills or Warrants, in such Form as they were before the making of this Act. Provided always, That the Warden of the King's Gaol of the Fleet, and of the King's Palace [of[3]] Westminster for the Time being, shall not be endamaged nor prejudiced by this ([4]) Ordinance in [the[5]] Duty of his Office. And also that this Ordinance shall begin at the Feast of Easter, which shall be in the Year of our Lord ([6]) MCCCCxlvj.

Sheriff returning Cepi Corpus, or Reddidit se, shall be chargeable with the Bodies.

Exception for the Warden of the Fleet, &c.

X

Extortion of Sheriffs in levying Wages of Knights of the Shire;

ITEM, Whereas before this Time divers Sheriffs in divers Counties of England, by Colour of Writs to them directed, to levy the Wages of the Knights of the Shires for the Time being, of the [Parliament[7]] of the King that now is, and of his noble Progenitors, have levied more Money than hath been due to the said Knights, and more than they have delivered ([8]), keeping and [retaining[9]] great Part of the ([10]) Money to their own Use and Profit, [to[11]] their Officers and Servants, to the great Loss of the common People of the said Counties: The King, considering the Premises, hath ordained by the Authority aforesaid, That the Sheriff of every County for the Time being, in the next County Court holden in their Counties, after the Delivery of the said Writs [directed to[12]] them, shall make open Proclamation, that the Coroners, and every chief Constable of the Peace of the said Counties, and the Bailiffs of every Hundred or Wapentake of the same County, and all other which will be at the assessing of the Wages of the Knights of the Shires, shall be at the next County there to be holden to assess the said Wages of the said Knights; and that the Sheriff, ([13]) Under Sheriff, Coroners or Bailiffs for the Time being, be there at the same Time in their proper Persons, upon Pain of Forfeiture to the King, of every of them that maketh Default, Forty Shillings; at which Time the said Sheriff or Under Sheriff, in the Presence of them that shall [come to the same,[14]] and of the Suitors of the same Counties then being there, in the full County well and duly shall assess every Hundred [to that[15]] assessable by itself, to pay a certain Sum for the Wages of the ([16]) Knights of the [Shire,[17]] so that the whole Sum of all the Hundreds do not exceed the Sum which shall be due to the said Knights; and after that in the same County, shall assess well and lawfully every [Village[18]] within the said Hundreds, [which should be there[19]] assessable, to a certain Sum for the Payment of the said Wages; so that the whole Sum of all the Towns within any of the said Hundreds, do not exceed the Sum assessed upon the Hundred of which they be. And that the said Sheriffs, Under Sheriffs, Bailiffs, nor none other Officer, for the Cause aforesaid, shall levy ([20]) more Money of any [Village[18]] than that whereunto they were assessed, ([20]):

Appointment of County Court to assess such Wages.

Penalty on Sheriff, &c. for Absence.

Each Hundred and each Township shall be assessed by itself.

Penalty on levying more than is assessed.

[1] Countreis [2] this Ordenance } *Rot. Parl.* [3] *Jesus Christ*
[4] atte [5] psent [6] his } *nu.* xiv. (39.)
[7] Parlementes [8] unto theym
[9] takyng [10] seid [11] and
[12] made unto [13] or
[14] atte that tyme come [15] therto } *Rot. Parl. nu.* xv (40.)
[16] seid [17] Shires [18] Township
[19] no [20] and in mañ and fourme as thei ben assessed

Et q̃ lez Justič dez assisez en lor Sessions Justič del un Bank & del aut[re] & Justič de la peas en lor paiis eie[nt] poiar denquerer oier & t̃mīer doffič s[es]unz esp̃eal cōmission de & s[i] to[us] iceux q̃ ferront le cont[re]rie dicest ordeign[e]nč en chune article ou point dicell. Et si lez ditz Visco[us] reto[r]ne[z] sur ascun psone cepi corpus ou reddidit se q̃ils soie[nt] chargeablez davoir [le corps[1]] dez ditz psonez a lez jo[u]s de le reto[r]ne dez ditz bīs billez ou garr[e]untz en tiel fo[r]me come ils fure[nt] dev[e]nt la fes[te]unč diceste acte. Purveu to[us] foitz q̃ p cest p̃sent ordeign[e]nč le Gardeyn de la Gaole le Roy de Flete & de la Paleys du Roi a Westm̃ p[r] le te[rs] estea[u] ne soit endamage ne p̃judice en son duete de son Offič: Et auxint q̃ cest ordeign[e]nč cōmenča en la fest de Pasq̃ q̃ s̃ra en lan de nr̃e s[r] Jhu Crist M[l] CCCC xlvj[e].

Item co[e] dev[e]nt cest te[rs] div̄sez Visco[us] en div̄sez Counteez Dengl [q̃ ont[2]] p colo[r] dez bīs directz a eux p[r] lever lez gagez de lez Chivalers de lez Counteez p[r] le te[rs] esteantz de lez pleñtz du Roy q̃ orest & de sez noblez pgenito[u]s, ount leve pluis de money q̃ ad este due as lez ditz Chīrs & pluis q̃ ils ount deliv̄ez a eux, gard[e]untz & p̃ign[e]ntz g[r]unde ptie du dit money a lor use & pfit demesne & lor Offičrs & serv[au]nts, a t̃sg[r]unde damage de la cōe poepl[e] de lez ditz Counteez; le Roy considera[u] lez p̃misez ad Cōcilium p laučto[re] suisdit, q̃ le Visč de chune Co[un]te p[r] la te[rs] estea[u] en le pschein Counte tenuz[e] en lor Counteez apr̃s la deliv̄aunč de lez ditz bīs fait a eux, face oyer p[r] ma[m] q̃ lez Coron̄s & chune chief Con[st]abl[e] de la peas dez ditz Counteez & lez Baillifs de chun Hundred ou Wapentak de ñi le Counte, & to[us] aut̄z q̃ voille[nt] estre a le assessaunč de lez gagez dez Chīrs de lez Counteez, soie[nt] a le pschein Countee illoquez a tenir dassesser lez ([3]) gagez de lez ditz Chīrs; & q̃ le Visč ou Southvisč Coron̄s ou Baillifs p[r] le te[rs] estea[u] soie[nt] illoquez a mesme le te[rs] en lor̄s pprez psonez, s[i] la peyn̄ de forfaite[r] a Roi de chune diceux q̃ face defaute xl s. a quel te[rs] le ([4]) Visč ou Southvisč en p̃senč diceux q̃ a cell te[rs] viendro[r] & de lez suito[u]s dez ditz Counteez adonq̃s esteantz la en le pleyn Counte bn & dueñt cessa chune hundred a ceo assessable p luy mesme, a un ch̄ayn sōme de paier p[r] lez gagez dez ditz Chīrs de lez Counteez, issint q̃ lentier sōme dez to[us] lez Hundredez nexcede la sōme q̃ s̃ra dewe a lez ditz Chīrs; & aps ceo en ñi le Counte assesse bn & dueñt chune village deinz lez ditz Hundredez a ceo assessable a un ch̄ayn sōme p[r] le paieñt de lez ditz gagez; issint q̃ lentier sōme dez to[us] lez villez deinz ascun de lez ditz Hundredez nexcede la sōme assesse sur le Hundrede de quell eux sont: Et q̃ lez ditz Visco[us] Southvisč Baillifs ne null aut̄s Offičs p[r] la cause suisdit leva pluis de money de null village q̃ ceo n̄ q̃ soit assessez; [& en mañe & fo[r]me co[m] ils sont assessez.[5]]

[1] les corps *Lib. Scacc.*
[2] ount *Lib. Scacc.* but the Words are superfluous here.
[3] ditz *Lib. Scacc.* [4] *Lib. Scacc.* omits.

Et si ascun face ou voille assesser ascun Hundred ou Village autrement q̃ est avnt dit, q̃ ils forface' p' chune defaut a Roy xx li. & a chune home q̃ voet suer en cest cas x li. Et q̃ lez ditz Visc̃ bien & dueme' levent la money issint assessez sur lez ditz villages auxi hastifm̃t co' ils poient boneñt ap̃s le dit [assensance [1]] & icell deliv̄ent as lez ditz Chivalers accorda' a lez br̃ez de ceo destre faitz, s' lez ditz peynez; & celluy q̃ voet suer en cest cas soit admys a ceo & eit p' sa accõn en cest cas un Sciĩ fac̃ envs celluy q̃ offende encount' cest ordeign'nc̃; Et si le def dueñt garniz en ycell face defaulte, ou autrm̃t appierge & soit en ycell convict, q̃ adonq̃s lez pleintifs recov̄ent envs eux q̃ issint ([2]) convictz x li. a lo' ppre use oustr̃ lez ditz xx li. ove lo' dañi p' lez costagez de lo' suitz a le treble. Et q̃ lez Justic̃ de le Bank le Roi Justic̃ de cõe Bank Justic̃ dassisez & Gaole deliv̄er & Justic̃ de la peas en lo' paiis eie' poiar denquerer oier & t̄mier dez to'tz lez ditz defaultz, sibn p enquerr̃ a la suite du Roi co' p accõn a la suite de ptie. Et q̃ to'tz tielx expensez dez Chlrs ne soie' levez dascuns aufs villagez f̄iez ou lieux forsq, dez tielx co' ils ount este dueñt levez dev'nt cest te'; & q̃ en chune tiel br̃ desore affair p' lever lez gagez dez ([3]) Chivalers soit cest act̃ comp̄henduz.

xj. Item le Roi ad ordeigne & establie p laucto'[4] suisdit q̃ si ascun psone ou psonez ten'ntz ou defend'untz en ascun accõn reall ou psonell, ap̃s ceo q̃ ils ount pledez al issue en ascuñ suite ou accion, & lissue joyne & ent' de record & un venir̃ fac̃ de la Jur̃ reto'ne, q̃ sils ou ascun de eux ap̃s a autre jo' en co't plede ascun foreyñ ple, t'able en ascun aut' Counte q̃ lou le br̃ est porte ou la suite p's, & lez demaunda'ts ou pleintifs en tielx foreinz pleez plede' a issue, q̃ tiel issue en tiel foreyñ plee soit trie ou le br̃e est porte ou la suite p's, & p mesme la Jurr̃ issint reto'ne: & q̃ cest act̃ & ordeign'nc̃ cõmenc̃a a la feste de Pasq, q̃ s̄ra en lan de nr̃e f' Jhu Crist M'CCCCxlvj' & endurera tanq, al pschein pleñt.

xij. Item le Roi ad ordeigne p laucto'[5] suisdit q̃ chune Serv'nt de Husbondrie p'posa' a deptier de son maister a le fyne de son t̄me, a milieu de son t̄me ou autrm̃t dev'nt face coven'nt ovesq, un aut' ho* de luy s̄vir p' le pschein an, sil soit en tiel cas co' la ley luy voet cõpeller de s̄vir; Et q̃ le dit Serv'nt & celluy q̃ issint fra coven'nt ove luy a le mye lieu de la dit t̄me ou dev'nt garnise' le maister du dit Serv'nt de la dit coven'nt issint de novell fait, issint q̃ m̃ le maistre puisse luy p'voir un aut' Serv'nt encount' le fyñ de son t̄me: Et si ascun coven'nt ovesq, ascun tiel Serv'nt soit autrem̃t fait, ou tielx garnishm̃tz en mañe & fo'me suisditz ne soit eu, q̃ m̃ le coven'nt soit voide, & q̃ m̃ le Serv'nt soit compelle de s̄vir son p'm̃ maister p' le pschein an, sinoun q̃ un loial & resonabl cause estea'

[1] assessaunce
[2] sount
[3] ditz
} *Lib. Scacc.*

And if any do or will assess any Hundred or [Village'] otherwise than is aforesaid, that they shall forfeit for every Default to the King Twenty Pounds, and to [any'] Man which will sue in this Case Ten Pounds. And that the said Sheriffs well and duly shall levy the Money so assessed upon the aforesaid [Villages'] as speedily as they well may after the said assessing, and the same shall deliver to the said Knights, according to the Writs thereof to be made, upon the said Penalties; and he that will sue in this Case, shall be thereunto admitted, and shall have for his Action in this Case a Scire facias against him that offendeth contrary to this Ordinance; and if the Defendant, duly warned [in the same,'] make Default, or else appear and be [in the same'] convict, that then the Plaintiffs shall recover against them which be so convict Ten Pounds to their own Use, over the said Twenty Pounds, with their [Treble Damages for the Costs of their Suits.'] And ([6]) the Justices of the King's Bench, and of the Common Pleas, Justices of Assises, and Gaol Delivery, and Justices of Peace in their [Country,'] shall have Power to inquire, hear, and determine of all the said Defaults, as well by Inquiry at the King's Suit, as by Action at the Suit of the [Parties'']: And that all such Expences of Knights shall not be levied of any other [Villages,'] Seigniories, or Places, but of such [whereof it hath been levied before this Time:'] And that in every such Writ from henceforth to be made to levy the Wages of the said Knights, this Act shall be comprehended [in the same.'] *Sheriffs shall levy the Money, and pay it to the Knights.* *Recovery of Penalties.* *Treble Costs.* *Such Wages shall be levied only where usual.*

ITEM, The King hath ordained and established by the Authority aforesaid, That if any Person or Persons Tenants or Defendants in any Action Real or Personal, after that they [be[10]] pleaded to an Issue in any Suit or Action, and the Issue joined and entered of Record, and a Venire facias of the Jury returned, that if they or any of them after, at another Day in Court, plead any foreign Plea, triable in any other [Court[11]] than where the Writ is brought or the Suit taken, and the Demandants or Plaintiffs in such foreign Pleas plead to the Issue, that such Issue in such foreign Plea shall be tried where the Writ is brought [in[12]] such Suit taken, and by the same Jury so returned: And that this Act and Ordinance shall begin at the Feast of Easter, which shall be in the Year of our Lord ([13]) MCCCCxlvj, and shall endure till the next Parliament. *XI. Trial of Foreign Pleas after Issue joined, &c.* *Continuance of this Act.*

ITEM, The King hath ordained by the Authority aforesaid, That every Servant of Husbandry, purposing to depart from his Master at the End of his Term, at the Midst of his Term [or otherwise, make Covenant before[14]] with another Man to serve him for the next Year, if he be in such Case as the Law will compel him to serve; and that the said Servant, and he which so shall make Covenant with him, at the Midst of the said Term or before, shall give Warning to the Master of the said Servant of the said Covenant so newly made, so that the same Master may provide ([15]) another Servant against the End of his Term: And if any Covenant with any such Servant be otherwise made, or that such Warning in Manner and Form aforesaid be not had, that the same Covenant shall be void, and that the same Servant be compelled to serve his first Master for the next Year, except that a lawful ([16]) Cause, being of a *XII. Servants in Husbandry purposing to leave their Masters must engage with a new one, and give warning to the old; or continue to serve the First Master.*

[1] Townshipp
[2] Townshippes
[3] damages for the costes of thaire suytes to the treble
[4] Countries
[5] as thei have ben duly leved hereafore
[6] evy
[7] therinne
[8] that
[9] party
} *Rot. Parl. nu.* xv. (40.)

[10] have
[11] Shire
[12] or
} *Rot. Parl. nu.* xviij. (43)

[13] *Jesus Christ*
[14] or elles byfore, make coven'nt
[15] hym
[16] and resonable
} *Rot. Parl. nu.* xix. (44.)

Wages of Servants in Husbandry, &c. with Meat and Drink, and without.

Wages of Servants of Hostlers, &c. in Cities.

Summer Wages of Masons, Carpenters, and other Artificers.

Winter Wages.

Wages of Labourers in Harvest.

Holydays.

Justices of Peace shall enforce this Act.

Penalty on Servants, &c. offending.

Action against Offenders.

later Time, require the contrary. And also that the Salaries and Wages of Servants, Labourers, and Artificers, shall not exceed the assessing that followeth; that is to say, the Wages of a Bailiff of Husbandry by Year xxiij s. iiij d. and clothing Price of Five Shillings, with Meat and Drink; of a chief Hind, a Carter or chief Shepherd xx s. and clothing Price of iiij s. with Meat and Drink; a common Servant of Husbandry xv s. and clothing Price of xl d.; a Woman Servant Ten Shillings, and clothing Price of iiij s. with Meat and Drink; an Infant within the Age of Fourteen Years vj s. and clothing Price of ij s. with Meat and Drink; the same Form shall be observed of Wages of Servants being with Hostlers, Victuallers, and Artificers in [City Borough [1]] and elsewhere; and such as deserve less shall take less, and also in Places where less is used to be given, less shall be given from henceforth. And that from the Feast of Easter till the Feast of Saint Michael, the Wages of any free Mason or Master Carpenter shall not exceed iiij d. by the Day, with Meat and Drink, and without Meat and Drink v d. ob; a Master Tiler or a Slater, a rough Mason and mesne Carpenter, and other Artificers concerning Building, by the Day Three pence with Meat and Drink, and without Meat and Drink iiij d. ob; and every other Labourer by the Day ij d. with Meat and Drink, and without Meat and Drink iij d. ob: And from the Feast of Saint Michael till the Feast of Easter, a free Mason and a Master Carpenter by the Day iij d. with Meat and Drink, [and without Meat and Drink,[2]] iiij d. ob; Tiler, mesne Carpenter, rough Mason, and other Artificers aforesaid by the Day ij d. ob. with Meat and Drink, and without Meat and Drink iiij d.; and every other Artificer and Labourer by the Day j d. ob. with Meat and Drink, and without Meat and Drink iij d. and he that deserveth less shall take less: Provided that the said assessing shall not extend to Labourers in the Time of Harvest, ([3]); in which Time the Wages of a Mower shall not exceed iiij d. by the Day with Meat and Drink, and without Meat and Drink vj d; a ([4]) Reaper or Carter iij d. by the Day with Meat and Drink, and without Meat and Drink v d; a Woman Labourer and other Labourers in Time of Harvest ij d. ob. by the Day with Meat and Drink, and without Meat and Drink iij d. ob; and such as be worthy of less shall take less, and in Places where less is used to be taken, less shall be taken from henceforth. And that no Artificer, Workman, nor Labourer, shall take any Thing [for the Holiday nor for the ferial Day[5]] but after the Rate of the Time of the Day in which he laboureth. And if any Person refuse to serve or labour according to the Premises, that every Justice of Peace in their Counties shall have Power at every Time to call them to Examination [of the same,[6]] and such as they shall find defective, to commit to the Gaol, there to remain till they have found sufficient Surety to serve and labour in Form by the Law required. And if any Servant, Artificer, Workman, or Labourer, do contrary to the Premises, or deny his Service, Occupation, or Labour, by reason of not giving of Wages or Salary, contrary to [these Statutes,[7]] that he shall lose to the Party that will sue in this Behalf xx s.: And that the said Justices of Peace shall have Power to hear and determine all manner of Offences done contrary to the Form of this Statute, as well at the King's Suit as at the Party's; And that every of the King's liege People may have the Suit against every Person that shall offend in any

[1] Citees, Burghs,
[2] *Rot. Parl.* inserts these Words.
[3] aboute Hervest labour
[4] man
[5] for eny halyday, ne for no Werkeday
[6] therof
[7] this Statute

} *Rot. Parl.* nu. xix. (44.)

de puisne te' requira le cont'rie. Et auxint q̄ lez Salariez & gagez des Serv'ntz laborers & artific̄s nexcede' p̄ lassessaunc̄ q̄ ensuist; ſ. la Salarie dun Baillif de Husbondrie p an xxiij s. iiij d. & vestur̄ p'ce de v s. ovesq̄ mangier & boier; de un chief Hine un charet̄ ou chief berger xx s. & vestur̄ le p'ce de iiij s. ovesq̄ mangier & boier; un cõe ſv'nt de Husbandrie xv s. & vestur price de xl d; un fēme ſv'nt x s. & vestur̄ price de iiij s. ovesq̄ maungier & boier; un enf'unt deinz age de xiiij ans vj s. & vestur̄ price de ij s. ovesq̄ maungier & boier: mesme la fo'me soit obſvez de salarie dez Serv'ntz ovesq̄ hostilers vitaillers & artific̄s en Citeez Burghs & aillo's esteantz; et tielx q̄ meyns deservie' meyns de p̄ndr̄, & auxint en lieux ou meyns est use destre donez meyns [donent[1]] desore enav'nt. Et q̄ de la fest de Pasq̄ jesq̄ a le feste de Seint Michel lez gagez ascun frank mason ou maiſt̄ Carpent̄ nexcede pas p' le jo' iiij d. ovesq̄ mangier & boier, & saunz maungier & boier v d. ob̄; un maiſt̄ Tiler ou Sclatter un rough mason & mesne Carpent̄ & aut's Artific̄s conc'n'ntz edificac̄on iij d. p le jo', ovesq̄ mangier & boier, & s'unz mangier & boier iiij d. ob̄; & c̄hune aut̄ laborer p' le jo' ij d. ovesq̄ mangier & boier, & s'unz mangier & boier iij d. ob̄: Et de la fest de Seint Michel jesq̄ a la feste de Pasq̄ un frank mason & un maiſt̄ Carpent̄ p le jo' iij d. ovesq̄ mangier & boier ([2]) iiij d. ob̄; Tiler mesne Carpent̄ rough mason & aut's artific̄s av'ntditz p le jo', ij d. ob̄. ovesq̄ mangier & boier, & saunz mangier & boier iiij d; Et c̄hune aut' artific̄ & laborer p le jo' j d. ob̄. ovesq̄ mangier & boier, & s'unz mangier & boier iij d; & q̄ meinz deserve meinz de p̄ndr̄: P'veu q̄ la dit assessaunc̄ nextenda pas as laborers en te' daust ento' labo' daust; en quele lez gagez dun falchier nexceda pas le jo' iiij d. ovesq̄ mangier & boier, & saunz mangier & boier vj d; un home messo' ou charetto' iij d. p le jo' ovesq̄ mangier & boier, & s'unz mangier & boier v d; un fēme laborer & aut's laborers en te' daust p le jo' ij d. ob̄, ovesq̄ mangier & boier, & s'unz mangier & boier iiij d. ob̄; & tielx q̄ soñt dignez meyns meins de p̄ndr̄, & en lieux ou meynz est use destre pris meyns destre prise desore enav'nt: Et q̄ null artific̄ ov'er ne laborer p̄digne ascun chose p' le jo' festival ne p' le jo' ferial except solonq̄ la rate de le te' de le jo' en quele il labo': Et si ascun psone refuse de ſvir ou laborer accorda' a lez p̄missez q̄ c̄hune Justic̄ de la peas en lo' Counteez eient poiar a c̄hune te' dappeller eux a examiacion dicell, & tielx co' ils trove' defectifs de cōmitter a Gaole, illoq̄s a dem'er tanq̄ ils ont t'vez sufficea' suerte de ſvir & laborer en fo'me p ley requis. Et si ascun Serv'nt artific̄ ov'er ou laborer face cont'rie a lez p̄missez, ou denia son ſvice occupac̄on ou labo' p reason de noun donance dez gagez ou salariez cont'rie a cest estat', q̄ il pde a la ptie q̄ voet suer en cest ptie xx s. Et q̄ lez ditz Justic̄ de peas aient poiar doier & t'miet to' mañs offencez faitz encount' la fo'me dicest estat' sibn a la suite du Roi co' a la suite de ptie. Et q̄ c̄hune de lez liegez du Roi poet av̄ la suite envs c̄hune

[1] destre donez *Lib. Scacc.*
[2] & sans manger & boier *Printed Copies.—Lib. Scacc.* as Text.

psone q̃ offendra en ascune point encount[r] cest estat', & soit le pcesse en ycell p attachemẽt un capias & exigend: auxint q̃ lez Justic̃ de peas assesse[r] null fyn sur ascun q̃ ꝥra convict dev'nt eux de chose fait encount[r] ascun estat' dez laborers ou artificꝭ, ou p cell cause luy mettera en le grace du Roi, desoubz iij s. iiij d. Et auxint q̃ lez Justic̃ du peas p mye to[s] le Roiat deux te' chune an to[s] lez estat[s] dez laborers artificꝭ hostillers vitaillers ꝟv'ntz (1) vager'untz, dev'nt cest te' faitz nie' revokez, ovesq, cest estat', ov̄teme' en lo' Sessions face' destre pnunciez: auxint q̃ p colo' de teno' de meyns teñtz q̃ la husbandrie dicell suffise a continuell occupac̃on dun home, null home soit excuse de ꝟvir p lan, sur t peyn destre justifie co' un vagera'. Auxi' q̃ Justic̃ de peas aient poier de pndr̄ to[s] ꝟv'ntz retenuz ovesq, ascun psone p colo' de husbandrie, & nie' duẽñt occupie ento' ycell, quelez ꝟv'ntz doie' p la ley estre ꝟv'ntz de husbandrie, hors de la ꝟvice [hors (2)] de lo' maistrez, & de eux compeller de ꝟvir en loccupac̃on de husbandrie a tielx co' require' lo' ꝟvice, & de justifier eux en chune point si co' mesmez lez Justic̃ ount poiar de justifier vager'untz: & q̃ cest estat' cōmence destre de force & executorie en la fest de Seint Michell q̃ ꝥra en lan nr̄e f' M'CCCCxlvj' & en null manꝛe dev'nt.

xiij. Item le Roi ad ordeigne & establie p laucto[s] suisdit, q̃ si ascun achato' ou aut̄ Officer de le Duc de Glouc̃, ou dascun autre f' ou pson de quele estate gree ou condic̃on q̃il soit, p̄suma s' luy de pndr̄ ou aut̄ñt pigne ascuns vitaillez graynez feyne cariagez ou ascun aut̄ chose q̃conq, q̃il soit, de ascun de lez liegez du Roi en ascun manꝛe encount[r] lo' volunte, s'unz loial bargaine pent' lez ditz achato's ou Offic̃s & la dit liege poeple de ceo destre fait, a le use du dit Duc ou ascun aut' f' p' lour hostielx, sinoun t'unt soulemẽt p' le Roi & la roigne & lo' hostielx, q̃ adonq̃s si notice ou request soit fait a le Mair Visco' Baillif Constabl Offic̃s, ou aut' de lez Ministrez du Roi, de lez Citeez & Burghs ou aut̄s Counteez & lieux ou tiel pris aveigna destre, q̃ adonq̃s le dit Mair Visco' Baillif Constable Officer & Minister, a q̃ tiel notice & request ꝥra fait, mainten'nt pndra & arrest̄a to[s] tielx achato's & offic̃s issint fes'untz ou ꝥspassauntz, & eux mette' en le pschein prison du Roy, illoquez a dem'er & nie' destre lessez a baille ne maymp's, tanq, al te' q̃ils ont rebaillez to[s] lez vitaillez cariagez & aut̄s chosez issint p'sez ou le v̄roie value diceux; Et si lez ditz Mair Visco[s] Baillifs Constablez & Offic̃s av'nt dit face' le cont'rie de ceo, q̃ adonq̃s ils forferont xx. li. dont le Roi av̄a lune moite, & la ptie de q̃ tielx chosez sont p'sez laut' moite sil voet suer, p un acc̃on de dette en la quele le defend'unt ne fra sa ley; Et si il ne voet suer celluy q̃ voet suer p' le Roy & luy ñz av̄a la suite de recov̄er a luy mesmez lune moite de ceo & le Roi laut' moite. Et si ascun de lez ditz achato's aut' q̃ du Roi & du roigne soit duc̃ convict de tiel meinz loial [p'ce (3)] co' dev'nt est recite, a la suite dez tielx ptiez co' suero' env̄s eux en cell ptie, q̃ adonq̃s ils rendro' a la ptie q̃ issint

(1) & *Lib. Scacc.* (2) *Lib. Scacc.* omits. (3) prise *Lib. Scacc.*

Point against this Statute, and the Process (1) shall be by Attachment, Capias, and Exigend: Also that the Justices of Peace shall assess no Fine upon any which shall be convict before them of a Thing done contrary to any Statute of Labourers or Artificers, or for that Cause put him in the [good] Grace of our Sovereign Lord the King, under iii s. iiii d. And also that the Justices of Peace through (2) the Realm Two Times every Year shall do openly to be proclaimed in their Sessions all the Statutes of Labourers, Artificers, Hostlers, Victuallers, Servants, and Vagabonds before this Time made and not revoked; with this Statute: Also that by Colour of [the Tenor of less Lands (3)] than the Husbandry [of the same (4)] shall suffice to the continual Occupation of One Man, no Man shall be excused to serve by the Year, upon the Pain to be justified as a Vagabond; Also that Justices of Peace shall have Power to take all Servants retained with any Person by Colour of Husbandry, and not duly occupied about the same, which Servants ought by the Law to be Servants of Husbandry, (5) and to compel them to serve, in the Occupation of Husbandry, to such as shall require their Service, and to justify them in every Point as the same Justices have Power to justify Vagabonds: And that this Statute shall begin to be of force and executory, in the Feast of Saint Michael which shall be in the Year of our Lord One thousand four hundred and forty-six, and in no wise before.

No Fine shall be under 3 s. 4 d.

Proclamation of the Acts relating to Servants, &c.

Evasion of Service in Husbandry.

Commencement of Act.

XIII. ITEM, The King hath ordained and stablished by the Authority aforesaid, That if any [Buyer (6)] or other Officer of the Duke of Gloucester, or of any other Lord or Person, of what Estate Degree or Condicion that he be, presume upon him to take, or else do take any Victuals, Corn, Hay, Carriages, or any other Thing whatsoever, of any of the King's liege People in any wise against their Will, without lawful Bargain betwixt the said [Buyers (7)] or Officers, and the said liege People thereof to be made, to the Use of the said Duke or (8) other Lord for their Houses, but only for the King and the Queen, and their Houses, that then if Notice or Request be made to the Mayor, Sheriff, Bailiff, Constable, Officers, or other of the King's Ministers of the Cities and Boroughs, or other Counties or Places where such Taking shall happen to be, that then the said Mayor, Sheriff, Constable, Officer, and Minister, to whom such Notice and Request shall be made, presently shall take and arrest all such [Buyers (7)] and Officers so doing or offending, and them shall send to the King's next Prison, there to remain, and not to be let to Bail nor Mainprise, until they have redelivered [the same (9)] Victuals, Carriages, and other Things so taken, or the very Value of the same: And if the said Mayor, Sheriffs, Bailiffs, Constables and Officers aforesaid, do contrary to this, that then they shall forfeit Twenty Pounds, whereof the King shall have the one Half, and the Party from whom such Things be taken, the other Half, if he will sue, by an Action of Debt, in the which the Defendant shall not wage his Law; And if he will not sue, whosoever will sue for the King and himself shall have the Suit, to recover to himself the one Half thereof, and the King the other Half. And if any of the said [Buyers,(7)] other than of the King and Queen be duly convict of such unlawful Taking, as afore is recited, at the Suit of such Parties as shall sue them in this Behalf, that then they shall yield to the Party which so

Penalty on Buyers or Purveyors of Subjects taking any Thing against the Owner's Will.

Penalty on Officers not executing this Act.

On Buyers.

(1) therin (2) tenure of lasse teñts (3) oute of the ꝥvyse of theire maisters, (4) Achatour (5) any (6) all (7) therof (8) Achatours (9) all the seide } *Rot. Parl. nu.* xix. (44.) } *Rot. Parl. nu.* xxij. (47.)

sueth, the Treble Value of the Victuals, or other Things so taken, and the Double Costs of their Suits, and for the said Trespass to make Fine and Ransom to the King: And that in all such Actions or Suits aforesaid, the King's Protection shall not be allowed nor available for the Defendant: And this Ordinance shall begin and take Effect at the Feast of Easter, which shall be in the Year of our Lord One thousand four hundred and forty six. Provided always, that by this Act the Punishment ordained against the King's Purveyors in no wise shall be restrained.

Commencement of Act.

King's Purveyors.

XIV. Recital of St. 1 H.V. c. 1;

ITEM, Whereas by Authority of a Parliament holden at Westminster, the First Year of the Reign of [King Henry,] Father to the King that now is, amongst other Things It was ordained, That the Citizens and Burgesses of Cities and Boroughs, coming to the Parliament, should be chosen Men Citizens and Burgesses resiant, dwelling, and free in the same Cities and Boroughs, and none other, as in the same Statute more fully is contained; which Citizens and Burgesses have always in Cities and Boroughs been chosen by Citizens and Burgesses, and no other, and to the Sheriffs of the Counties returned, and upon their Returns received and accepted [by [1]] the Parliaments before this holden: And also, whereas by Authority of a Parliament holden at Westminster, the Eighth Year of the Reign of the King that now is, It was ordained in what Manner and Form the Knights of the Shires [coming [2]] to the Parliaments from thenceforth to be holden should be chosen, and how the Sheriffs of the same Counties thereupon should make their Returns, as in the same Statute more fully appeareth; by Force of which Statute, Elections of Knights to come to Parliament sometimes have been duly made, and lawfully returned, until now of late. that divers Sheriffs of the Counties of the Realm of England, for their singular Avail and Lucre, have not made due Elections of the Knights, nor in convenient Time, [nor good Men and true returned, [3]] and sometime no [Return [4]] of the Knights, Citizens, and Burgesses lawfully chosen to come to the Parliaments; but [such Knights, Citizens, and Burgesses have been returned, [5]] which were never duly chosen, and other Citizens and Burgesses than those which by the Mayors, and Bailiffs were to the said Sheriffs returned; and sometimes the Sheriffs have not returned the Writs which they had to make Elections of Knights to come to the Parliaments, but the said Writs have imbesiled, and moreover made no Precept to the Mayor and Bailiffs, or to the Bailiffs or Bailiff where no Mayor is, of Cities and Boroughs, for the Elections of Citizens and Burgesses, to come to the Parliaments, by Colour of these Words contained in the same Writs: "Quod in pleno comitatu tuo eligi facias pro comitatu tuo duos Milites, et pro qualibet civitate in comitatu tuo duos Cives, et pro quolibet burgo in comitatu tuo duos Burgenses;" and also because sufficient Penalty and convenient Remedy for the Party in such Case grieved is not ordained in the said Statutes against the Sheriffs, Mayors, and Bailiffs, which do contrary to the Form of the said Statutes: The King considering the Premises hath ordained by Authority aforesaid, That the said Statutes shall be duly kept ([6]) in all Points: And moreover that every Sheriff, after the Delivery of any such Writ to him made, shall make and deliver without Fraud a sufficient Precept under his Seal to every Mayor and Bailiff, or to Bailiffs or Bailiff where no Mayor is, of the Cities and Boroughs within his County, reciting

and of Stat. 8 H.VI. c. 7.

Defaults of Sheriffs in returning Knights, &c. to Parliament.

The recited Statutes 1 H.V. c. 1. 8 H.VI. c. 7. confirmed.

The Sheriffs shall send Precepts to the Mayors, &c. of Cities and Boroughs, to elect Citizens and Burgesses to Parliament;

[1] for [2] to come [3] nor good and true Returns
[4] Returns [5] have returned such Knights Citizens and Burgesses
[6] and observed

sua le treble value de lez vitaillez ou aũs chosez issint p'sez & lez costagez de lo' suitz doublez, & p' la dit ẽspas de faĩr fyn & raunceon a Roi: Et q̃ en to̅ tielx accõns ou suitz av'nt ditz la [ptiõn [1]] du Roi ne s̃ra p̃ allowe ne availlabl p' le denfend'unt: & cest ordenn̅ce de cõmence & p̃ndre effecte a la feste de Pasq̃ q̃ s̃ra en lan nr̃e d̃ M'CCCCxlvj°: P'veu to̅ te' q̃ p cest act le punisseñit ordeigne en aũs lez p'veo'rs du Roy en null mañe soit restrei'.

Item co' p aucto̅ dun pleñit tenuz a Westñ lan du reigne de le t̃s honorabl pier du Roi q̃orest prim̃, ent̃ aũs chosez ordeigne fuist, q̃ lez Citezeins & Burgeisez dez Citees & Burghs ven'ntz au pleñit s̃roie' eslieux homez Citezeins & Burgeisez resceauntz demurra[12] & enf'unchisez en ñiz lez Citeez & Burghs & niull aũs, co' en ñ lestat' pluis pleyneñit est conteignuz; lez queux Citizeins & Burgeisez ([2]) & null aũs ont to' te' en Citeez & Burghs estez eslieux, & as Visco[13] dez Counteez reto'nez, & s' lour reto'nez resceux & acceptez [p' [3]] lez pleñitz dev'nt sez hoeurez tenuz: Et auxi' co' p aucto̅ dun pleñit tenuz a Westñ lan du reigne le Roi q̃orest oeptisme, ordeigne fuist en quell mañe & fo'me lez Chirs dez Counteez a venir as pleñitz en aps teniers s̃ront eslieux, & coñit lez Visco[13] dez ñiz lez Counteez s' ceo [s̃roie' [4]] lo' reto'nez, co' en mesme lestat' pluis pleyneñit appiert; p force de quele estat' elecc̃ons dez Chirz a venir a pleme' ascun foitz out estez dueñit faitz & loialñit reto'nez, tanq, a ore tarde q̃ diṽsez Visco[14] dez Counteez du Roiat Dengl p' lo' singuler availl & lucre ne ont faitz due elecc̃ons dez Chirs, ne en te' covenabl, ne bons & v̂roiez reto'nez & ascun foitz null reto'nez dez Chirs Citizeins & Burgeisez loialme' esluz p' venir as pleñitz, mez ont reto'nez tielx Chirs Citezeins & Burgeisez q̃ ne fure' unquez dueme' eslieux, & aũs Citezeins & Burgeisez [q̃ ne fure' unq̃s [5]] q̃ ceux q̃ p Mairs & Baillifs as ditz Visco[15] fure' reto'nez; Et ascun foitz lez Visc̃ ne ont reto'nez [p [6]] bĩs q̃ils avoient p' fair elecc̃ons dez Chirs a venir as pleñitz, einz lez ditz bĩs ont embesillez, & oustr̃ null p̃cept as Mair & Baillifs, ou as Baillifs ou Baillif ou Mair nest, dez [Citezeins & Burgeisez [7]] p' elecc̃ons dez Citezeins & Burgeisez de venir as pleñitz [furent [8]] p colo' de cestz parolx contenuz en lez ditz bĩs, qd in pleno Com̃ tuo elegi fac̃ p Com̃ tuo duos milites, & p quatt civitate in Com̃ tuo duos Cives, & p quott Burgo in Com̃ tuo duos Burgenses; Et auxint p' ceo q̃ sufficea' peyne & covenabl remedie p' la ptie en tiel cas g've ne sont p̃ ordeignez en lez ditz estat[16] v̂s lez Visco[15] Mairs & Baillifs q̃ face' encount' la forme dez ditz estat[16]: le Roi considera' lez p̃missez ad ordeigne p aucto̅ suisdit, q̃ lez ditz estat[16] soient dueñit gardez & obfvez en to̅ pointz: Et oustre ceo q̃ chiune Visc̃ aps la liv̂e de [chiune [9]] tiel bĩ a luy fait [faĩr [10]] & deliva saunz fraude un sufficea' p̃cept desouth son seal a chiune Mair & Baillif, ou as Baillifs ou Baillif ou Mair nest, [deinz [11]] Citeez & Burghs deinz soñ Countee recita'

[1] pteccion *Lib. Scacc.*
[2] p Citezeins & Burgeyses [4] ferroient
[3] *Printed Copies read* per—*Rot. Parl.* as Text. [5] *omitted.* [6] lez, *on an Erasure.* [7] Citees et Burghs [8] firent [9] ascun *on an Erasure.* [10] ferra [11] des
} *Rot. Parl.* nu. xxiij. (48.)

xiiij.

@1‘A‘ ‘# 1‘1?L‘B&><?-A<‘C‘ ‘,‘@1‘CB1C ‘A10@‘1 “0“0&‘ U11‘ C‘ ‘ 1\1‘-0‘A1‘ >10 -1‘@<‘ ‘ 11‘`A1?L P‘ ‘ 1\1‘-\9‘ I‘ 1-‘ >‘@<‘ =& >1‘0“ 0?‘ ‘ ? .D‘ ‘ .1‘01\9‘A1‘+1-‘ ‘ <@ C@1 ‘ ‘ ‘H‘ >10>1\‘@1\‘ <‘ ‘ I‘ <‘@@‘=0‘&?‘ ` <‘@@‘=‘ I OP‘ <‘ ‘ -10‘ `A1\‘ ‘ 11\‘ I‘ ? .D0‘/‘P‘ 1 & -10‘&?‘ 1 C -1‘@&‘<@8‘ ‘C10‘@1‘A‘ ‘ CB1C ‘ <‘ >10>1‘@1‘ ‘019‘ C‘ 1-A1- D 1\‘ 1- ‘ ‘ @1‘ ‘0B&\‘ I‘ 1?L‘<@ =<‘ ‘ A1‘@1\‘A‘ \‘ 1@1BB&-0‘ I‘ A1\‘ -&‘‘0‘ A1\‘ A‘ \‘ ‘ 1\1‘-0‘ I‘ ? .1‘01\‘ ‘00‘- ‘ C‘ 1?L‘ 10@? \G ‘ 0‘ B1&‘ H‘ BD?-1‘ ‘0B&‘ =1B1‘ #&-‘ I‘ A &‘ ‘ 1 & -1‘ A1‘ BD?-1‘ A1@‘ # 1‘ I‘ A1‘B@@?-1‘ 1 & -1‘ C‘ <‘ ‘ I‘ <‘@@‘=09‘ &?‘ *)‘ <‘@@‘=‘ &?‘ <‘ ‘ -10‘ <‘@? ‘ =1‘ ‘ ‘H‘ B=1?-1‘ ‘ B&‘ <‘ BD?-1‘ =&‘ \‘ H‘@ =1&1‘@1‘B&- < ‘1‘A‘110‘ 10 < ‘ &?‘ A<0B?-‘ <? ‘ 10 < ‘ C‘ 1@1BB&-‘ A1\‘ D@ 0‘ ‘ 1\1‘-0‘ ‘ ? .1‘01\‘ A1‘ +1-‘ ‘ <@ C@1-‘ ‘ A1+0- ‘ 01\‘ D&1? 1\‘=<‘ ‘ 1-B& .1‘@<‘ C1 -1‘B&- 1-?‘ 1-‘ @1‘A‘ ‘ 10 < ‘ =<‘ ‘ @1‘ A‘ ‘ <-‘ &1C ‘0>1@ ‘ &?0 ‘ B1&‘ =& =<B1‘ I‘ C<‘1‘ <‘ BD?-1‘ C0&-1‘ 1-‘ ?!‘ 10@‘1?‘ D‘+<@1 ‘ ‘ 1\1‘-‘ &?‘ ? .1‘0‘ 1-‘ 90&-‘ &?- 1‘A1‘ +1-‘ ‘ <‘ <0B?-‘ C@1=- 9 I‘ -1> 1‘C‘ @? ‘ A?1‘D‘ 1 & -19‘&?‘<‘ <0B?-‘ <? ‘ C0&-‘H‘ 1-‘A1=<? 1‘A1‘ ‘1@‘ D‘j +<@1 ‘ ‘ 1\1‘-9 ‘)‘ ? .1‘0‘0?1 ‘@1‘+&1 ‘ ‘‘‘ ‘A&- ‘BD -‘ D ‘ ‘ 1 1‘-‘ I‘ ? .1‘0‘ ‘00‘- ‘ . +1‘ 01C<@- 1‘&?‘<0B?-‘ <? ‘ C0&-1‘H‘ 1-‘ B‘ A1=<?@ 1‘ 0?1 ‘ +&1 ‘ 1‘‘ 0<‘ <BB‘&-‘A1‘ A1 1‘1-, 0 @1‘A‘ ‘ ‘0B&‘ &?‘ 01\‘ 1L1B? 1 0‘ ?‘<A‘-‘0 <@ & 0‘ <‘A1><?-A1‘ I‘ ‘ , ‘& I‘A‘ \‘ ‘ ‘ &+1‘ 01\‘B&0 <.1\‘ 1-‘ B10‘ B<0‘ A10C1-A?\‘ ‘ H‘ 1-‘ ‘1@ <BB‘&-‘ C ‘0‘ C‘ +0 ?1‘ A‘110‘ 10 < ‘ @1‘ A1=1-A\W?- ‘ -1‘ .<.< ‘0<‘ @1 ‘ A1‘ @< A1><?-A1‘0?‘0A‘ ‘ 1-‘ -?@@ >< 1‘G ‘ H‘ -?@@ A1=1-A ?- ‘ 1-‘ ‘1@ <BA&-‘ <C<‘ ‘0B?-‘ 100& -‘; ‘ 1-‘ >‘ @1‘ >< 1‘ <‘ B@@?-1‘ =&‘ \‘ H‘ <0B?-1‘ <‘ ‘ I‘ <‘@@‘=0‘ &?‘ <‘@@‘=0‘ &?‘ <‘@@‘=‘ &?‘ <‘ ‘ -10 ‘ 1 & -1‘ &?‘ 1 & -1‘ <? 0‘ H‘ B1?L‘ H‘ 01- ‘ 10@?\‘ C‘ @1\‘ ‘ 1\1‘-0‘ I‘ ? .1‘01\‘ A1\‘ ‘ 11\‘ I‘ ? .D0‘&?‘ ‘1@L‘ 1@1BB&-0‘ 0&- ‘ &?‘M & - ‘=<‘ \9‘1-B& .1‘ I‘ =& =1B1‘ <‘ &“ L‘@‘ ‘ S f 1-&?0 ‘ =# =1B1‘ I‘ C<‘1‘ <‘ BD?-1‘C0&-1‘ ?!‘ 10@‘1?‘ ‘ 1\1‘-‘ &?‘ ? .1‘0‘ <‘ +1-‘ ‘ <@ C@1-‘ ‘ I‘ -1> 1‘C‘ ‘D\‘& I‘ <‘ ‘ ‘ <‘@@‘=0‘&?‘ <‘@@‘=0‘ &?‘ <‘@@‘=‘ &?‘ <‘ ‘ -10‘ 1 & -19‘&?‘ N)‘ <? ‘ C0&-1‘H‘ 1-‘A1=<?@ 1‘A1‘ A1@‘ ‘ 1\1‘-‘&?‘ ? .1‘0‘ ‘00‘- ‘10@‘1?‘0H1‘ +&1 9‘L@‘@‘‘ ‘A&- ‘ BD?-1‘A1\‘ ‘ 1\1‘-0‘1‘ ? .1 01\‘ ‘00‘- ‘ . +1‘ 01+O<@>1‘ &?‘ <0B?-‘ <? ‘ C0&-1‘ H‘ 1-‘ @&‘ A1=<? 1‘ 0?1 ‘ +&1 ‘ <‘ ‘ 0<‘ <BB‘&-‘ A1‘ A1 1‘1-, 0‘BD?-1‘A1\‘A‘ \‘ <‘ ‘ I‘ <‘@@‘=09‘&?‘ <‘@@‘=0‘&?‘ <‘@@‘=‘&?‘ <‘ ‘ -10‘9‘ L@ ‘ ‘ &+1‘01\‘ &0 <.1\‘ 1-‘B10‘B<0‘ 1LC1-A‘‘‘\G I‘ H‘ 1-‘ ‘1@ <BB‘&-‘A1‘ A1 1‘C 0‘ C‘ =& B1‘ A‘110‘ 10 < ‘ -?@@ A1@ =1-A ?- ‘ .<.<‘ 0<‘ @1 ‘ A1‘ A‘‘ A1><?-A1‘ 1-‘ -?@@ >< 1‘ -1‘ <C<‘ <0B?-‘ 100&‘-‘ ‘ H‘ BD?-1‘ ‘0B&‘ 9H‘ -1‘ =<B1‘ A?1‘ 1@1BB&-‘ A1\‘ D‘ 0‘ C‘ +1-‘ ‘ <@ C@1=- ‘ 1-‘ 1/‘ B&+1@ -<# 9 0‘ BD?-1‘ ‘0B&‘ 1-‘ 0&-‘ C@1 -‘ &?- 1‘C1- R‘ 8@1 D&? 1‘ A1‘ +‘‘ ‘ I‘ @1‘ D&1? ‘ A1‘ L ‘ A1+ - ‘ @1‘ -&-1‘ 0 ?-\‘ B&@@?0‘&-‘ 1-‘ B10‘ C ‘1@ I‘ BD?-1‘ ‘0B&‘ H‘ -1‘ =<B1‘ #&-‘ I‘ +1 < ‘ 1 & -1‘A1\‘ ‘1@L‘ 1@1B ‘&-0‘ A1\‘ D 0‘ A1‘ +1-‘ ‘ <@ C@1> ‘ 1-‘ 1@ <+1-‘ ‘ B&‘ <‘ 1?L‘ <CC ‘1‘ 1-‘ ‘-< 1‘ I‘ =& >1‘ 0?‘0A‘ \9‘ =& =<B1‘ 1-C0‘ @1‘ &“ @‘

D1‘ 0<‘A‘ F ‘ 9‘ B&> ><-A‘-.‘ D1>‘# ‘ D1‘ 0<>1‘ 1B1C ‘ `‘=‘‘#1‘<‘ ‘ 9‘ &‘ D&&01‘P‘# ‘ ‘ ‘\1-0‘&=‘ D1‘0<>1‘ ‘ 9‘ ‘ ‘\1-09‘ <-A‘‘-‘ D1‘0<>1‘ <--1‘<-A‘ !& >9‘ ‘=‘ ‘ ‘#1‘ <‘ & &?.D9‘ `# ‘ D1‘ ? .10010‘&=‘ D1‘0<>190P‘ &‘B&>1‘ &‘ D1‘ <‘@‘<>1- ‘ -A‘ D< ‘ D1‘0<>1‘ < & ‘ <-A‘ <‘@‘==09‘ & ‘ <‘@‘==0‘ & ‘ <‘@‘==‘ KD1 1‘ -&‘ < & ‘ ‘09‘ 0D<@@ 1 ? -‘ @<K=?@@ ‘ D1‘ /)‘ 1B1C ‘ &‘ D1‘ 0<>1‘ `‘ D1 ‘==09 P‘ # ‘ -A1- ? 10‘#1 K‘L ‘ D1‘0<- 1‘`‘ D1 ‘==09 P‘<-A‘ D1>‘ &‘ #1‘ ><A1‘&=‘ D1‘0<‘A‘ @1B ‘&-09<-A‘&=‘ D1‘ <>10‘&=‘ D1‘0<‘A‘ ‘ ‘\1-0‘ <-A‘ ? .10010‘# ‘ D1>‘ 0C‘BD&01-G <-A‘ D1 1j ?C&-‘)‘ 1+1 ‘ D1 ‘==‘0D<@@ ><a1‘<‘ .&&A‘ <-A‘ ‘.D =?@ 1 ? -‘ &=‘ 1+1 ‘ 0?BD‘ F ‘ 9‘ <-A‘ &=‘ 1+1 ‘ 1 ? -‘ # ‘ D1‘ < & 0‘<-A‘ <‘@‘==09‘ & ‘ <‘@‘==‘ K@=B 1‘ -&‘ < & ‘ ‘09‘ &‘ D‘>‘ ><A1‘ -A‘ D< ‘ 1+1 ‘ D1 ‘==‘ < ‘ 1+1 ‘ ‘>1‘ D< ‘ D1‘A& D‘B&- < ‘ &‘ D‘0‘ < ? 19‘& ‘ <- ‘ & D1 ‘ < ? 1‘ =& ‘ D1‘ @1= ‘&-‘ &=‘ , -‘.D 0‘ ‘ ‘\1-0‘ <-A‘ ? .10010‘ &‘B&>1‘ A‘ D1‘ < @‘<>1- 9 #1=& 1‘ D‘0‘ ‘>1‘><A19 0D<@@ ‘-B? ‘ D1‘ <‘-‘ B&- <‘-1A‘ ‘-‘ D1‘ 0<‘A‘ < ? 1‘ ><A1‘ D1‘0<‘A‘ ‘.D D‘ 1< G <-A‘ >& 1&+1 ‘ 0D<@@ =& =1‘ ‘ <-A‘C< ‘ &‘ 1+1 ‘ 1 0&-‘D1 1<= 1 ‘BD&01-‘ , -‘.D 9 ‘ ‘\1-9 . ‘ ? .100‘ ‘-‘ D‘0‘ &?- 9 &‘B&>1‘ &‘<- ‘ < j @‘<>1- 9 <-A‘ -& ‘ N)‘ A?@ ‘ 1 ?-=1A9‘ & ‘ &‘ <- ‘ & D1 ‘ 1 0&-9 FD‘BD‘ ‘-‘ “1=<?@ ‘ &=‘ 0?BD‘ , -‘.D ‘ ‘ ‘\1-‘ & ‘ ? .100‘ K‘@@ 0?19 <-‘ ?-A 1A‘ &?-A0G KD1 1&=‘ 1+1 ‘ , - D ‘ ‘ ‘\1-‘ <-A‘ ? .1 0‘ 0&‘ . ‘1+1A9 01+1 <@@ 9 & ‘ <- ‘& D1 ‘ 1 0&-‘ KD‘BD‘ ‘C‘ D1‘ ‘ “1=<?@ ‘ K‘@@ 0?19 0D<@@ D<+1‘D‘0‘ ‘&-‘&=‘ “1# ‘<.<‘-0 ‘ D1‘ 0<‘A‘ D1 ‘==9 & ‘ D‘0‘ L1B? & 0‘& ‘ A>‘-‘0 < & 0‘ &‘ A1><-A‘ <-A‘ D<+1‘ D1‘ 0<‘A‘ ?-A 1A‘ &?-A0‘ F‘ D‘ D‘0‘ &0 0‘ C1- ‘ ‘-‘ D<‘ <01‘ -A‘ D<‘ ‘-‘ 0?BD‘ @‘ -‘ <a1-‘# ‘+‘ ?1‘&=‘ D‘0‘ < ? 19 D1‘ “1=1-A<- ‘ 0D<@@ -& ‘ K<.1‘ D‘0‘ <K‘ &=‘ D1‘ “1>‘<-A‘ <=& 10<‘A‘ ‘-‘ <- ‘ K‘01‘9 <-A‘ D< ‘ -&‘ “1=1-A<- ‘ ‘-‘ 0?BD‘ B ‘&-‘ 0D<@@ D<+1‘<- ‘ 00&‘-G -A‘ ‘-‘ D1‘ 0<>1‘ <- -1 ‘ < ‘ 1+1 ‘ ‘>1‘ D< ‘ <- ‘ < & ‘ <-A‘ <‘@‘==09‘& ‘ <‘@‘==0‘ & ‘ <‘@‘==‘ KD1 1‘ -&‘ < & ‘ ‘09‘ 0D<@@ 1 ? -‘ & D1 ‘ D<-‘ D&01‘ KD‘BD‘ #1‘BD&01-‘ # ‘ =&1‘ ‘ ‘\1-0‘ <-A‘ ? 8‘ .10 010‘&=‘ D1‘ ‘ ‘10‘& ‘ & &?.D0‘ KD1 1‘0?BD‘ @1^‘&-0‘#1‘ & ‘0D<@@ #1‘ ><A19)‘0D<@@ ‘-B? ‘<-A‘=& =1‘ ‘ &‘ D1‘ , ‘-.‘ !& ‘ &?-A0‘G <-A‘ >& 1&+1 ‘0D<@@ =& =1‘ ‘ <-A‘ C< ‘ &‘ 1+1 ‘ 1 0&- D1 1<= 1 ‘ BD&01-‘ ‘ ‘\1-‘ & ‘ ? .100‘ &‘ B&>1‘ &‘ D1‘ < @‘<>1- 9 <-A‘ -& ‘ # ‘ D1‘0<>1‘ < & ‘ <-A‘ <‘@‘==09‘ & ‘ <‘@‘==0‘ &=‘ <‘@‘==‘ KD1 1‘ -&‘ < & ‘ ‘09‘ =1 ? -1A9‘ & ‘ &‘ <- ‘ & D1 ‘ 1 0&-‘ KD‘BD‘ ‘-‘ “1=1> ‘ &=‘ 0?BD‘ ‘ ‘\1-‘ & ‘ ? .100‘ 0&‘ BD&01-‘ K‘@@ 0?19 !& ‘ &?-A0G KD1 1&=‘ 1+1 ‘ &=‘ D1‘ ‘ ‘\1-0‘ <-A‘ ? .10010‘ 0&‘. ‘1+1A‘01+1 <@@ 9 & ‘ <- ‘ & D1 ‘ 1 0&-‘ KD‘BD‘ ‘-‘ D1‘ ‘ “1=<?@ ‘ K‘@@ 0?C9 0D<@@ D<+1‘D‘0‘ ='‘&-‘ &=‘ “1# ‘<.<‘-0 ‘ 1+1 ‘ &=‘ D1‘ 0<‘A‘ < & ‘ <-A9 <‘@‘==09‘ & ‘ <‘@‘==0‘ & ‘ <‘@‘==‘ KD1 1‘ -&‘ < & ‘ ‘09‘ <.<‘-0 ‘ D1‘ ‘ L1B? & 0‘ & ‘ A>‘-‘0 < & 0‘ &‘ A1><-A‘ <-A‘ D<+1‘ &=‘1+1 ‘ D1‘ 0<‘A‘ ` < & 0OP‘ <-A‘ <‘@‘==0‘ A=‘ <‘@‘==0‘ & ‘ <‘@‘==‘ KD1 1‘ -&‘ < & ‘ ‘0‘ !& ‘ &?-A0‘ K‘ D‘ D‘0‘ &0 0‘ -‘ D‘0‘ <01‘ 1LC1-A1A‘G <-A‘ D<‘ ‘-‘ 0?BD‘ =@‘&-‘ &=‘ “1# 9 <a1-‘ # ‘ !& B1‘&=‘ D‘0‘ < ? 19 -&‘ “1=1-A<- ‘ ‘-‘ <- ‘ K‘01‘0D<@@ K<.1‘D‘0‘ <K‘&=‘ D1‘0<‘A‘“1><-A9 -& ‘ D<+1‘<- ‘ 00&‘-‘ -A‘ D<‘ 1+1 ‘ D1 ‘==‘ D< ‘ ><a1 D‘ -& A?1‘ @1= ‘&-‘ &=‘ , -‘.D 0‘ &‘B&>1‘ &‘ D1‘ < @‘<>1- ‘ ‘-‘ B&-+1-‘1- ‘ ‘>1@ D< ‘ ‘0‘ &‘0< 9 1+1 ‘ D1 ‘==‘ ‘-‘ D‘0‘ =?@@ & - 9 #1 K‘L ‘ D1‘ &? ‘ &=‘ ‘.D ‘ <-A‘ D1‘ &? ‘ &=‘ @1+1-‘ # 2 1‘ &&-9 S K‘ D&?‘ &@@?0‘&-‘ ‘-‘ D‘0‘ 1D<@=9 <-A‘ 1+1 ‘ D1 ‘==‘ D< ‘ ><a1 D‘ -& ‘ .&&A‘ <-A‘ ?1‘ 1 ? -‘ &=‘ 0?BD‘ @1B ‘&-0‘ &=‘ , -‘.D 0‘ &‘B&>1‘ &‘ D1‘ < =‘<>1- ‘ ‘-‘ ‘>1‘ &‘ B&>19 <0‘ &‘ D1>‘ C1 <‘-1 D9 ‘-‘ <--1‘ <-A‘ !& >‘ <=& 10<‘A9 0D<@@ =& =>‘ &‘ D1‘ , ‘-.‘<-‘ ?-A 1A‘ &?-A0‘G

) $‘ $$ ‘ ‘ ‘M‘ ‘ .

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< & 0‘ I B‘ ‘D<? 1 ? -‘ D1‘ 0<‘A‘ 1B1C 0‘ &‘ D1‘ D1 ‘==0‘ KD&‘ 0D<@@ ><a1‘ ‘.D =?‘ 1 ? -‘ <BB& A‘-.@

D1 ‘==0‘ <-0. 100‘-.‘ D‘0‘& ‘<- ‘ =& >1‘ < ‘ ‘‘=1‘ &?BD‘-.‘ @1 ‘&= 0‘ 0D<@@ ‘&‘<Aj A‘ ‘&-‘ &‘ D1‘ 1-<@ ‘ & D1‘ , ‘-.‘?-A1‘ D1‘ < ? 1‘ 5 d ‘ ‘ B ‘$‘ =& =1‘ ‘ &&@‘ &‘ D1‘ < 9‘ I B

3!- +@‘.“!‘ @.“‘ .‘“ 4 &+& ><a‘-.‘?-A?1‘ 1 ? -‘ &=‘ ‘ ‘\1-0‘& ‘ ? .10010G % e‘ &‘ D1‘ ‘-.‘<-A‘% ‘ &‘ D1‘ < 9

‘>1‘&=‘ @1A@‘&-‘&=‘ M-&* Z‘&=‘ D1‘ D‘ 1

1-<@ ‘&-‘ D1 ‘==09 * *‘ &‘ D1‘ , ‘-.9‘<-A‘ &&=‘ &‘ D1‘ < 9‘ I B

6!#. '!"@ . '
3!- +&!2

' -@
"! 0"-!/' .';!'
M-&* '
& &j!-' .'"
40"'*!22' ;!'
0' .0 ' -/'
&!. ! < 0 '
&-' &Z"+ #!'
3!- +@
* &-2' !'
3!"2.-' E&-*'
&Z ! [
. .+' ' !'
M&-*' -/'
. .+' .' !'
3 "@' C#

V 3!"2.-Z'
2 +' ;!'
.2!-'
M-&* Z' .'
!' &"!2

W
b 0*!'3!--@'
2 +' -.';!'
&/' &+'
V&-!Z "!'
* 0*!/

5!' /7 '
!'"

W '
V+&!-' -/'
7 !"!'
2# ! ."Z'
2 +' E!'
-SO!2 2D

<-A' 0D<@@ '-B?' D1' <'-' &=' <-' ?-A 1A' &?-A0' &' #1'
C<'A' &' D'>' D<' K'@@ 0?1' <.<'-0' D'>9 D'0 L1B? & 0'
& ' A>'-'0 < & 09 =& ' D'0 <?01 9 # ' F < '&=' B '&-' &='
"1# 9 K' D' D'0 &0 0' '-' D'0 1D<@=' 1LC1-A1A9 K' D&?'
K<.'-.'&=' <K' &=' D'0 "1><-A9 & ' D<+'-.' 00&'-9 <0'
<=& 1' '0 0<'A' &+'A1A' <@K< 0' D<' 1+1 ' , -'. D 9
' '\1-9 <-A' ? .100' &' B&>1' &' <- ' < @'<>1-' D1 1j
<= 1 ' &' #1' D&@A1-9 '-' A?1' ! & >' BD&01-' <-A' -& ' 1 ? -1A'
<0 <=& 1' '0 0<'A9 0D<@@ #1.'-' D'0 B '&-' &=' "1# ' <=& 18'
0<'A' K' D'-' D 11' &- D0' <= 1 ' D1' <>1' < @'<>1-' B&>
>1-B1A9 &' C &B11A' '-' D1' 0<>1' ?' ' 1==1B ?<@@ '
K' D&?' ! <?A'G <-A' '=' D1' 0&' A&' -& 9 <-& D1 ' D<' K'@@
0?1' 0D<=' D<+1' D1' 0<'A' B?&-' &=' "1# 9 <0' ' '0 #1=& 1'
0<'A9 `<-A' 0D<@@ P' 1B&+1 ' D1'0<>1' ?>' K' D' D'0 &0 0
0C1-''-' D'0 1D<@=9 '-' <--1 ' <-A' !& >' <=& 10<'A9 0&
D<' -& "1=1-A<-''-' 0?BD' B '&-' 0D<@@ K<.1' D'0 <K9
-& '#1' 100&'-1A' '-' <-' K'01 9 <0 <=& 1' '0' 0<'A' -A' '=
<-' , -'. D 9 ' '\1-9 & ' "? .100 9 D1 1<=1' 1 ? - '# '
D1' D1 '=' &' B&-@1' & D1' < @'<>1-' '-' D1' <--1'
<=& 10<'A9 <= 1 ' 0?BD' 1 ? -9 #1' # ' <-' 1 0&-' C? '&? 9
<-A'<-& D1=' C? ''-' D'0 @<B1 9 D<' 0?BD' 1 0&-' 0&' C? ' '-'
D1' @<B1' &=' D'>' KD'BD' '0 ` ? 9'P' '=' D1' <a1' ?C&-' D'>'
&' #1' , -'. D 9 ' '\1-' & ' ? .100 9 <' <-' < @'<>1-' ''-'
'>1' & B&>1 9 0D<@@ =& =1'' & D1' , '-.' <-' ?-A 1A'
C&?-A0 9 <-A'<-' ?-A 1A' &?-A0' &' = 1' , -'. D 9 ' '\1-9
& ' ? .100' 0&' 1 ? -1A' # ' = 1' D1 '==9 <-A' <= 1 9 <0' <=& 1'
'0' 0<'A9 C? ' &? ' -A' D<' D<' , -'. D 9 ' '\1-9 &'
? .100' KD'BD' '0' 0&' C? ' &? ' 0D<@@ D<+1' <-' B '&-' &='
"1# ' &=' D1' 0<>1' '@' <.<'-0' 0?BD' 1 0&-' 0)' C? '
'-' D'0 @<B1 9 D'0 L1B? & 0' & ' A>'-'0 < & 0G &+'A1A'
<@K< 09 D<' D1' 0D<@@ 1.'-' D'0 ?' ' K' D'-' D 11'
&- D0' <= 1 ' D1' < @'<>1-' &>>1-B1AG >A' '=' D1' A&'
-& 9 D<' D1-' D1' D<' K'@@ 0?1' 0D<@@ D< 1' <-' B '&-' &='
"1# '&=' D1' 0<>1' '@'8<.<'-0' D'>' + D'BD' '0' C? ' '-' @<B1'
&=' D'>' D<' '0' 0&' C? ' &? ' <= 1 ' 0 BD' 1 ? -9 D'0' L1B?j
& 0' & ' A>'-'0 < & 0G <-A' D<' -&' "1=1-A<-''-' 0?BD'
B '&-' 0D<@@ K<.1' D'0 <K9 -& ' #1' 100&'-1A' G <-A' D<'
0?BD' &B100' 0D<@@ #1' '-' D1' B '&-0' <=& 10<'A9 <0' '0' '-' <'
F ''&=' 10C<00' A&-1'<.<'-0' D1' 1<B1' <' D1' &>>&-'
<K' &' D<' D1' , -'. D 0' &=' D1' D' 10' =& ' D1' < @'<j
>1-' D1 1<= 1 ' &' #1' BD&01-9 0D<@@ #1' -& <#@1' , -'. D 0'
&=' D1' 0<>1' &?- '10' =& ' D1' KD'BD' D1 ' 0D<@@)' #1'
BD&01-9 & ' & D1 K'01' 0?BD' -& <#@1' 0H?' 10' E1- @1>1-'
N)' &=' D1' 0<>1' &?- '10' <0' 0D<@@ #1' <#@1' &' #1'
, -'. D 0G <-A' -&' <-'@&' #1' 0?BD' , -'. D ' KD'BD' 0 <-A1 D'
'-' D1' "1. 11' &=' < 1&>&-' <-A' ?-A1

-/ 9 D1' , '-.' D< D' & A<'-1A' <-A' `10 <#@'0D1A0 P' # '
D1' ? D& ' '<=& 100''A9 D<' D1' 1-- 9 KD'BD' '0' B<@@1A9
D1' E<?.1' 1-- 9 0D<@@ -& ' #1' C<'A' &' D1' E<?.1 9 -& '
&' <-' & D1 ' '-' D'0' <>1 9 ?- '@ D1' & ' D'0' "1C? ' D<+1'
.<?.1A' D1' F '-10 9 <-A' D1-' D1' &' <a1' <-A' 1B1'+1' D'0
1-- ' =& ' D1' 0<>1' '-' F V ' K' D&?' >& 1' -B 1<01' & '
A+<- <.1' ` &' B@<'>' =& ' ' P' ;' -A' <@0&' D<' D1' & ' D'0
"1C? ' #1' 1<A ' &A&' D1' ='B1' &=' E<?.1 ''-' <@@ @<B10 9
KD1-' D1' ` &' D<' 0P' # ' D ' < '0D<@@ #1' 1H?' 1AG <-A'
` D< hP &' #1' &#01 +1A' D &?.D' <@@ D1' ` 1<@>' &=' -.j
@<-A93P' ?C&-' D1' <'-' B&>C '01A' '-' D1' <?1' >< A1' D1'
1+1-' <-A' K1- '1 D' 1< ' &=' ` D1' -&#@1P' , '-.' AK<' A'
D1' D' A9 &=' D1' .<?.'-.' = 1A' F '-1' <-A' F D' 1'
F '-19 A?@ ' &' #1' 1L1B? 1A

9 ''0' & A<'-1A9 # ' D1 ? D& ' '<=& 10<'A9 D<'
1+1 ' 0BD1< & ' 0D<@@ <a1' D'0' -H?10 0' &=' ='B1' # '
+' >1' &=' D1' F ' 0' &=' "'1>' B@<?0' ' 1L 1>?>9 <-A' <@@
& D1 ' F ' 09 K' D'-' D1' &- D' <= 1 ' D1' "1@'+1 ' &='
0?BD' F ' 0G <-A' <@0&' D<' <@' 0?BD' '-H?'0' '&-0' 0D<@@ #1

U .' '!' -/' '-"'-"' ' $

U . ' ;&" ' Z 8
". '&/!/' U !" '" #+ @1@-*' @ N$@' *
)' !" .' ' &2 M@-*&2' 6! 01!' ']]'%%&' ' R , 8

I' 1-B& .1' @<' C1 -1' A1' @' ' <' C<'1 ' <' B1@@? ' H' +&1 '
0?1 ' 1-+00 @? ' 01\' 1L1B? 1 0' &?' <A>'0 < & ' C ')'
B<?01' C' &'1' A<B=I -' A1' A=' 1' &+1' 01\' B&0 <. \' 1-'
B1@@ C '1' 1LC1-A?\9 0)' . .1 ' A1' @1 ' A1' B1@@ A18'
><?-A1' &?' < ' 1 0&'-' B&/' A1+D' ' 10 ' A ' ;' +1 <' &W'
=&' \' H' 1= ?-' D ' ' 1' 1>' I ' ? .1'0' C? ' +1-' ' ' <'
<0B @-' C@1> ' 1-' 1\' <+'' .-' ' <' 1-' 9 1-' A?1' =& >1'
10@'1?' I ' -&?-' C<0' 1 & -1' B&' A10?'0' 10 ' A' 9 `B&'/'P' 0<'
BB'&-' A1' A1 1' 0?'0A' ' A1'-\' &'0' >&'0' !' >10>1' @1'
C@1> ' B& <1-B1 9 <' CB1A1 ' 1-' @<' A' ' 0?' 1' 1==1Q@?1@> '
0==' -\' = <?A1G I' 0" '00'-' -1' =<B1' 1' ' ?-' <? ' H' 0?1 @1'
+&1 ' @1' A' ' <B1 -' A1' A1 1' B&' A1+ -' 10 ' A' ' A1' <,' I'
1B&+ 1' '=' @<' 0&>1' &+1' 1\' B&0 <. \' 1-9B10 ' C '1' A'0G
C1-A?\' 1-' ><51' I' =& >1' <+0-' A' 9 '00'-' H' -?@@ A1=1-G'
A ?-' 1-' '1@ <BB'&-' .<.<' 0<' @1 ' -1' 0&=' 100&'-' 1-' -?@@
>< 1' B& ' A10?'0' 10 ' A' ' 0" 0B -' D'+<@1 ' 1\1'-'
&?' ? .1'0' 1-' 1/' <+1'. -= 9 1 & -1' C' @1' @OB&M A1' +1-' '
<9 C@1 -' 1-' @<' >< 1' 0?'0A' 9 <C0' '1@ 1 & -1' C' 0B?-'
C0&-1' 0&=' &?0 1' I ' ?-' <? ' > 0' 1-' 0&-' @'1?9 H' '1@ C0&-1'
'00'-' > 0' 1-' @1' @'1?' B10 ? ' H' 10 ' &?0 19 0 ' <BB1C 1'
0' @@ ' A10 1' D' <@1 ' ' 1\1'-' &?' ? .1'0' <' <0B?-'
C@1> ' 1-' 1' <+1-' 9 =C =<B1' A150' @1' &" @'G ' '
<9 D'+<@1 ' ' 1m<-' &?' ? .1'0' '00'-' 1 & -1' C' @1' '0B '
I' <C0' B&>1' A1+ -' 10 ' A' ' &?0 1' H' B10 ' D'+<@1 '
' 1\1'-' &?' ? .1'0' ' 10 ' ' 0'-' &?0 1' <,' <1=&-' A1'
A1 1' A1\' >10>1\' '=' ' '1@ C0&-1' '00'-' > 0' 1-' 0&-'
@'1?' 01\' 1L1B? 1/0' &?' <A'-'0 <=& 0G ? +1?' & ' =&= \'
H'@ B&>1-B1' 0<' 0?' 1' A1'-\' &'0' >& 0' <C0' @1' C@1-' '
B&>1-B1G I' 0" '@ -1' @<B1' ' B1@@? ' H +&1=' 0 1 ' <,' <BB&-'
A1' A1 1' A1\' >10>1\' @1\' '@' ' 1D,0' B10 ? ' H' 10 ' > 0'
1-' @1' @'1?' B10 ? ' ' 1 ''00'-' < ' '1@ 1 & -1' &?0 1' 01\'
1L1B? 1 0' &?' <A' <0 < & 0' I' H' -?@@ A1=1-A ?-' 1-' '1@
<BB'&-' .<.1 <' 0<' @1 ' -1' 0&=' 100&'-9 I' H' <? '1@ CB1001'
0&=' 1-' @1\' <BB I -0' <+W- A=\' 1C[' 10 ' 1-' =1 1' A1' ` ?0 P'
=1' '81-B&?-' @<' C1<0' QA1'\P' @<' B&@1' @1 G' 00'-' H' @1\'
D' 0' A1\9 h?- 11m C' @1' C@1 @' 1-' ?!' <' 10@'1 0' 0&'1/'
-& <#@1\' E 0' A1\' >10>1\' @1\' &?- 11\' C' @1\' H?1HL'
'@0' 1 &-' '00'-' 10@?\9 &?' <?R> ' '1@L' -& <#@1\'
0H '1 ' .1 ' '@0' D&>1\' A1@ ` < '+' 10 P' A1\' >10>1\'
@1\' &?- 11\' B&' 0&'1' <#@1\' A10 1' D'+<@1 0G I' -?@@
D&>1' A10 1' '1@ D'+<@1 ' H' 10 &'01' 1-' @<' A1. 11' A1'
+<A@1 ' I' A10&? D

1>' @1' &" <A' & A1'. -1' I' C? +'='?' C' @< @= & J 0?'0A' '
' @1' A1-'1 ' H' 10 ' <CC1@@1' @1' .<?.1' C1- ' -19 0&=' C<'1' <
@1' E<?.1&' -1' < < B?-' <? ' 1-' 0&-' -&?-19 <-H9 '@ &?'
0&-' A1C? 11' $ 1=' .<?.1' \' '-1\G I' <A&-H0' @? ' A1'
C -A 1' I' 10B1'+1 ' 0&-' A1-'1 ' C' B1&' 1-' . 11' 0\?-\'
C@?'0' 1-B 1B1' H?' <+W- <.1' C? ' B1&' B@< >1 ;' '<?L'-'
H' '@ 0&' ' C 10 ' &?' 0 -' A1C? 11' A1' =<' ' @&=='B1' A1' .<?.1&'
1-' &3' @'1?L' HW?-' ' ' <' B1&' C' @<' C '1' 0&' ' 1H?'0' ' I' B1&'
A10 1' &#01 +1m' C' > 1' &? ' @1' H'<=' A?' &" 0? ' @<'
C1 -1' B&>C '01' 1-' @10 < ' =<' ' <-' LL+' ' A?' & ' Aj
K< A' @1' '1 B1' A1' .<?.'1 ' A1\' +'-1\' &?.1' I' #@<-B'
A?1>1' 10 1' 1L1B? '

1>' A1'. -1' 10 ' C' @<? I & ' 1' 0?'0A' ' H' BD? -1' =10B 'B8'
&? ' C'. -1' 01\' 1-H?10 1\' A&=='B1' C' +1 ?1' A1\' # 1\' A1'
A'1>' B@<?0' ' >1 1>?' I' &? \' <?R0' # '1=0' A1' -\' @1' >&'0'
<00(@<' A1@', <?-B' A<? 'B@L' # =0G I' <?L'-' H' &? \' <? '1@L

' 10')' 2 0-j
' #. 1!-#! @ "!2 22' I ; $ +' ' "'W%&&H' R < 8
0 <
' - &22 0- !'

'-H?'0'B -0 0&'1/ C @01\' 1-' #&-1\' +'@@1\' I ' @'1?L'&, 1\G 1 ' H' "? ' A1' 1?L' C' . -1' C '+1> ' -1' <C='' 1 ' C' @? ' -1' C' <? 1' `'C' <0B?-1'WP' >10-1' C0&-1' C? ' @1L1B?B'&-' A1\' <0' B?-1\' '1@L' # '1=0 1-' ?-' &?- 1 -1' C' @&BB<0'&-' A1' B1& &?0 1' a' 0C>1' A1' '00 +'' 'A ' &?' L'' '0 ' ''' 'A ' &?' A10&?@D @&?' 0&-' @<#&? ' I ' 01\' B&0 <.1\' B1& A1><?DA1 1- 9 '00'- ' H' @< 0&>1' H'@ <? '1@>10 C2-A < -1LB1A< C<0 1-' &? ' @< 0&>1' A1' L@' 0 ' CH ' @1\G 1L1B?B'&-0 A<0BC-1' '1@ # '1=' 1-' ?-' &?- 11G 1 ' 0" <0B?-1' 0BD1 &? ' =<B1' @1' B&- < '1' A<0B?-1' A1' @1\' C>'001\' H' <A&-H0 '@ =& =1B1' @< 0&>1' A 1 L@ ' ';' <?L'- ' H' 0" <0B?-1' D&>1' <C01' m0B?-' &=='B1' C '01' A1+ - ' <0B?-' 0BD1 &H ' &?' &>' 0'& 9 I ' A1- ' 1' ' <0B?-' 1'=' =11' 1- 0 <0B?-' C< 1- 09 H' 1-' B1=' B<01' -?@@ C 1B1 &-' 0&' ' <@'&K1' -1' <@@&?<#@1G I ' H ?- ' < <0B?-' . <?- ' &?' @11\' <' =<' ' 0)' <0B?-1' C0&-1' H' < 0< <0B?-' '1@ &=='B1' H' @10 < 0 1C' '1@ B<0 A1+W- ' B10 ' `10 < 0/ P' =<' \' 0&@10 A?1>1C ' &#01 +1\' ;' I ' H' @1' &" 1' ' @< >&' 1' A1' @<' A' ' =# =<a? ' A1' L@ ' , ' I ' H' @< C< '1' ' 1-' B10 ' C '1' +&1 ' 0?1 ' C? ' @1' &" I ' @? ' >10>1\' 1' ' @<? 1' >&' 1' A'B1@@

1>' @1' &" B&>0'A1 <- ' B&>1 ' A' 01\' B&>C@1'- \' &?- ' 10 1' =<' \' A1+#' ' B10 ' 1' C' A'+'01\' A1' 01\' @'1.1\' >< BD<- \' 1C<' <- \' <0 @1\' C '1\' A1' E<0B&'.-1' I ' E? 1-9 B&>1- ' < < A' '@0 -&- ' 10 1\' 0?== 1\' A<B@'< 1 ' +'-1\' A1' @<' B 10B1<?-B1' A1@ D<? 1' C<''0 1-' '1@ 10 B&>1' '@0 0&@&'1- ' <==<' G ' <?L'- ' B&>1- ' '@@&H?1\' 0&- ' A', 01\' -&+1@L' '>C&0a'&-0 A1><?-A1\' I ' 1+1\' A1' 01\' A' \' @'1.1\' >< BD ?- \' 1C<' <?- \' <0 @1\' A' \' C '1\9 <? >1- ' H' <A' 10 1' ?011' A<?-B'1-' 1>C0 A10 1' A1><-A1' 1 ' @1+19 1-' . <?-A' A<><.1' A1\' '>10>1\' @1\' >< BDW?- \9 I ' .N?-A1\' CA1\' I ' <-'1- '0>1- ' A1\' &? \' 01\' =&'<@L' @'1.1\9 <A' & A1'.-1' C' @<?= & ' 11' 0?'0A' \9 H' &? \' 01\' A' \' >< BD<?- \' 1C<' <?- \' <0 @1\' A' \' C '1\' A1' E<0j B&'.-1' I ' E? 1-' C?'001- ' = <?-BD1>1- ' 1-' <C 1\' <BD< 1 ' @1\' +'-1\' '@@&H?1\' A1' @<' D<? 1' C<''0 9 1-' &? \' <? '1@L' 1>C0 I ' &? ' <? '1@ @'#1 1' B&>1' '@0 ?0&'1- ' 1?L' <BD< 1 ']] ' &?']]] ' <-0 C<001A9 0<?-\' <0B?-1' <? 1' -&+1@@ '>8 C&0'B'&-' &?' BD< .1' A10 1' 1 1\' &?' > 01' C? ' 1?L,' 1 ' H' 0" <0B?-' A1' @1\' ==' B1 0' A?' & ' 1-' @1\' A' \' C '1\' &?' <0B?-' <? 1' C0& 1' A'0 &? #1' +1L1' &?' . 1+1' &?' =<B1' A'0 &? #1 ' +1L1 ' &?' . 1 1 ' <0B?-0' A1' @1\' A' \' < j BD<?- \' &?' @'1.1\' A?' & 9 &?' =<B1' A10 1' @1+1' A<0B?-' A1' 1?L' <0B?-0' -&+1@L' '>C&0' '&-0' B&- '1' <' B10 ' & 8 A1'.-3-B9 '@ A1' =& =1' ' < <?- \' A1\' =&' \' B&>1' '@ &==1-A< <' @< C< '1' . 1+11' LL' '' ' &?0 1' 01\' 1#@1\' A<>' A10 1' C<'1\' <' @? 9 @?-1' C '1' A1' >10>1' @<' =& =1' ? ' A1' LL' '' A10 1' C<'1\' <@ &1C0 A?' &" I ' @<? 1' C '1' <' @? ' '00'- ' . 1+19 &?' <' B1@@? ' H' 1 ' 01\' A1=<? 1\' I ' -1B@'.1-B1\' C? ' @1' & ' +&1 ' 0?1 ' 1-' B1@@1' C< '1

)/ 2#O-' / ' a %' .$- ' 2' !%
' ' L M ' ' ʸ !1 2' L M '

<a1-' X-' .&&A' &K-0 <-A' &C1-' @<B10G <-A' D<' -&-1' &=' D1>'0D<@@ <a1' C '+'@ ' -& ' &C1-@ ' # ' D'>9 =-& ' # ' <- ' 1 0& - =& ' D1' L1B? '&-' &=' <- ' 0?BD' F ' 0' '-' &-1' &?- 9 -& ' # ' D1' BB<0'&-' D1 1&=9 <#&+1' D1' ?>' &=' 'a' D'@@'-.0 <-A' '.D 8C1-B19 & ' D' 11-' D'@@'-.0 <-A' !&? 8C1-B19 & ' <#&+1' KD1 1' D'0 <#&? ' <-A' D'0 &0 0'0D<@@ 1H?' 1' ' 9 0&' D<' D1' ?>' KD'BD' D1' &' 0D<@@ <a1' A&' -& ' 1LB11A' '-' D1' F D&@1' D1' ?>' &=' !& ' D'@@'-.09 =& ' D1' L1B? '&-' &=' <- ' 0?BD' F ' ' '-' &-1' &?- G <-A' '=' <- ' 0BD1< & ' A&' &- < ' &' <- ' &=' D1' 1>'010 9 D<' D1-' D1' 0D<@@ =& =1' ' D1' ?>' &=' !& ' &?-A0 ' @ &' D<' '=' <- ' <-' <+1 01' <- ' ==' B1' <a1-' #1=& 1' <- ' 0BD1< & '& ' &>>'00'&-1 9 <-A' D1 1&=' D< D' <' B' 1' =<B'<0' <.<'-0 ' <- ' `C< 1- 119 hP D<' '-' D'0 <01 -&' & 1B '&-' 0D<@@ #1' <@@&K1A9 -& ' <@@&Kj <#@1' G <-A' <0' &' <- ' E <- '& ' 1<01' &' #1' ><A1' &' <- ' 1 0&-' KD'BD' 0D<@@ <+1 01' <- ' 0?BD' ='B19 D<' D1' < ? 1' '-' D<' <01 9 #1=& 1' D'0 '>1' ><A1 9 0D<@@ #1' A?@ ' &#01 +1A' ;' '-A' D<' D1' , '-.' 0D<@@ D<+1' D1' <@=' &=' D1' 0<'A' !& =1' ? 1' &=' !& ' &?-A0 9 <-A' D1' < 9 KD'BD' '-' D'0 1D<@=' K'@@ 0?1' =& ' D1' , '-.' <-A' D'>01@=9 0D<@@ D<+1' D1' & D1 ' <@=' &=' D1' 0<>1

9 D1' , '-.9 B&-0'A1 '-.' D&K' A'+1 0 &>C@<'- 0 D<+1' #11-' ><A1' #1=& 1' D'0 '>19 # ' A'+1 0 &=' D'0 @'1.10 1 BD<- 0 1C<' '-.' &' D1' < 0 &=' E< B&'-1' <-A' E? 1-9 D&K' D<' -&K' &=' @< 1' D1 ' D<+1' /)' #11-' 0?=j =1 1A' &' #? ' F '-10 &=' D1' E &K'-.' &=' D1' D'.D' &?- ''-' 0?BD' '>1' <0 D1 ' K1 1' K&-' ` &'#1' ><A1G 0P' <-A' <@0& D&K' D1 1' #1' A'+1 0 -1K' >C&0'?&-0 A1><-A1A' <-A' @1+'1A' &=' D'0 0<'A' @'1.10 1 BD<- 0 1C<' '-.' &' D1' 0<'A' < 0 & D1 K'01' D<-' D< D' #11-' ?01A' &=' &@A' '>1' &' #1' A1><-A1A' <-A' @1+'1A9 &' D1' . 1<' '' <><.1' &=' D1' 0<>1' 1 BD<- 0 <-A' . 1<' &00' <-A' '-A <-B1' &=' <@@ D'0' =<' D=?@' @'1.1' 1&C@1G D< D' & A<'-1A' # ' D1' ? D& ' ' <=& 10<'A9 D<' <@@ D'0' 0<'A' 1 BD<- 0 1C<' '-.' &' D1' 0<'A' < 0' &=' E<0B&- ' <-A' E? 1-9 >< ' = 11@ ' D1 1<= 1 ' #? ' D1' F '-10' D1 1' &=' D1' D'.D' &?- 9 '-' <@@ 0?BD' '>10 9 <-A' '-' <@@ 0?BD' ` '#1 '10 9 0P' <0' D1 ' D<+1' ?01A' &' #? ' D1>' LL' & ' LLL' 1< 0 C<0 9 K' D&? ' <- ' & D1 ' -1K' >C&0' '&-' & ' D< .1' ` &' #1' C? N P' ?C&-' D1>;' -A' D<' '=' <- ' '&=' D1' , '-./0 ='B1 0 '-' D1' 0<'A' < 0 9 ' <- ' & D1 ' 1 0A-9 A'0 ? # +1L' & ' . '1+1A9 <- ' &=' D1' 0<'A' 1 BD<- 0 9 A'0 ? #1A9 +1L1A9 & ' . '1+1A9 <- ' &=' D1' 0<'A' 1 BD<- 0 9 & ' @'1.1' 1&C@1' &=' d`&?' &+1 1'.-' & AP' D1' , '-.9 & ' A&' &' #1' @1+'1A' &=' <- ' &=' D1>' <- ' -1K' >C&0' '&-0G B&- < ' &' D'0 A'-<-B19 D1' &' =& =1' ' <0' &= 1- '>10' <0' D1' &==1-A1 D9 &' D1' < ' . '1+1A' LL ' C&?-A' &+1 ' D'0 1#@1' "<><.10' &' #1' C<'A' &' D'>G D1' &-1' <@=' &=' D1' 0<>1' ! & =1' ? 1' &=' K1- ' &?-A0' &' #1' C<'A' &' D1' 01' &=' `&? ' &+1 1'.-' & AP' D1' , '-.9 <-A' D1' & D1 ' < ' &' D1' < '0&' . '1+1A9 & ' &' D'>' KD'BD' '-' D'0' " 1j =<?@ ' <-A' 1.@' .1-B1' K'@@ 0?1' =& ' `&? ' &+1 1'.-' & AP' D1' , '-.' '-' D'0' 1D<@=

K-!' ;@'./!"';!' -@'1!-!'3!"2.-'I' $ '
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@ ' &+1 1'.-' & A' D1' , '- .9 <' D'0 < @'<>1- '
D&@A1-' <' ' A'-?-A0#? 9 '-' D1' !1<0 ' &='
<'- ' B&@<0 6 D<' '0 &' 0< 9 D1' L ' " < ' &=' !1# ?< 9
D1' LL+9 1< ' &=' D'0 1'.-9 # ' D1' A+'B1' <-A' 1- '
&=' D1' & A0 C' ' ?<@ <CA' 1>C& <@9 <-A' D1' &> >&-0
&=' D'0 1<@>' '-' D1' 0<'A' < @'<>1- ' <001>#@1A9 <-A' # '
? D& ' '&=' D1' 0<>1' < @'<>1- 9 D< D' <CC &+1A9 < 8
D1A9 <-A' <==''>1A' <@@ <--1 ' &=' < ? 10 ><A1' '-' > '
< @'<>1- ' <.<'-0 ' F 1@BD>1-' #1=& 1' D'0 '>19 -& '
1C1<@1A;' -A' >& 1&+1 ' D< D' & A<'-1A'# ' D1' ? D& ' '
<=& 10<'A' D<' <@@ E <- 0 &=' ! <-BD'010 9 < a1 09
!<' " <-A' & D1 ' '#1 '10 &' #? ' & ' &' 1@@9 ` &' #<a1'
& ' &' # 1K9 <-A' &' 01@@\'P' K' D'-' D1' &K-0' &=' & D'
F <@109 ><A1' &' <- ' F 1@0D>< -' #1=& 1' D'0 '>19 0D<@@
#1' +&'A' <-A' &=' -&' <@?1 ' -A' D< ' `1@@ D1' '@@<' -0' &=/P'
&? ' &+1 1'.-' & A' D1' , '-.' F' D>' & D' F <@10' 0D<='
#1' #&?-A' <-A' B&-0 <' -1A' &' A&' 0?BD' <#&? 0' <-A' 1 j
+'B10' `<0' D1 ' &=' '.D '/P' D<+1' ?01A' &' A&' &=' &@A' '>19
-& K' D0 <-A' -.' <- ' E <- ' ><A1' &' D1>9 & ' <- ' 0<.1'
?01A' # ' D1>' `&=' < @< 1 ' '>10P' &' D1' B&- < 6 <-A'
D<' 0?BD' ' B1 ' 0D<@@ D<+1' &K1 ' &' B&>C1@ D1>' &'
A&' 0 'BD' <#&? 0' <-A' 1 +'B10 9 `<0' D1 ' D<+1' ?01AOP' &'
B&>C1@ D1>' #1=& 1' D'0 '>1' @<K=&@@

K.'" ; E!' ."; "0!' .' 2!+' ' ++' 4.0-/!1!-' .6' o' o'
;' .' 6&t ' 2' !@ L' ' + !' @1!' 2'] R5 8
;' 2' '!' 02!/

=1' @1' & ' <' &-' C< @1>1- ' 1-?\' <' ? ' < -
A>?A1' 1-' @1' =10 ' A1' < - ' B&@<0 9 B10 <00<+&@ '
@1' A'0>1' &/' A1' !1+01 ' <-' A1' 0&-' 1'.-1' LL+ ' A1@ <A+'0'
I ' < 01- 1' A10' 0' 10C 1@L' ` I ' 1>C& 1@L ' P' I ' @10' 10'
A1' 0&-' &'<@>1' 1-' @1' A' ' C< @1>1- ' <001>#@1\' I ' C'
<?=@& @ 1' A1' >10>1' @1' C< @1>1- ' <A' <CC &+1' a '='1' I '
<==1 >1' &? \' >< 0' A10 < ? 1\' =<@ 10' 1-' <0B?-' C< @1>1- '
1-B ?'' ' ' D&>10' E<@& 0' A1+/- ' 1@@ 1>C0' -'1- ' 18'
C1@@1\;' 1 ' & 1' B1&' <A' & A1'. -1 C' @<?B & ' 1' <+=& A' ' H1'
&? \' . '- 10' A10' = <-BD'010' >1 BD10' =B4 10' I ' <? 10'
A 110 A<BD< 1 '&?' +1-A 19 <' C'0 1 ' &?' # <0@1 ' A1' +1-A 19
A1'-\' @1\' +'@@10' A1' & D.<@10' =1@ \' < <0B?-' DA>1 '
E<@& 0' A1+3-' B0D' 1>C0' &'1-' '+&'A1\' I ' A1' -?@@ +<@?1 '
' H' &? \' +'@@1'-0' -=1' @1' & ' A1'-\' & D.<@10'
0&'-' &#@'.1\' I ' < 1\' A1' =<' 1' A1@0' @<#&? 0' I ' I +'B10' A1'
A &' ' 0" B&>1' '@0' &?-' ?01\' < =1' 1' A<?''B'1-' 1>C0 6
'1-' &#0 <-' <0B?-' ./?-' =1' ' < 1?L' &?' <0B?-' ?0<.1'
?011' C' 1?L' A1' C?'0-1' 1>C0' 1-' B&- '1 6' I ' H' A1@L'
&=='B1 0' 1'1-' C&@< ' A1' B&>C1@@1 ' 1?L' <=<' 1' A1@L' @<#&? 0'
I ' M+'B10' 0" B&>1' &?-' ?01\' A1' B&>C1@@1 ' 1?L' A1+3- '
B1@@ 1>C0' @&'<@>1-

;' ; !'"+@-!/'.-' !' 6.++

<B".1' !' 7!-@L & ' .' !' +&&"@L-&- ' ! '" . 'M ' !-"@' ' ;. '&-#+O2&'!'0 ++' .-' !' 2 1!' 0 !' 6.++

D1' 0<'A' 1 BD<-A'010 ' -' KD&01' <-A0' 0&1+1 ' D1 ' 0D<@@ #1' =&?-A ' -A' D< ' &C1-' &B@<>< '&-' 0D<@@ #1' ><A1' ``?C&-' D< 'P' #1 K'L ' D'0' <-A' D1' ' +' < ' &=' ?@ ' -1L 'B&>'- . K' D'-' D1' ' &=' &-A&-' <-A' & D1 ' @<B10' -1B100< ' <-A' B&-+1-'1- ' &' D1' 0<>1 ' -A' '=' <- ' ?' ' #1' B&> >1-B1A' D1 1<= 1 ' #1B<?01' &=' <- ' 0?BD' 01'\'- . ' -' KD'BD' <- ' 00?1' B&-B1 -'- .' D'0' Q ' 0D<@@ #1' <a1- D<' D1' 0<'A' 00?1' 0D<@@ #1' '1A' '-' D1' &?- ' KD1 1' D1' 0<'A' 1'\'- .' '0' D<A <-A' '-' -&-1' & D1 ' @<B1;' D'0' A'-<-B1' &' 1-A? 1' ``#? ' '@@ P' D1' -1L ' < @'<>1-

6!#& ,' . ' !' *"! ' !#"! 2!' . ' !' 02 . 1 2' ' + &2' -/' . ' !' !# @' . ' !' . 7 -'H

 ' !& <0> ?BD' <0' , '- .' AK< A' D1' D' A' # ' . 1< ' "1@'#1 < '&-' & A<'-1A' D'0' KD&@1' <C@1' &=' F &&@0' F &&@=1@0' <-A' & D1 ' 1 BD<-A'010' &' #1' <' <@<'0' =& ' D1' F 1<' <-A' &=' '&=' /)' D' ' 1<@>' <-A' <=1. ?< A' &=' D1' 0<'A' &K -' <-A' # ' D1' . 1<' '#1 '10' <-A' ! <-BD'010' .'+1-' &' 1 BD<- 0' D' D1 ' 1C<' '- .' `<= 1 '  D< ' ><- ' 1< 0 0'P' B<>1' .  1< '  1+1- ?10' &' D'>' <-A' & D'0'  ? B10 ' 0& 0' <0' ' '<CC1< 1 D' &='  1B& A' '-'  D1' , '- ./0'  LBD1H?1 ' D< ''0'  &' 0<  ' '-' `1+1 ' 'P' 1< ' &=' D'0' 1' .-' L+'' ' ' '<-A' >& 1' <-A' 0&' B&- '-?1A' >< - ' 1< 0' < ' F D'BD' '>1' . 1< ' 'BD10' B<>1' '- &' D'0' 1<@>' &=' -.@<-A' # ' D1' >1<-' &=' 1 BD<- 0' &=' D1' 0<'A' <C@1' D1-' #1'- .' ' '-' ?>#1 ' <-A' &=' . 1< ' 'BD10' .&&A' ?0 'B1' <-A' <-A' D<A' #1 K'L ' < ' <-A' < ' <-A' # ' D1>' K1@@ 1L1B? 1A' D1' 0<'A' &K -' &=' <@<'0' <-A' D1' < BD10' K1 1' K1@@ 1C<' 1A' <-A' &@A'1 0' C<'A' &=' D1' ' F <. 10' `<@ D&?. D' D<' ><'- 1-<- 0P' # ' A'+1 0' <-A' ><- ' 'j B1-B10' .'+1-' # ' 1 1 0' < 1- 0' <-A' # ' >'0?0'- .' &=' DA' 0<'A' 'B1-B10' '-' #? '- .' &=' F &&@0' <-A' F &&@=1@0' '-' & D1 ' @<B10' D<-' D1' ' 'B1-B1' B&- <'-1 #' '-' 0D'CC'- .' ``'. 1<' 'P'  ?>#1 ' <-A' F 1' . D ' <-A' B&@&? '- .'  D1' 0<>1' # ' -1K' ``B&- '+1A'0P' <>10' <0' & ='- .' <-A' D& '- .' A' <-A' 0&>1' 1 0&-0' KD'BD' <BB& A'- .' &' D1' ' 'B1-B1' &?. D ' &' D<+1' B< '1A' D1' ' F &&@0' &+1 ' D1' &?- <'-0' D<+1' 0&@A' D1' <>1' '-' <#<- ' <-A' '-' & D1 ' @<B10' &' 0?BD' 1-' KD'BD' K1 1' K&- ' &' #1' <BB?0 &>1A' &' #? ' D1' ' F &&@0' < ' D1' <C@1' &=' <@<'0' <-A' <@0&' # ' . 1< ' 0 1<@'- .' &? ' &=' F &&@0' <-A' F &&@=1@0' -&' B> &>1A' '-' A'+1 0' < 0' &=' - .@<-A' &=' 1@<-A' <-A' &=' F <@10' &= 1- '>10' =<' D1' &-01- ' <-A' 1<-' &=' `?-@<K=?@/'P' ='B1 0' <0' 1< BD1 0' <-A' ? +1 & 0' KD'BD' <a1' -&' ! 11' #? ' C '+ ' 1K< AR' =& ' A&' -.' K & - .' &' D1' , '- .' <-A' # ' A'+1 0' 10 <'- 0' &=' 1 BD<-A'010' '-' <@<'0' <0' K1@@ # ' F < 0' <i' # ' &@A'1 0' =& ' D1' ' F <. 10' <-A' ><- ' & D1 ' <?010' '-' KD'BD' D1' 1 BD<- 0' &=' D1'0<'A' <C@1' `'#1' -& '&='  #'@'  '-& '3 P'  &K1 ' &'  - & ' D1' ' '#1  '10' <-A'  ! <-BD'010' &='  &@A'  '>1' ?01A'  <-A'  <BB?0 &>1A' ;' &K' ' ' '0' 0&'  D<' # '  D1'  1<-0' <=& 10<'A' <-A' # '  D1' # 1<a'- .' &='  `0?BD' <C@10 3' P' D1' ?0 &>0' <-A' ?#0'A'10' &=' D1' 1 BD<-A'010' 1C<' '- .' &' D1' 0<'A' <C@1' &=' <@<'0' C<00' -& ' 1< @ ' L' ' ' C&?-A' KD'BD' '0' #? ' @' @1' '-' &>C< '0&-' &' D<' ' D<' D1 ' D<+1' #11C' D1 1 &=& 1' D1' &>>&-0' &=' D'0' <-A' -& ' 1- 'BD1A' # ' D1' ' F &&@0' <-A' F &&@=1@0' <-A' & D1 ' 1 BD<-A'010' <0' D1 ' K1 1' F &-' &' #1' D1' 1 BD<- 0' . 1< @ ' -''-'0D1A' <0' F 1@@ '-' ?>#1 ' <0' '-' E&&A0' <-A' -& ' `&=J P'  &+Z1 ' -& ' `&=0 P' &>=& ' &' #? ' D1' F &&@0' <-A' F &&@=1@0' <-A' & D1 ' 1 BD<-A'010' <0' D1 ' D<+1' A&-1' &=' &@A' '>1' D1' &@A'1 0' &=' <@<'0' <-A' &=' D1' < BD10' D1 1' -& ' C<'A' &=' D1' ' F <. 10' D1' &K-' &=' <@<'0' # ' "1=<?@ ' &=' 1C< < '&-' <0' K1@@' K' D'-' D1' &K-' F <@@0' &K1 0' <-A' <0A1' <0' K' D&?' D1

' !"0 .-' :0- .' N$ ' ' "'&#'R5 8') &2 1 -@' @!"!'2' &'" :20 1 ' . 7' ; !' & ' - . 7' ' ')' !@-!/' U 0- "0! [' '!'-. ' ; ! '# !"&22 !/' -!"' . ' [' !' .+!' +!') &- = ' ' '*7

@10' A' \' I D<?-A'010' 1-' H?1'LB&-H10' >< -0' H@@0' 0&'1-' &+10 ' ' H' & 1' CB@<><B'&-' 0&' ' =<' ' 0? ' B1&' 1- 1' B ' I ' @1' L+W ' &? ' A?' ?@ ' C0BD1'-' +1-<- ' A1A1'-0' @<' ' 11' A1' &?-A 10' 5' <?R0' @'1?L' -1B100< '10' I ' BC-+18' -'1-B1\' <' B1&' ' 0" <0B#-1' 0? 1' 0&' ' B&>1-B1' 1-' <C 10' C? ' B<?01' A<0B?-1' A1= ' 01 0 -' 1-' H?1@ <0B?-1' '00?1' B&- -<- ' B10 ' <B 1' , <' C '01' H' @<' A' ' '00?1' 0&' ' '1' 1-' @1' &?- 11' &?' @<' A' ' 01'0 -' 10 ' 1K1' 1 ' 1-' -?@@ <? 1' @'1?;' B10 ' & A1' .-3-B1' A1-A? 1 ' ?0H?10' <?' C BD1'-' C< @ >1-

=>' H' B&>1' @1' & ' AK< A' @1' '1 B1' C' .0?-A1' A1@'8 = <B'&-' A1' .-<' 0&-' 1- '1 ' <C@1' A1' 1'-10' C1<?@L' @<-?1\' I ' A<-R0' BD<?-A'010' 10 1' <' <@1 0' C ' @1' #'1-' I ' C?=-' ' A1' B10 ' 0&-' &'<@>1' I ' 0< =1.< A1' A1' @<' A' ' +'@@1' 1 ' C' @10' .D'-A1' @'= 11 ' I ' = <C-BD'010' A&-1m' <0' ' BD<?- 10' '@@1B' 1C< <C \' <=0 ' B1&' C@?0&? 0' <- -10' +'-8' A 1- ' ./?-A10' 1+1-?1\' <' @? ' I ' ' 0(0' 0?BB100 ? 0' B&>1' '@' <CC'1 ' A1' 1B& A' 1-' @10BD1H?1 ' A?' & @' 10 8' <0 <+&' ' 1-' <0B?-1' <-' A1' 0&-' 1'. -1' L+'@' 0' -' I ' C@?'0' 1 ' <'-0" B&- -?<' C@?0&? 0' <-0@' ?' H?1@ 1>C0' .W?-A1\' 'BD10010' +@-A 1@- ' 1-' B10 ' &'<@>1' " 1-. @1 1' C' @1' >& 1-' A10' -=BD<?- 10' A?' A' ' 0 <C@1@ @& 0' 10 1<- \' C@?j 0&? 0' 1-' -&># 1' I ' A1' . ?-A1' 'BD1001@ #&-1' ?0AB1' I ' & ' 1- 1' C< '1' I ' C< '1' 1?1\' I ' C' 1?L' #'1-' 1L1B? 1\@ @<' A' ' '@@1' A1' <@1 0' I ' @10' < BD10' #'1-' 1C< 110@ 1 ' @1\' &?@A'&C 0' C<'1\' A1' @1? 0' . <. 10' &>#'1-' H' ><'- 1-<- ' C' A'+ 010' I ' C@?0&? 0' @'B1-B10' A&-1\' C' 10' C< 1- 10' I ' C' >10?0<-B1' A10' A' \' @'B1-B10' 1-' <BD1 <- ' @1 -10' I ' C1<?@L' D-?1\' 1-' <?R0' @'1?L' H' @1?R' @'B1-B1' B&C 1'- @ 1-' 10a'CC<?- ' C ? ' .W?-A' -&>#=1' I ' C&'0@ 1 ' B&@&? <- ' C' &+1@@10' B&- &+10' -& >0' B&>1' & @ .' I ' D& @ - .' <0B?-10' C0&-10' H' 0&@&-B' X1? ' @'B1-B1' A1+&'1- ' <+&' ' B< '1' @&? 0' @1 -10' &?@K1' @1<' &- >. -10@ &?- ' +1-A?1\' 'B1@'10' 1-' <#<- ' I ' 1-' <?R0' @'1?L' <' '1@L' D&>10' H' =? 1- ' <BB? ?>10' A<BD1 1 ' @1? 0' @1'-10' <' @10 <C@1' A1' < 1' " ' <?L" C' .3?-A' 1>#@1 '1' D& 0' A10' @1 -0' I ' C1<?@L' @<-?1?L' -&-' B?0 ?>1\' 1-' A'1010' C< '10' "1-8' .e1R 1' "' @<-A1' I ' E<@10@ 0&?+1- ' =.' \' C' @1' B&-01- ' I ' >&'1-' A1\' A10@& <?L'&=='R0' B&>1' 1 1D&? 0' I ' ? +1&? 0' ' -1' C 1' . 1- ' -?=' =11@ ><'0' C '+1' 1.< A1\' C? ' =<'8' 0<?D ' <?' & ' & ' ' B ' C' A'1010' 10 <'- 10' A1 ' ' BD<-8' A'01 ' 1-' <@1'0' <?m" #'1-' C ' .?1 10' B&>1' C' &?@A1&? 0' C? ' @&? ' .<. 10@ I ' C@?0&? 0' <?R0' B<?010' 1-' H?1@@10' @10' BD<?- \' A?' A' ' 10 <C@1' -&- ' C&'- ' 10 1' BD'1 ' -1' A1' C&<' ' A1- &'1=' @1? 0' @'# 110' I ' = <?-BD'010' A1@' <?-B'1 " 1>C0' ?01\' I ' <BB?0 ?>1\' ' '@ 10 ' <'-0" H' C' @1\' >&'1-1\' A10?'0A' \' I ' C' @<' ?>C1 '1' A1- '1 ' 10 <C@1@ @10' ?0 ?>10' I ' 0?#0'A10' A10' ', BD<?-A'010' 1C< <- \' <?' A' ' 10 <C@1' A1' < 10' -1' C<001- ' C&'- ' <--?1@>1- ' L' ' '# ' @1' H?1@X' -10 ' >10' C1 ' 1' 1-' B&>C< 10&-' <?' B1&' H' @\' &?- ' 10 1' CB ' A1+/- @ @10' &1\' A1' B10 ' , 1' -?@'1>1- ' 1- 'BD1\@ C' @1? ' @< -10' C1<?@L' @<-1?L' I ' <?R0' '5BD< -8' A'01m' B&>1' '@0' 0&'@&'1- ' 10 1@ @1\' ' BD<?- \' . ?-A1>1- @ A >1-?\' <?L" #'1-' 1-' -&># 1' H' 1-' #'1-0 ' I ' -'1- ' 1-' C&<' ' -1' 1-' B&>=& ' A<BD< 1 ' @1\' @< -10' C1<?@L' @<-1?L' I ' <?R0' ' BD<?-A'010' B&>1' '@0' &?- ' =<' ' A1' @<?-8' '1-' 1>C0@ @1\' &?@A1&? 0' A ' <@1'0' I ' A1\' < BD10' @<' -&&-' C<'1\' A1' @&? ' .<. 1\@ @<' '@@1' A1' <@1'0' C< @ A1=<?@ 1' A1\' 1C< <B'&-0' <-H@ A1A1'- ' @<' '@@1' > ? 0' &? 0' I ' BD< 1<?' B&>1' A1' D& 0' @<' '@@1' A1' !&001\9

E1 1 0 B@1=1 10B@?010 #<-a10 I ' <?R0 1C<B'&<0 H?1?L , &'1< ' =<' 1\ C? ' A1=1-B1 A1 @< '@@1 I ' A1 @1<?1 C A1D& 0 101 > #@1 A10' 1 & <@ > 1- ' A10 &'1\ H ' "'1?' A18 =1-A1 0<?-\ 1& H 1 > 1A'1 0&'@ D<0 '=> 1- ' C +1C ; 1 A' ' @1 & ' B&-0'A1 <- ' @1\ > '001\ <A' & A1'. -1 I ' 10 <#@'1 C @<?A & ' 1 A10?'0A' H @1\ <' 1 &-0 <#@10 I ' & > C<'. -'1 A1\ ='BD<?- 10 A1 @10 <C@1 A1 <@1 0 C? ' @1 1 > C0 10 1< ' \ I ' @&? ' 0?B 100& ? 0 C? ' &?=\ &? 0 ' C?'001- ' <+&' ' I ' 1 &'1 ' &? \ @&? ' = <?-BD'010 I ' @'# 110 I ' B#?-' A1?L 1 ' 1- '1 ' 1C<'1 1 A1 &? \ ><'''0 A1 ' BD<?-A'01\ <?' A' ' 10 <C@1 C @1 A' ' & ' &?' C 01\ -&#@1m .1-' &? 0 < 1?L' &?' < @&? 0 dRA1B100& ? 0 &?' <0B?-' A1?L' C< ' <?B & ' 1 A?' C< @1 > 1- ' .0?= 1\ &?' B&-=1 > 1\ -'1- ' 1C1@@1\' -1 1] B1C 1\ ' H @1\' A' \ <' 1 &-0 <#@10 4 ' @&? 0 0?BB100& ? 0 C?'001- ' C 1?@L' > 10 > 10 &?' C @&? ' &=='R ' I ' > '-'0 1\ =<' 1 1L1B?B'&-' A1' &? \ ''C<50 BD&010 I ' >< '10 A&?- ' @<' B&'.<&'00<-B1' < 1?L 1.< A1' &?' <CC '1- -H A1A1'-0 @< ''@1' A1' <@1'0 B& > 1 A1' D& 0 @< '@@1' 1-' @<' C '-B 1 C 1-<?- ' <' 'B1@@ <CC1' 1\ @1 a +'-<.1 <0B?-' B& > <?-A1 > 1- ' 10B 'C ' &?' <0B?-' <? 1 BD&01=<' ' &?' <==<' 1 <?' B&- @1' -'1- ' #0 <- ' ? +1?' &? \'=&' \' H' C' B10 ' <B ' -?@@ D& > 1 0&'@ 1LA?01' A1' 0< @&'<@@ 0? 1 C' # '1= A1 &? ' A<0B?-' ?.1 > 1- ' 1-A?m A1+0- ' @1\' A' \ <' 1 I ' &-0 <#@10 1 @1 D<?-B1@@1 ' "1-.@1 1 I ' @1 &?-01'@@ A?' & ' 0&'1- ' 1LB@?0 \' A1' 1A 1001 ' @1\' A1=<?@ 1\' A1\' A' \ <' 1 I ' &-0 <#@10 0&@&-&' @<' =&? > 1 A1 @10 < ? ' =<' ' @1' LL+' ' <--1 A?' =1'. -1 A?' & ' AK< A @1 '1 B1 ' H -?@@ > <51 A1 @'B1-B1 C ' 10a'CC<-B1 A1 @1 -10 C1<?@L' @<-?1\' &?' A10 < -' .0?'' 1 <' <0B?-1 C0&-1 &?' C0&-10 0&'@ 1==1B ?1'@ -1 <+<'@@<#@1' <' @? ' &?' <' B1?L' A1' B< '1 ' &?' <>10-1 ' <0B?-1 ' '1@L' @< -10 C1<?@L' '<-?1@L' &?' 10 < -' D& 0 A1' B10 ' &'<@ > 1 ' " 1 - .@1 1 @&-A &?' E<@10 <' <0B?-1 <? 1 @'1?' H <?' A' ' 10 <C@1 A1 <@1 0 " ' H &?' -< 1 A1' @'B1-B1 C' -=1 A' ' &C<'. -1 ' @1 & ' &?' <0B?-1 A1' 010 D1' 0 &?' 0?BB100&? 0 <' <0B?-1 C0&-1 &?' C0&-10 <' .0?-8 '1 ' A1' &?' C ' @< -10 C1<?@L' @<-?1\' &?' 10 < -' A10 1 1?1\' B< '1\' &?' 10a'CC1\' D& 0 A1' B10 ' &'<@ > 1 ' " 1 .@1 1 @ #@&-A &?' E<@10 <' <0B?-1 <? 1 @'1?' H <?' A' ' 10 <C@1 0&'@ +&'A1' I ' A1' -?@@ 1==1= ' H B@'?-' C0&-1 &-' C0&-10 H <BB1CA1-' &C 1'-1-' I ' > 1 1-' 1-' 1L1B?B'&-' <0B?-1 A1 @'B1-B1 &?' @ &?' B1?L' <@ &1C0 A1' H?1@@ <0B?-1 A1 @'B1-B1' 0&=' &?' M <' . ?- 11' I ' 1?1 I ' C' 1?L' &?' C' <0B?-1 <? 1 ?' & ' <.. 1 > 1-@ ' B&-01-' > R 1-' 1L1B?B'&-' 0&' ' &?' 0&'1-' D& 0 A1' C 1BB'&-' A?' & G ' &?@ 1' B1&' H '@ @' <' <0 A' \ <' 1 &-0 <#@10 I ' &> C<'. -'1' A1\' ' BD<?- \' A?' A' ' 10 <C@1 I ' <' @&?' 0?BB100&? 0 C ' &? \' &? 0 A<+&' ' I ' C 0?1 ' -1 <BB'&-' 0? ' 10 10 < ? 1 1-8 B&?- 1 B@'?-' C0&-1 &?' C0&-10 H' &==1-A1 > ' B&?- 1 B10 ' & A1-/-B1 1 ' <+&' ' A1 CB1001 1-' 'B1@@ ' B& > 1 10 ' C? +1?' 1-' @1' C > ?-' " =<B 8 &?' A1 CB1001' B& > 1 C' @< & ' @1 ' 10 ' 1-' ?-1' <BB'&-' A1' 10C<0 =<' \' 1-B&?- 1 @< C1<0 A?' & 8 <' @&? ' 1@1BB'&- ' '0" <0B?-1 C0&-1 &?' C0&-10 <' @&? ' 0? 1 0? ' B1& 0&' ' B&-+' ' &?' < 1'- ' H' > 10 > 10 @1\' <' 1 &-0 <#@1\' I ' & > C<'. -1 A1\' ' BD<?- \' <>&?- ' ?.1 > 1- ' <' 1B&+1 ' &? \' @10 #'1-0 >&1#@10 I ' BD< 1?L H' <0B?-1 '1@ C0&-1 &?' C0&-1\' <'-0" B&-+'=@;' &?' < 1'- ' <+&' ' @1' &? ' A1' >1 1 1-' 1L1B?B'&-' A<?B?-1 '1@ @'B1-B1 &?' <?' 1 > C0 A1 @1' A' ' ?.1 > 1- ' 1-A?\@ &?' 1-' <0B?-1 1 > C0 1- 1 @1' >1 1 1-' @1L1B?B'&-

&'+-@ &=' " a10@ ` @'==0@/P' @?'B10@ <-a0@ <-A & D1 ' 1C< < '&-0 KD'BD 0D&?@A #1 > <A1 =& ' " 1=1-B1 &=' D1 &K-' <-A &=' D1 F < 1 ' `K' D&? 90 P' @'a1@ ' &#1) A10 & 1A@ KD'BD E&A A1=1-A@ 1LB1C ' D< ' 1 > 1A ' #1' D<0A@ ' C &+'A1A ? ' 0<'A &+1 1'. -' & A D1 , '-.@ B&-0'A1 '-.' D1 1 > '010@ D< D & A<'-1A <-A 10 <#@'0D1A' # ' ? D& ' '<=& 10<'A ' D< ' D1 < & @ &-0 <#@10@ <-A ` &>C<- '0P' &=' 1 BD<- 0 &=' D1 <C@1' &=' <@<'0 =& ' D1 ' > 1' #1'-.@ <-A' D1' ' ?BB100& 0 =& ' 1+1 @ > < ' D<+1' <-A' 1- & '<@@ D1' ' ! <-BD'010 <-A' '#1 '10 <-A' 1+1 ' &=' D1 > @ <-A' KD&@1' 1C<' ' &=' <@@ > <--1 ' &=' 1 BD<- j A'010 & D1' 0<'A' <C@1@ # ' D1' 0<'A' , '-. ' # ' D'0 -&#@1' &.1-' & 0 & D1 >' & ' & D1' ' 1A1B100& 0@ & ' <- '&=' D1' @ # ' D1' ? D& ' '&=' < @'<>1-' . <- 1A' & ' B&-=' >1A@ -& ' 1C1<@1A' -& ' 1LB1C 1A ' -A' D<' D1' 0<'A' < & @ &-0 <#@10@ <-A' D1' ' ?BB100& 0@ > < ' # ' D1 > 01@+10 & ' # ' D1' ' ='B1 0 <-A' '-'0 1 0 A& L1j B? '&-' &=' <@@ > <--1 ' &=' D'-.0' <-A' < 1 0@ D1' , -&K@ @1A.1' KD1 1&=' &' D1 > ' `C1 <'-1 D@8/P' <0 K1@@' K' D'-' D1' &K-' &=' <@<'0@ <0 K' D&? ' D1' &K-' '-' D1' 1B'-<' C1 @ <'-'-.' &' D1' 0<>1@ B<@@1A' D1' ` a + -<.1 h P@ <-' &-'8 ><<A > 1-' F ' '-.@ & ' <-' &D1 ' D'-.' > <A1' & ' &' #1' > <A1' &' D1' B&- < '-& K' D0 <-A'-.' &+'A1A' <@K< 0@ D<' # ' D'0 =@' -&' <-' 0D<@@ #1' 1LB@?A1A' &=' D'0 @<K=?@ ?' ' # ' F ' ' &=' & @ &=' <-' ?A. > 1-' .'+1-' #1=& 1' D1' 0<'A' < & ' <-A' &-0 <#@10@ -& ' D1' D<-B1@@& ' &=' -.@<-A' <-A' D1' , ? /0 &?-B'@ 0D<@@ -& ' #1' 1LB@?A1A' &' HA 100 D1' " 1=<?@ 0 &=' D1' 0<'A' < & ' <-A' &-0 <#@10@ <= 1 ' D1 ! & > ' &=' D1' < ? 1' > <A1' D1' LL+' ' ' 1< ' &=' D1' 1'. -' &=' , '-.' AK< A' D1' D' A ' -A' D<' -& <--1 ' &=' 'B1-B1' =& ' 0D'CC'-.' &=' F &&@0' <-A' F &&@=1@0@ & ' &=' '-@ . <- 1A' &' <-' 1 0&-' & ' 1 0&-0@ 0D<@@ #1' 1==1B ?<@ -& ' <+<'@<#@1' &' D' > ' & ' &' D1 > @ H' B< ' & ' # '-.' <-' 0?BD' F &&@0@ F &&@=1@0@ & ' '-' &?' &=' D'0 1<@ > ' &=' -.@<-A@ 1@<-A' & ' F <@10@ &' <-' D1 ' @<B1' D<-' &' D1' D<-' &' D1' 0<'A' <C@1' &=' <@<'0 -A' D<' <@@ ><--1 ' &=' 'B1-B1' # ' &? ' 0<'A' &+1 1'. -' & A' D1' , '-.@ & ' <-' &=' D'0 1' 0 & ' ?BB100& 0@ '<-' 1 0&-' & ' 1 0&-0' &' #1' . <- 1A@ &=' & ' =& ' F &&@0' F &&@=1@0' & ' '-@ &' #1' D<A@ B< '1A@ & ' 0D'CC1A' &? ' &=' D'0 1<@ > ' &=' -.@<-A@ 1@<-A@ & ' F <@10@ `& '0P' <-' & D1 ' @<B1' D<-' &' D1' 0<'A' <C@1@ 0D<@@ #1' +&'A' <-A' &=' -&-1' ==1 =' -A' D<' 1+1 ' 1 0&-' & ' 1 0&-0' KD'BD' 0D<@@ <BB1C @ &# <'-@ <-A' C? ' '-' L1B? '&-' <-' 0?BD' 'B1-B1@ & ' D1' & ' D1 ' &' KD&01' 01' <-' 0?BD' 'B1= B1' '0' & ' 0D<@@ #1' . <- 1A' <-A' D<A@ <-A' # ' D1 > ' & ' # ' <-' & D1 '# ' D1' ' . 11j > 1-' & ' &-01-' C? ' '-' L1B? '&-@ 0D<@@ #1' &? ' &=' D1' , '-./0 & 1B '&-'G <-A' > & 1&+1 @ D<' ' '0D<@@ #1' @<K=?@ &' D1' 0<'A' < & @ &-0 <#@10@ <-A' ` &?0C<- '&=' 1 BD<- 0' &=' D1' 0<'A' <C@1@ <-A' &' D1' ' ?BB100& 0' =& ' 1+1 @ &' D<+1' <-A' C? 0?1' <-' @'&-' ?C&-' D'0' < ? 1' <.<'-0 ' 1+1 ' 1 0&-' & ' 1 0&-0@ KD'BD' 0D<@@ &=='1-A' B&- < ' &' D'0 A'-<-B1@ <-A' &' DH+1'0?BD' &B100' 'C' D1' 0<>1' <0 '0 C &+'A1A' '-' D1' 1> ? ' " =<B'<0@ & '0?BD' &B100' <0' # ' D1') ' <K' '0 '-' <-' @'&-' &=' 10C<00' A&-1' <.<'-0 ' D1' , '-./0 1<B1@ <' D1' ' @1 @'&C ' -A'' =' <-' 1 0&-' & ' 1 0&-0 <' D1' ' ?'' ?C&-' D1' 0<>1' #H B&-+' ' & ' <' <-' 1A@ D<' D1' 0<>1' < & @ &-0 <#@10@ <-A' ` & > C<- 0P' &=' 1 BD<- 0 0D<@@ D<+1' ?A.1>1-' & ' 1B&+1 ' <@@ D1' > &+1<#@1' E&&A0 <-A' D< 1@0@ D<' ' <C ' 0''BD' 1 0&-' & ' 1 0&-0 0&' B& +' @ & ' < <'- 1A' D<A@ D1' " < ' &=' C? '-.' '-' L1B? '&-' &=' <- ' 0?BD' 'B1-B1@ & ' < ' D1' ' > 1' &=' D1' 0<'A' ?A.1>1-' .'+1-@ & ' < ' <- ' ' > 1' k /)' #1 K'L ' D1' C? '-.' '-' L1B? '&-' &=' <- ' 0?BD

(' b ! !@2 ' M!@!2K :' .0 ! 7 "/'
<0 &"+@ @B!+&22 & !'
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+' &#!-#!2' .' !% ." ' V, . -+2 ' C#' . -@' . !'" 3+ #!' -' ', !' +!' + &2' 2 +' ;!' .&/>

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3".#!22' &-' 20# ' # &.-'

0/*!1!-' !"!&-'<

'B1-B1ℊ `& ' < ' D1' ' > 1' & =/ P' D1' =& 10<'A' ?A.1j >1- ' .'+1-ℊ & ' D1' <@?1' D1 1&=ℊ < ' D1' @1=@'&-' &=' D1' @<'- '=0' '-' D1' 0<>1' A&-0ℭ KD1 1&=' D1' K&' < 0' &=' D1' E&&A0' <-A' D< 1@0' 0&' 1B&+1 1A' <-A' D<A' '-' L1B? '&-ℊ & ' D1' <@?1' D1 1&=ℊ 0D<@@ #1' 1>C@& 1A' =& ' 1C< < '&-0' &=' `E? 1 0ℊ P' @?'B10ℊ <-A' <-a0' <' <@<'0' <=& 10<'Aℊ # ' D1' ? +1 '-.'&=' D1' <0 1 '&=' D1' `0<'A'P' F & a0' D1 1'=& ' D1' '>1' #1'-.ℊ <-A' D1' D' A' < ' D1 1&=' 0D<@@ 1><'-' &' D1' < & ℊ &-0 <#@10ℊ <-A' ` &>C<- '0P' <=& 10<'A' &+'A1A' <@K< 0' D< ' D1' 0<'A' B@'&-' #1' D<A' <-A' B&>>1-B1A' K' D'-' D1' &?- ' KD1 1'0?BD' 'B1-B1' 0D<@@ #1' C?' '-' L1B? '&-ℭ -A' '=' <- ' 0?BD' 'B1-B1' #1' C?' '-' L1B? '&-' '-' 1@<-A' & ' F <@10ℊ D<' D1-' D1' ?' '0D<@@ #1' B&>>1-B1A' '-' D1' &?- ' K' D'-' -.@<-A' -1L ' <A &'-'-.' &' D1' @<B1' KD1 1'0?BD' 'B1-B1' 0D<@@ #1' C?' '-' L1B? '&-' '-' 1@<-A' & ' F <@10 ' -A' >& 1&+1 ℊ D<'1+1 ' 1 0&-'& ' 1 0&-0ℊ KD'BD' 0D<@@ 0D'C' & ' `# '-.' & ' A&OP' &' #1' 0D'CC1A' & ' B< '1A' <- ' F &&@0ℊ F &&@=1@0ℊ & ' '-'&?' &=' D'0' 1<@>ℊ 0)' 1@<-Aℊ & ' F <@10ℊ # ' &@&?' &=' <' ' 'B1-B1ℊ & ' & D1 K'01ℊ <-A' D1>' C?' &' <@1' '-' <- ' & D1 ' ` < 0'P' & ' @<B1'&?' &=' D1' 0<'A' 1<@>'&=' -.@<-Aℊ 1@<-Aℊ & ' F <@10ℊ D<-' ` &'/'P' D1' 0<'A' <C@1' C=' <@<'0ℊ ?-@100' D1' D'Cℊ '-' KD'BD' D1' 0<'A' F &&@0' F &&@=1@0' & ' '-' 0)' 0D&?@A' #1' C1 '0D1Aℊ <-A' >< ' -& ' #1' # &?.D ' &' D1' 0<'A' <C@1ℊ <-A' D1 1&=' #1' < ''- 1A' & ' B&-+' I ' < ' D1' ?' ' &=' D1' 0<'A' < & ℊ &-0 <#@10' <-A` &>C<- ' 'P' &=' 1 j BD<- 0' &=' D1' 0<'A' <C@1ℊ # ' 0?BD' = '&-' <-A' &B100' . &?-A1A' ?C&-' D'0' ' <0' '0' <=& 1' 1D<' 01Aℊ D1'0<>1' B '&-' &' #1' <a1-' '-' D1' &?- ' KD1 1' D1'0<'A' F &&@0' F &&@=1@0' & ' '-'#1' 0D'CC1A' & ' B< C1A' &? ℊ D<' D1' D<@@ =& =1' ' <@@ D'0' E&&A0' <-A' D< 1@0ℊ &' #1' 1>C@& 1A' <-A' D<A' >' D1' ! & >' <=C 10<'A' -A' '=' <- ' F &C@0' F &&@j =1@0' & ' '-ℊ = &>' D1-B1=& D' #1' B< '1A' & ' 0D'CC1A' &' #1' D<A' &?' &=' D'0' 1<@>' &=' -.@<-Aℊ 1@<-Aℊ & ' F <@10ℊ &' <- ' & D1 ' @<B1' &?' '8&=' -.@<-Aℊ 1@<-Aℊ & ' F <@10ℊ D<-' &' D1' 0<'A' <C@1ℊ # ' ! & B1' &=' <- ' 'B1-B1ℊ D<' D1-' ' ' 0D<@@ #1' @<K=?@ &' 1+1 ' 1 0&-ℊ #1'-.' D1' ,'-./0' '1.18><-ℊ '01'\1' D1' 0<'A' F &&@0' F &&@=1@0' <-A' '-ℊ <-A' D1>' a11C' &' D'0' &K-' 01' <= 1 ' 0?BD' 1'\'-.' -A' D<' 1+1 ' ?0 & >1 ℊ & >C &@@1 ℊ 1< BD1 ' <-A' ? +1 & ℊ KD'BD' # ' D'0' , -&K@1A.1' 0D<@@ 0?=='1 ' & ' <A>' ' <- ' F &&@0' F &&@=1@0' & ' '-' &' #1' 0D'CC1Aℊ K' D'-' <- ' & ℊ 11a ' <+1-ℊ & ' <- ' & D1 ' @<B1' KD1 1' D1 '#1' =='B1 0ℊ `& / P' <- ' & D1 ' & ' & ' @<B1' D<-' &' D1'0<'A' <C@1' <0' <=& 1' '0'0<'Aℊ # ' ! & B1' &=' <- ' 'B1-B1ℊ & ' # ' &@&?' D1 1&=ℊ 'J)' # ' ! & B1' &=' <- ' F ' ' & ' & D1 ' &>><-A>1- ℊ '-' <==' >'-.' & ' <CC &+'-.' &=' <- '0?BD' 'B1-B1' &' D1>' &' #1'A' 1= 1Aℊ & ' K'@@' -.@ ' 0?==1 ' <- '0?BD' 1 BD<-A'01'0' &' C<0'0' &?' & ' &=' D'0' 1<@>ℊ -& ' 1-0 &>1A' & ' -& ' K1'.D1A' < ' D1' , '-./0' =1<>ℊ 0?BD' &=' D1>' KD'BD' &?.D ' &' #1' K1'.D1Aℊ 0D<@@ '-B?' D1' <'C' <-A' ! & =1' ? 1' <=& 10<'Aℭ <-A' D1' & ' D1 ' 0D<@@ #1' 1C? 1A' <-A' ?A.1A' '-'@'a1' <01ℊ <0' D1' FD'BD'1L1B? 1 D' <-' 0?BD' 'B1-B1' &' <-' & D1 ' @ B1' D<-' &' D1' 0<'A' <C@1ℊ <= 1 ' D<' D1' D1 1&=' 0D<@@ #1' B&-+'=' <' D1' ?' ' &=' D'>' KD'BD' '-' D'0' <01' K'@@ 0?1ℭ <-A' D<' ' 0D<@@ #1' @<K=?@ &' 1+1 ' 1 0&-' #1'-.' D1' , '-./0' ?# 1B' <-A' '1.18'C<-ℊ D<' '-' 0?BD' <01' K'@@ C? 0?1ℊ &' D<+1'0?BD' B '&-' <.<'-0' D1'0<'A' ?0 & >1 0ℊ & >Cj &@@1 0ℊ 1< BD1 0ℊ <-A' ? +1 & 0ℊ <0' '0' C &+'A1A' <.<'-0'0?BD' 1 0&-0' KD'BD' 0D<@@ C? ' '-' L1B? '&-' <-' 0?BD' 'B1-B1ℊ <0' <=& 1' '0'0<'A' -A' D<' <@@ >><--1 ' &=' D'-.' A&-1' B&- < ' &' D1' A'-<-B1'&=' D'0' <? 1ℊ

A1' <0B?-1' '1@ @'B1-B1ℊ I ' @1' A' ' ?.1>1-' 1-A?\ℊ &?' @1' +<@?1' 1-' <@ 1@1BB'&-' A1\' C@<'- '=1' 1-' @10' >10>10' < B'&-0ℭ A&?-' @1\' A1?L' C< '10' A1\' #'1-0' I ' BD< 1?L' <'-0" 1B& 1\' I ' 1?1\' 1-' 1L1B?B'&-' &?' @1' +<@?1' 1-' M &-' 1>C@&'1\' C' 1C<B'&C0' A1\' E1 1'0' 0B@?010' I ' <-a1 ' <' <@1'0' ?'0A' \' C' @<' 0? +A<?-B1' A?' <'0 1' A10' &?+ <'.-1\' '@@1B' C ' @1' 1>C0' 10 1<-ℊ 1 ' @<' '1 B1' C< '1'1-' 1><- -A <'<0' <' 1' &-0 <#@1\' I ' &>C<'.-1' A10?'0A' ' ? +1?' &? \' =&' \' ' 'A' ' <BA&-' 0& ' 1?1' I 'B&>1-B1' A1A1'-0' @1' &?- 1' ' A1@ @'B1-B1' , <' > 0' 1-' 1L1B?B'&-' ⁝ 1 '0" <0B?-1' A1@ @'B1-B1'0&' ' > 0' 1-' 1L1j B?B'&-' 1-' @&-A' &-' E<@10' H' @& 0' '1' 0? 1' i&' ' 1 >1-B1' 1-' @1' &?- 1' A1A1'-0' -.@1R 1' C0BD1'-' <A #'.-<-' <' @1' @'1?' &?' '1@ @'B1-B1' M a' > 0' 1-' 1L1B?B'&-' 1-' @&-A' &?' E<@10' ' &?@ 1' B1 ' H' B=B?-' C0&-1' &?' &-1\ℊ ' 10a'CC1-' &?' <>10-1-' & ' =1 K ' AB0a'CC1 ' &?' B< '1 ' <0B?-0' @< -10' C1<?@L' @<-?1@L' &?' 10 < -' D& 0' A1' B10 ' &'<@>1' "1-.@1R 1' @&-A' &?' E<@10ℊ C' B&@&?' A<0B?-1' @'B1-B1' &?' <? 1>1-ℊ ' @1\' >1 1-' <' +1-A 1' 1-' <0B?-1' <? 1' C& ' ?' @'1?' D& 0' A?' A' ' &'<@>1' "1-.@1 1' @&-A' &?' E<@10' H' <?' A' ' 10 <C@1' A1' <@1'0ℊ 0" -&-' H' @<' - 1=' 1 ' H1@ @1\' A' \' @< -1\' C1<?@L' @<-?1\' &?' 10 < -1' , &?-ℊ 0& ' C1 '0' I ' -1' C&1 ' 10 1' < <10-1' < ' A' ' 10 <C@1ℊ 1 ' A1' B1&' 0&' ' &-+'=@;' &?' < 1@-' <' @<' 0?' 1' A1\' A' \' <' 1' &> <#@1 ' ' E&>C<'.-'B' A10ℭ BD<?-\' A?' A' ' 10 <C@1' C' A1@ <BB'&-' ' C 1001' =&?-A?\' 0?' ' B10 ' <B 1' B&>1' '@ 10 ' A1+0-' 1D1 01ℊ B1@ 1' <BA&-' A10 1' C '01' 1-' @1' &?- 1' &?' @1\' A' '' @< -1\' C1<?@L' @<- 1\' &?' 10 < -1' -' 10a'CC1\' & ' B< '1\' D& 0ℊ H' ' =& ==' B1' &? \' 01\' #'1-0' BD< 1?L' A10 1' 1>C@&'1\' B 1F1\' 1-' @<' =&? >1' <t0-A' ' 0" <0B?-' D C 10' C1<?#B' @<-?1\' &?' 10 < -' A10& 1' 1-<+#' ' 0&'1-' B< '1\' &?' 10a'CC1\' A10 1' 1K10' D& 0' A1' B10 ' &'<@>1' #1-.@1 1' @&-A' &?' E<@10ℊ <' <0j B?-1' <? 1' @'1?' D& 0' " 1-.@1 1' @&-A' &?' E<@10ℭ H' <?' A' ' 10 <C@1' C' =& B1' A<0B?-1' @'B1-B1ℊ H' @& 0' '@' <' <' BD?-' C0&-1' 10 <-' @1' @'1.1' D&- 1' A?' & ' A1' 01'01 ' @10' A' \' @< -1a' C1<?@L' @<-?1\' ' 10 < -1' B @10' .< A1 ' <' 0&-' CC 1' C1C0' <C 10' '1@ 01'0 C ' = ' H' BD?-' ?0 ? >1 ' &?-8' =&@@&?' 1 BD1&?' ' ? 1'&?' H' C' 0<' B&'.-'0?-B1' 0&?== 1' &?' <A>' 1' <0B?-0' @< -10' C1<?@L' @<-?1\' &?' 10 < -1' A10 1' 10a'CC1\' A1'-\' <0B?-1' C& 1' 1a1' D<#@1' &?' <0B?-1' <? 1' @'1?' ? '@0' 0&?-' ==' MOℊ <?' <0B?-1' <? 1' C& 1' &?' @'1?' H' <?' A' ' 10 <C@1' B& >1' A10?'0' 10 ' A' ℊ C' =& B1' A<0B?-1' @'B1-B1' &?' C' B&@&?' 1-ℊ &?' C' =& B1' A<0B?-1' # '1=' ? <? 1' B& ><? A1>1-' 1-' <==' >'-' &?' <CC &+'-' A<0B?-1' A1@ @'B1-B1' < 1?L' A10 1' <A 1001\ℊ & ' 0&?== 1' &@?-< 1>1-' <0B?-0' '1@L' ;='BD<?-A'01\' C<001' D& 0' A1' B10 ' &'<@>1' -&-' B?0 ?>1\' &?' -&-' C&'01\' <' @1' 1<>1' A?' & ℊ '1@L' A1' 1?L' H' A1+&'1-' 10 1' C&' 1\ℊ 1-B&? .1' @<' C1 -1' I ' =& =<' ? 1' 0?'0A' ℭ ' B1@@?' &?' B1?L' 0&'1' ' 1C? 1\ '' <A ?.1\ -' <0' 01>#@<F1' B&>1' 1@? ' H' 1L1B? 1' <0B?-1' '1@ @'B1-B1' < <0B?-1' <? 1' @'1?' ' <?' A' ' 10 <C@1ℊ <CM' B1&' H'ℊ 1-' 0&=' B&-+'B ' <' @<' ? 1' A1' B1@@? ' H' 1-' B10 ' B<0' 0?1 ' +&?@A <ℭ ' H' 'ℊ @' <' <' BD?-' C0&-1' 10 1<-' @1' @'1.1' D&>1' A?' & ' '1-' B1&' B<0' +&1@B' C? 0?1 ' A< &' ' '1@ <B '&-' 1-B&?- 1' @10' A' \' ?0 A 0' &?- &@@1 0' 1 BD1&? 0' ' ? +1'&? 0' B&>1' 10 ' C? +1?' 1-B ?- 1' '1@L' C0 -10' H' >1 1-' 1-' 1L1j B? '&-' <0B?-1' '1@ @'B1-B1' B&>1' A10?'0' 10 ' A' ' ' H' &?' BD&01'=1' '1-B&?- 1' & A1 0-B1' A1 B10 ' 10 < ?

-' 7 ' .0- @' 20#' &.-' 2 +' ;!' #.11!-#!/

B." !& 0"!' .'" !% ." &-*' V..+2' C#' !+2!7 !"!' -' .' !' +!' ' + &2';@ .+.0"' . ' ' &#!-#!' .'" . !"7&2!

-@' 0;H!/' . ' !' M&-*' 1 @ 2!&j!' .' &2 .7-' 2!' 20#' V..+2

02.1!"2 -/' . !'" &#!"2 !"1& &-*' V..+2' C#' .' .' ;!' 5' !%k ." !/'2 +' "-#0" /2 1!' 3!-+&!2 2 !' & !"2

<-H# A1A1'-0 B10 &'<@>1 B&>1 A1 D& 0 -'1- '<#@1 C ><'1 A1 1B& A&'>0 1-'00?1 I &'<#@1 C 1-H?10 1 >10>1 @1 &?- 1 I +'0-1 &?@< A' <BB'&- M < C '010 ? +1?@ &? \ =&' \ H &?>< 1 A1 @'B1-B1 C? @< -10 I 10 < -1 <CC<001 C @1 <' 10 A1 < &a =10a'CC10 1-'E<@1'0 &?@ < <a10 0-' C<'<- B?0 ?>1\ I 0?#0'A'10 B&>1 <@'1-0 =&- &?@ ==' &- 0&' 0&?@1>1- 1RRB1C \ ? +1?@ <?L" H B10 4# -1L 1-A C&- -1 < C<0 C2 ?A'B'<@@ < @<@'B1-B1 . ?C 1 C -=1 A 0& <'.-1 = @1 & C B10 10 C< 1- 10 C <?- \ A< 1 @1 LL"H &? A1 ?@ <-' A1 0&-' 1'.-1 LL+ n <@ -=1 0&+0<'.-1 <>1@< '.-1 0< &>C<'.-1@ C 10a'CC1 I B< '1 C '@1 01\ A C& 1\ <00'.-110 &-B 1A' &? 0@ @< -10 C1<?] @<-?1\ I 10 < -0&&-BT# @< =&? >1 I 1==1= A1\ A' \ 10 C< 1- 10@ '00'- H @1\ A' \ @< -10@ C1<?@L @<-?1\ I 10 < - I B= ?< A 1?L 0&'1- I 0&' 1 =ACC10 1= <@11 &?@ E<@110@ < <a1 &?@ < <a10 I B< '1\ C @10 <' 10 A1 < &a ? +1?@ <?L" H B10 <Q - 1L 1-A -1 0&' C2P?A'B'< <@<@'B1-B1 ./?- 1 C -=1 A' 0&,<'.-1 @1 & C 01\ = 10 C< 1- \ C& <- \ A< 1 @1 C '>1 (? A1 ?@ <-' A1 0&-' 1'.-1 aR ?@ <? "?1 A1 ?==' C @1 -&?-' A1 E?'@@'<> < H?10 I &?- 1 A1 ?==@ C? 10a'CC1 I B< '1 C @? 01\ A1C \ &?@ < &?>1\ ' 0 <B0 A1@ @< -1 A1@ B &'00<?-B1 A?@ &?- 1 A1 & ==@ 0&@&-B @< =&? >1 I 1=1=@;' A1\ >10>1\ ' 10 C< 1- \ , H & CB@<><1'&-' A1 B10 T& A1-0-B1 0&' =<' 1- B@'?-' '@@1 2?@1\ &?- 110 0&?- 1-?\@ B@'?-' C& D<#@1 I '@@1 1 BD'1<0 A' \ C& 1\ C@?'0 <A &'.-[- C @1 '0B&?- A1 1=?-' "&?- 11 &?@ 0&-' A1C? 11@ 1#?- >&'0 ?-1=&' \ C @< 0C<B1 A?-1 A1> <-' C0BD1'-' <C0 B10 & A1'.-0-B1 =<' <C0 B10 <Q@1 A1- 0 1?L 1-+& 11 ?'# '1= A1 1B& A@ 0? C1 -1 A1]L" A10 1 =& =<' \ <?@ & 0" @< A' CB@<><B'&-' -1 0?' A?1>1- 1L1B? 1 ? +1?@ &? \ =&' \ H B10 . ?- 1 &?@ & A1-/-B1 -1 0& 1L 1-A C<0 <0 '&? I &+1- A1 1'- &D-'A?@ 'A@ @'-. &-' I <01\ 0?&B100&? 0@ H" &?- '@'B1-B1 C @1\ 10 C< 1- 10 A?@ & =<' \ <1?L @1 'L' &? A1 &+1>#1 <-' A1 0&-' 1'.-1 LL+ @ A10a'CC1 B< '1 &?@ 0 @< -10 <@ -&>#=1 A1 L' ? C@1 0 B -1'.-W- 10]]]' 0<Ba10 &?@ A1A1'-0@ <0 <?@0 @'1?L &?@ C& 0 A1 C< A1 @< H <@ A' 10 <C@1 A?@ <@1'0 ? +1?@ <?L" &? \ =&' \ H B10 ./?- 1 &?@ & A1'.-/-B1 -1 0& 1L 1-A C<0 <0 ./?- 10 01 <@>1- =<' \ <0 D&><0 F<@0 -.D3>@ D&><0 &?-' I' < &D-' 1- B&a 10H?'1 0@ C @10 10 C< 1- 10 A1 -=1 A' _ @1 & A1+/- B&0 1>C0@ A10a'CC1 B< '1 &?@ <'-1-1 R 1-0 @< -10 <0 <?C0 @'1?L &?@ & 10 A1 C A1@< H <@ A' 1 0 <C@1 A1 <@1'0@ >10 H'@0 0&'1- A1 B10 & A1'.-/-B1 &?@ &? 1>1- =& C '010 1 H B10 & A1-/-B1 1A>1-11 < < @1 =10 A1@ < '+' 1 A?@ 1'- &D-' <C '0 C0BD1'-' <+1-' I 1-A? 1 < 10H10 <@= -1 A?@ B -a <-0 C0BD1 -1>1- 1-0?<- \ , > H &?@ '@ 10 & A1'.-1 C 10 < ? 1 =<' 1-' <-' H?< A?@ 1'.-1 @1 & 1- @1' H?< @1 -&#@1 C.1-' &?@ A?@ -=1 0& < '.-1 @1 & H& 10@ H &? \ I D<?- \ <D1-0 10 <?-.10 I A <-0\1'-0 H <>10-1- <0B? 0 I D<?-A'010 1-' -.@1 1@ I @1\ +1-A1-' A1A1'-0 @1 A' &'<@>1@ &?@ @< >&-1 C? @1\ A' \ BD<?-A'010 10B1?@ &?@ < 10B1+&' >1 1-' < 1>C@&'1 C? <? 0 ='BD<?-A'010 "1-.@1 1 < B< '1 D& 0 A1 B10 &'<@>1@ 0<?-\ 1>C& 1 &+10H@ 1?L <0B?-1 & 1 &?@ < .1-' 1-

<0 K1@@ K' D'-' D'0 1<@>' <0 K' D&?@ -& '<#@1 # < 1 &=' 1B& A@ 0D<@@ #1 C? ' '-' 00?1@ <-A #1 '<#@1 # -H?10 '-' D1 0<>1 &?- '<-A '0-1@ KD1 1 D1 0<'A B '&-' 0D<@@ #1 <a1- &+'A1A <@K< 0 D< '<@@ <--1 &=' 'B1-B10 =& F &&@ <-A '-' &C<00 # D1 1'.D 0 &=' < &Ba@ 0D'CC1A '-' E<@@'10 & < <Ba0 `=& 'C '-. P ?0 &>0 <-A ?#0'A'10 < @'1-0 A& & 0D<@@ A&@ 0D<@@ #1 &-@ 1LB1C &+'A1A <@0&@ D< D'0 B 0D<@@ -& 1L 1-A@ -& 0D<@@ #1 C 1 ?A'B'<@ D1 'B1-B1 . <- 1A # &? 0<'A +1 1'.-' & A D1 , '-. # 0<'A +1 1'.-' & A D1 , '-. 1<@ K' D&? @ -& '<#@1 # < 1 &=' 1B& A@ 0D<@@ #1 C? ' '-' 00?1@ <-A #1 '<#@1 # -H?10 '-' D1 0<>1 &?- '<-A '0-1@ KD1 1 D1 0<'A B '&-' 0D<@@ #1 <a1- &+'A1A <@K< 0 D< '<@@ <--1 &=' 'B1-B10 =& F &&@ <-A '-' &C<00 # D1 1'.D 0 &=' < &Ba@ 0D'CC1A '-' E<@@'10 & < <Ba0 `=& 'C '-. P ?0 &>0 <-A ?#0'A'10 < @'1-0 A& & 0D<@@ A&@ 0D<@@ #1 &-@ 1LB1C &+'A1A <@0&@ D< D'0 B 0D<@@ -& 1L 1-A@ -& 0D<@@ #1 C 1 ?A'B'<@ D1 'B1-B1 . <- 1A # &? 0<'A +1 1'.-' & A D1 , '-. # D'0 1 1 0 <1-0@ #1<'-.' "<1 D1 LL"'' A<' &=' ?@ @ D1 LL+' 1<' &=' D'0 1'.-@ &@ &?' <A D1 ^?11-' D'0 &>C<-'&-@ &'0D'C <-A B< @ # D1 @ D1 "1C? '10@ 00'.-0@ & 1A' & 0@ F &&@0@ F &&@=1@0@ <-A '-@ <=1 =&1' !& >' <-A ==1B' &=' D1 0<'A 1 1 0 <1-0@ 0&' D<' D1'0<'A' F &&@0@ F &&@=1@0@ <-A '-@ <-A 1+1 &=' D1>' 0D<@@ #1' <-A' #1' 0D'CC1A' '-' E<@@1 & E<@@'1 @ < <Ba ' < <Ba0@ <-A' B< '1A' D1' =&.D 0 &=' < &Ba =&+'A1A' <@ @ D< ' D'0 B 0D<@@ -& 1L 1-A' ` &/P' #1' C 1 ?A'B'<@ ' D1' 'B1-B1' . <- 1A# '&?' 0)' &+1 1'.-' & A' D1 , '-.' # 'D'0 1 1 0 <1-0@ #1<@ '-. " <1' D1' ! ' 0 ' " < '&=' ?@ ' D1' LL''' ' 1< '&=' D'0 A.-' &' D1' " ?a1' &=' ?==&@a@ # '=&1' <>1' &=' F '@@'<>' < j H?'0 <-A' < @ &=' ?==&@a@ &'0D'C <-A' B< ' # 'D'>@ D'0 "1C? '10 & ' &>'10@ K&' D&?0<-A' <Ba0 &=' F &&@@ &=' D1' . &K'-.' &=' D1' &?- ' &=' & =&@a@ <= 1 D1' ! & >' <-A' ==1 &=' D1' 0< '1' 1 1 0 <1-0' -A' D< ' &C1-' &B@<><'&-' &=' D'0 A'-<-B1' 0D<@@ #1' ><A1' '-' 10=1 &K-' KD1 1' D1' &?- ' &?@ 0' #1' D&@A1-@ 1+1 & @ <+1-@ <-A' < a1' &K-' -1L '<A &'-'-.' &' D1' 0<'A & 0@ # D1' D1 '=' &=' 1+1 &?- '& 'D'0 "1C? @ &-B1' 1+1 &-D' # D1' C<B1&=' <@=' <1< '-1L ' <= 1 D'0' A'-<-B1' ><A1@ <= 1 D'0' = 01-' `<.<'-0=0' P' D1>' # F '' &=' 1B& A@ ?C&-' <'C' &=']]' @' &' #1' &=&=1'' &' D1' , '-.@ '=' D1' 0<'A &B@<><'&-' #1' -& A?@ 1L1B? 1A &+'A1A' <@K< 0@ D< 'D'0 E <-' A'-<-B1' 0D<@@ -?' 1L 1-A' &' D1' '& R-A' &-+1-' &=' <'-' &D-' &=' 'A@'-. &-' <-A' D'0 ?Bj B100& 0 KD'BD' D<+1' 'B1-B1' # D1' , '-./0 1 1 0 <1-0 ><A1' &' D1>' D1' 'L' &=' &+1>#1@ D1' LL+' 1< ' =' D'0 1'.-@ &' 0D'C' B< ' & '# '-.' D1' ' F &&@0 &' D1' -?>#1 &=' L'' ' < C@1 0@ B&- <'-'-.' LLL ' <Ba0 & K' D'-@ &' & D1 @<B10 & ' & 0 #1 &-A' D1' 1<@ D<-' &' D1' 0<'A' <C@1' =' <@<'0' &+'A1A' <@0& D< 'D'0 E <-' & ' A'-<-B1' 0D<@@ -& 1L 1-A' &' E <-0' 01+1 <@@ ><A1' &' D& ><0' F <@0'-.D<>@ D& ><0' &K-1@ <-A' &' &D-' 1-- B&Ba@ 0H?' 10@ # D1' 1 1 0 <1-0 &=' &?' &+1 1'.-' & A' D1 , '-.' #1=& 1' D'0 '>1@ &'0D'C B< ' & ' # '-.' B1 <'-' F &&@0' &' & D1 @<B10 & ' & 0 #1 &-A' D1' 1< D<-' &' D1' 0<'A' <C@1' &=' <@<'0@ #? ' D< ' D1 ' 0D<@@ #1' B@1< @ ' 1LB1C '= &>' D'0 A'-<-B1 -A' D< ' D'0 A'-<-B1' 0D<@@ #1.'-' <' =&1' !1<0 &=' D1' <'+' ' &=' <'-' &D-' D1' <C '0 -1L ' B& >'-.@ <-A' 0D<@@ 1-A? 1' &' D1' -A' &=' !'+1' 1< 0 -1L '=&@@&K'-. @ F D1 1' ' '0' & A<'-1A' # '<' <?1' ><A1' '-' D1' !&? D' 1< '&=' \@)' , '-.' 1- ' D1' !&? D@ - #@1' &.1-' & '&=' &? ' &+1 1'.-' & A' D1' , '-.' D< ' -&K' 0@ D< '<@@ 1 BD<- 0 @'1-0@ <-.1 0 <-A' " 1-'\1-0@ D< ' # '-.' <- ' 1 BD<-A'010 '-&' ` D'0' 1<@>' &=P' -.@<-A@ <-A' D1>' 01@@ K' D'-' D1' 0<'A' 1<@>' ` &=' -.@<-A@ 0D&?@A' C? <@@ =&1' &-1 @ =& ' D1' 0<'A' 1 BD<-A'010 1B1'+1A' & ' &' #1' 1B1'+1A@ &' #1' 1>C@& 1A' =& ' & D1 ' 1 BD<-A'010 &=' -.@<-A@ &' B< ' &?' &=' D'0 1<@>@ K' D&?' #1< '-.' <K< ' K' D' D1>' <- ' E&@A' & '@+1 ' '-

!-#1'@ * &-2' &@ '2 +# ;!' 3&!/ &-' !' 2 1!' .0- @' 7 !"!&-' !' # &.-' &@' ;".0* 3". '&2 ' . ' &#!-#1@ ." V . +2@ ' 2@ !' "!&* 2' . ' ."..##.'> B." ' &#!-#!' . <- 1A' &' !' 90!!-', B." .-!' *" - !/' ! 0E!'. ' 0 .+E) 3".#+ 1 &.-' 2 ' +# ;!' 1 /!' . ' &2' ^< -/' " &#!-#!$ *" - !/' . #!" &- "&' ! 3!"$.":) .11!-#!k 1!-' ' ;' .-&-0 -#!' . ' # 6!#& +' . ' %@ 1- @ ' # !" ' "!SO&"&-+' !"# -$' +&!-$' .' !1 +.@' .!&" .-!@L' &-' ;0@&-+' . ' -*+&2 ' !"k # -/&2!2

! ' "!#& ! /' # ' ! ' / ! /

@ . "Z . " . ! '" &#!"'2 1 @ ""!2 ' & 2 ' - /' E ! ' 0"! @ . ' ! "# - Z +&!-Z' ." ;2!"' -#!/ ' "!#& ! /' #

@'&- * 1 - 2 ' 0 ZK . 1 !"2 ' 11' 'b .;/'," □"1(!% ." ! /' .-" "@ . &Z'

. 11!-#!)' 1 ! ' -/' . . &- -#!' . ' &Z' < ' 3".# 1 &.-' !"! .

&'-ℊ @< 1ℊ & ' <00ℊ &? ' &=' D1' 0<'A' 1G'@ -ℊ ?C&-' <'-' &=' !& =1' ? 1' &=' D1' 0< > 1G `'KD'BD'\ P' -& K' Dj 0 <-A'-.ℊ A'+1 0' 1 BD<- 0' @'1-0ℊ <-.1 0' -A' "1-'\1-0ℊ A<'@ ' '-' A'+1 0' & 0ℊ <+1-0ℊ 11a0ℊ <-A' & D1 ' @<B10' K' D'-' D1' 0<'A' 1<@ > ℊ # '-.' '-' F D1< ℊ & -ℊ <-A' D1 ' 1 BD<-A'010' <-A' '= ?<@ℊ =& ' D1' KD'BD' D1 ' 1B1'+1' E&@A' <-A' '@+1 ℊ <-A' D1'0<>1' B< ' K' D' D1>' &? '&=' D1' <'A' 1<@- ℊ K' D&? '<- ' >C@& j >1- '&=' D1'0<'A' E&@A' <-A' '@+1 ' `?C&-0P' <- ' 1 BD<-j  A'010' &=' D'0' 1<@>ℊ '-' . 1<' "<>.1' <- ' '-C&+1 '0D8  >1- '&=' D'0' 1<@>ℊ <-A' ?'<'0D'-.' &=' D1' , '-.00' &'-ℊ  '-' "1=<?@ ' &=' A?1' 1< BD' D<A' &=' ?0 & -1 0ℊ &>Cj  &@@1 0' <-A' 1< BD1 0ℊ `D<+'-.'0P' &K1 ' <-A' ? D& ' ' ` &' A&' D1' ='B10' C' #1' 1L1B? 1A0'P G' ? '0<'A' &+1 1'.-' & A' D1' , '-.' B&-0'A1 '-.' D1' 1>'010ℊ #< D' & A<'-1A' # ' ' 1' ? D& ' ' <=& 10<'A ' D<' '=' <- ' 1 BD<- 0ℊ @'1-0' <-A' <-.1 0ℊ # '-.ℊ #1< ℊ & 'B< ' <- ' F D1< ℊ & >ℊ & ' <- ' & D1 ' 1 BD<-A'010' & ' '^?<@ '-' <- ' < 1-ℊ C ℊ & ' 11aℊ & ' & D1 ' @<B10' &=' D'0' 0<'A' 1<@>ℊ D<' D1' ` < & 0ℊOP' <'@'==0ℊ & 1 1=10ℊ ?0j  &>1 0ℊ &>C &@@1 0' <-A' 1< BD1 0ℊ <-A' & D1 ' ==' B1 0'  D1 1' &=' D1' 0 ?A' C& ℊ < 1-ℊ & ' 11aℊ & ' & D1 '  @<B10ℊ `<-A' 1+1 ' &=' D1>ℊ 0D<@@OP' D<+1'=?@@ ? D& ' ' <-A' &K1 ' &' < 10 ' <-A' 01'\1' <@@ D'C0ℊ < .10ℊ <-A' D1 ' 1001@0' BD< .1A' <-A' = 1' .D 1A' K' D ' F D1< ℊ & >ℊ & ' <- '& D1 ' 1 BD<-A'010' & ' ' ?<@ℊ `0&P' # &?.D ' '- &'  D'0' 1<@>' `& =/' P' <- ' &?- '&?' &=' D'0' 1<@>ℊ &' 01@@G <-A' &' <a1' ?=='B'1-' ? 1 '&=' <@@ D1' 0<'A' 1 j BD<- 0' @'1-0' <-A' <-.1 0ℊ =& ' D1' 0<'A' F D1< ℊ & -ℊ & ' & D1 ' 1 BD<-A'010' <-A' '=@?<@ 0& # &?.D ' # ' D1' 0<'A' 1 BD<- 0' @'1-0' <-A' <-.1 0ℊ B& > '-.' <-A' 1C<' j '-.' &' D1' 0<'A' & 0' <+1-0' <-A' 11a0ℊ <-A' & D1 ' @<B10' &=' D'0' 0<'A' 1<@>ℊ `<-A' D<'0P' D1' &-1 ' KD'BD' 0D<@@ #1' <a1-' & ' 1B1'+1A' =& ' D1' 0<'A' F D1< ℊ & >' <-A' & D1 ' 1 BD<-A'010' & ' 'E?<@@ 0D<@@ #1' 1>j C@& 1A' ?C&-' D1' 1 BD<-A'010' <CA' & > >&A' '10' &=' D'0 1<@>' K' D&? ' ! <?A@ ?# '@ ℊ & ' <@181-.'-1 ' -A' '=' <- ' E&@A' & ' '@+1 ''-' &=&)' @< 1ℊ & ' <00ℊ # ' 1 ' BD<- 0' @'1-0ℊ <-.1 0' & ' "1-'\1-0ℊ #1' B< '1A' &? '&= D'0' 1<@>ℊ <a1-' & ' 1B<+1A' =& ' F D1< ℊ & >ℊ & '<- ' & D1 ' 1 BD<-A'010' & ' '^?<@ℊ &' #1' # &?.D ' '- &' D'0 1<@>' `&=/ P' <- '& D1 ' &?- ' ?' &=' D'0' 1<@>ℊ B& - ' < =&' D'0' A'-<-B1' <=& 1' 1B' 1A@ D<' ' ' 0D<@@ #1' @<K=?@ &' 1+1 ' 1 0&-' &' C? 0?1' <-' = '& ' &=' "1# ' <.<'-0 '<@@ 0?BD' E?0 & >1 ' & >C &@@1 0ℊ<-A' 1< BD1 0ℊ <-A' 1+1 '&=' D1>ℊ '-' KD&01' , -&K@1A.1' <-A' 1= ?= ' <.<'-0 ' D1' ' ==' B1ℊ <- ' ?BD' E&@A' & ' '@+1 ' '-' &'-ℊ @< 1ℊ & ' <00ℊ '0' D<A' <-A' B< '1A' ?' &=' D'0' 1<@>' ' &' #1' C? 0?1A' '-' 0?BD' &?- '10' KD1 1' 0?BD' F D1< ℊ & -ℊ & ' <- ' & D1 ' 1 BD<-A'01' & ' '^ <@ '0' # &?.D ' <-A' C?' &' 0<@1G <-A3' -8 D1' 0<'A' ^'&-' 0D<@@ ><a1' D'0 "1><-A' &=' <' ?>' <>#?- '-.' &' D1' <@?1' &=' D1' 0<'A' F D1< ℊ ' 1 BD<-A'01ℊ ' 'A@?<@G <-A' D<' D1' < '10' & ' < ℊ KD'BD' '0' 0&' 0?1Aℊ <-A' =' 0 '<CC1< Dℊ 0D<@@ #1' C? ' &' <-0K1 ' '-' D1' 0<'A' = '& ' <-A' 0D @' -& ' K<.1' D'0' @< K ' '-' D1' 0<'A' '&-ℊ -& ' 00&'-' -& ' &@ 1=@'&-' 0D<@@ #1' '-' D1' 0<>1' =@'&-' =& ' D' >' & '=& ' <- ' &=' D1>' <@@&K1A ' &+'A1A' <@ > 0ℊ D<' D'0' A'-<-B1' 0D<@@ #1.' -' <-A' 0D<@@ #1' '-' D'0' =& 1 h' '-' D1' L + ' &=' <0 1 ' -1L '1-0?'-.ℊ <-A' 0D<@@ 1-A? 1' A@@ D1' -1L ' < @' <>1- G -A' D<' &B@<>< '&-' D1 1&=' #1' ><A1' #1=& 1' D1' 0<'A'] ''-' <@@ < 0' &=' D'0' 1<@>' KD1 1' <- ' F D1< ℊ & >ℊ & ' & D1 ' 1 BD<-A'010' & ' '=@?<@ #1' & '0D<@@ #1' # &?.D ' '- &' D'0 1<@>ℊ= & >' <- ' & =- '&?' &=' D'0' /)' 1<@> B&'.-1' C@< 1' &?' ><001ℊ D& 0' A?A' &'<@>1' 0?' C1 -1' A1' =& =1' ? 1' A=B1==G B1 ' 10 < ? 1' -'1- '&#0 <- ℊ A', 01<' ='BD<?- \' <@'1-0' 10 <-.10' I ' A1'- \&-0' &?>1D-1- ℊ 1-' A' 01\' C& 10' D<#@10' I ' B 1a10' I ' <?, i' ='1?L' A1# 0' e1' A' ' &'<@>1' <CC# 1- ' = ?>1- '#@11<' I ' <?R0' D<?-8' A'01 ' I ' +' <''@ℊ C ' @1\' H?1@L' '@0' 10B1'+1- ' & 1' I ' < .1- ' I ' B1'ℊ BD< & &?- ' & 10Hℊ 1?L' D& 0' A?' A' ' &'<@>1ℊ 0<?-\' <0B?-1' 1>C@&'1>1- ' A?' A' ' C 1' I ' < .1- ' C? ' <0B?-0'='BD<?-A'010' A1' B10 ' &'<@>1ℊ 1-' .W?-A1' A<>< .1' I ' 1>C&, 00D1>1- ' A?' B10 ' &'<@>1' I ' A'> > ?A&-' A?' B&'.-1' A?' & ℊ 1-' A1=1?@ 1' A1' A?1' 01 BD1' 1?1' A1\' ?0 ' ? 0' &?< &@@&? 0' I ' 1 BD1&? 0' A1\' '1@L' C& 1 ' D0#@10' B 1a10' I ;' <? 0' 1?L' & 8 ?0 ? 0' & > #@@&? 0' I ' 1 BD1&? 0' &?-' C&'< ' I ' <?B & ' 1' A1' =1= 1' I ' 1L1B?=' @&? ' &==' B10G =1' A' ' &, <'. '1' '@1' & ' 1 - 'A1 <- ' @1\' > '001\' <A' & A1'.-1' C' @<?1 & ' 1' A10?'0A' ' ' 0" <0B?-0' BD<?- \'<@'1-0' I ' 10 <?-.10' <>10-1- ' <CC& 8 U- '&?' BD< &'1- '<0B?-1' = ?>1- ' #@10' &?' <0B?-0' <?R0' BD<?-A'010' &?' +' >=ℊ 1-' <0B?-1' D #@1' C& ' &?' B 1a1' &?' <?R0' @'1?L' A1' B10 ' A' ' &'<@>1ℊ H' @1' <' 1ℊ < @@'=1ℊ & 1=1ℊ ?0 ? I ℊ #- &@@&? 0' I ' 1 BD1&? 0' I ' <?R0' ='B1 0' '@@1&0H10' A1' A' ' C& ' D<#@1' &?' 1=1a1' &-' <-R0' @'1?]ℊ 1'1-' I ' BD?-' A1?L' 1' ' C@1 -' <?B & ' 1' I ' C&'< ' A< 10 1 ' I ' 01'01 ' &? \'@10' -'1=1' #< .10' I ' <?R0' +1001<?L' BD< .10' I ' = 1 \' & 1' = ?>1- ' #@10' &?' <0B?-0' <?R ' ='BD<?-A'010' &?' +' <''@ℊ <CC& 1\' 1-' B10 ' &'<@>1ℊ A<0 ' ?-1' C<'0' D& 0' A1' B10 ' A' ' &'<@>1' ' +1-A 1G ' I ' A<C8 C 1-A 1' 0?==' B'<-' 0?1 11' A1' &? \' @1\' A' \' ='BD<?- \' <@'1= 0' I ' 10 <?-.10ℊ C? ' @1' A' ' = ?>1- ' D@110' I ' <?R0' BD<?-A'010' I ' +' <'@@1' <'-0" <.C&C'10' C' @1m' A' \' ='BD<?=' \' <@'1-0' I ' 10 <?-.10ℊ +1-= @ \' I ' 1C<' <- \' <0' A' \' CC \' D<#@10' I ' B 1a10' I ' <?R0' @'1?L' A1' B10 ' A' ' &'<@>1ℊ H' @<' > -1 ' H' M <' C '01' &?' 10B1?' C? ' @1' A' ' = ?>1- '#@110' I ' <?R0' ='BD<?-A'01\' &?' +' <''@@1' M <' 1>8' C@&'10& '@1\' BD<?-A'01\' I ' 1 >&A' 110' A1' B10 ' #'<@>1ℊ 0<?-\' = <?A1' 0?# '@' 11' &?' ><@1' 1-. -1 ' '0" <0B?-1' & 1'&?' < .1- ' 1-'B&'.-1'C@< 1'&?' ><001ℊC' - 1D<?- \'<@'1-0' 10 <-.10' &?' A1' -0\1>0ℊ 0&'@ B< '1' D& 0' A1' B10 ' &'<@>1' C '01' I ' @10B1+1' C =- >1- '#@1 0&-' <0B?''0' <?R0' ='BDA?-8' A'01\' & ' +D<'@ ℊ <CC& 10' 1-' B10 ' &'<@>1' A<0B?-1' <? 1' C<'0' D 0' A1' B10 ' A' ' &'<@>1ℊ 1-' B& - = '1' A 1' 10' & 8' A1'.-=&B1' A 0?'0' 1B' 11ℊ H'@ @' =<'<' BD?-' C0&-'1' A1' C? 0?1 ' <B1=&-' A1' A1 1' 1CB&?- 1' & \' '1@L' &0 ? >1 0' E&?-8' &@@&? 0' I ' 1 BD ? 0' I ' BD?-' A1?L'ℊ 1-' &'.-@0<-B1 'A18 =1? 1' A1' H'' &?' A1' H?1?L' 1-B&?- 1'@1 '&=='B1' <0B?-1' '1@1' & 1' ? < .1- ' 1-' B&'.-1' C@< 1' &?' ><001' 10 ' 1?1' I ' B< @1\' D& 0' A1' B10 ' &'<@>1G A10 1' C? 0?1' 1-' '1@L' &?- 110' @<' &?' '1@L' = ?> - ' #@110' &?' <0B?-1' <? 1' BD<?-A'01' &?' +' <''@ 10 '<CC& 1\' I ' > 0' <' +1-A1G 1 ' 1-' @<' A' ' <BB'C-' =1 ' 0&-' A1><? A1' A?' 0&>1' <>&?- =&- ' <' @<' +<@?1' A?' A' ' = ?>1- ' I ' #@110ℊ ='BD<?-A'01\' &?' +' <' 'G 1 ' H' @1\' C< '10' &?' C< '1' H' 10 ' <'-0" 0?1' I ' C '=' 1>1- ' <CC@1 G <' > 0' ' 10C A 1' 1-' @<' A' ' <BB'&-ℊ I ' -1' .<'.1 <' C&'- ' 0<' @1 ' 1-' @<' A' ' <BB'&-' -1' 100&-" -1' C 1BB'&-' 1-' >10>1' @<&B'&-' M <' C? ' @? ' &?' C' <0B?-1' A1?L' <@@&?11 ' V ? 11 ' &? L' =&' \' H' B10 ' & A1'. - -B1' B(>1%R < I ' M <' > <<' =& B1<' @<' L+W 8A1ℊ <0a1' C0BD1'&' 1-<-' I ' 0& ' 1-A? >< ?0H10' <?' C0BD > -' C< @1 <1- G ' H' CB@<><8' B'& ' A1' B1&' 0&#' =1@ ' A1+3- ' @1' A#']+W ' 1-' &? \' C< '10 A1' B10 ' &'<@>1ℊ &?' = ?>1- ' #@110' I ' <?R0' ' BD<- A'010' &?' +' <''@ 0& > ' &?' M &?- ' <CC& 1\' 1-' B10 ' &'<@>1ℊ A<0 ?-1' C<'0' D& 0' A1' B10 ' A' &'<@>1

' %2 ' 0 ' 2 ' I) ' ?1='1'3 ' % ' 4 (' 5 6 ' ' %2 ' ' # 7 1 # 2 ' & %&' □ ' &&% 11 ' $ ' $ ' □ 2 & ' 2 (' ! ' G ' % ' ' ' * &% ' %2 ' ' d- %' ' 8 1 ' 0' 2 (# ' (ℊ ' %2 : % ') %2 %' '

F& a><-0D'C &=' D1' <-A0' <-A' < 0 KD'BD' D1' 0<'A' " ?a1' `D&A1 D' <-A' &BB?C'1 D9 P' 0D&?A' -& ' B&>1' '- &' D1' 0<'A' 1<>' <= 1 ' D1' 0<'A' !1<0 ? ?C&-' <'-' &=' !& ' =1' ? 1'&=' D1' 0<>1' 1 BD<-A'01 D<' '0' &' 0< D1' &-1' <=' D1 1&=' &' D1' , '- . <-A' D1' & D1 ' <=' &' D' >' KD'BD' =' 0 ' `0D< 01'\1' D1/0<'A' 1 BD<-A'010 '-' KD&01' <-A0' 0&1+1 ' D<' D1 ' `0D< #1' =&? -A <-A' D<' D1 1?C&-' &C1-' &B<>< '&-' `0D< #1' ><A1' #1 K'L ' ` D'03P' '>1' <-A' D1' L+' A<' &=' ?' D1-' -1L ' 1-0?'- . K' D'-' D1' ' '&=' &-A& - &A' & D1 ' <B10' -1B100< ' <-A' B&-+1-'1-' &' D1' 0<>1 -A' '=' <- ' ?' ' `#13P' B&>>1-B1A' <= 1 ' ` D'0OP' '>1' )' #1B<?01' &=' <- ' 0?BD' 1'\? 1 ' KD'BD' <- ' 00?1' B&-B1 -'- . ' D'0OP' A'-<-B1' `0D< OP' #1' 'A' '-' D1' &?- '10 KD1 1' D1' 0<'A' 1'\? 1' `0D< OP' #1' D<A' <-A' '-' -&-1' & D1 ' <B1)' FD'BD' A'-<-B1' 0D&?A' `D<+1'1-A? 1A/ P' '' D1' -1L ' < ' >1- -A' ! & <0>?BD' <0' # ' D1' ?>>&-0' <-A' &>0' >1-B1>1- ' &=' D'0' C 101- ' < ' <>1- D1' 0<'A' A'j -<-B1' `0D< #1' OP' =?' 1LC' 1A' &A' A1 1 >'-1A' -&' A?1' 1=& >< '&-'&-' D1' 1D<=' &=' D1' 0<'A' " ?a1'&=' ?=. &'-' &=' D1' 1>'010' 1 ' D<A' ' ?'0<'A' &+1 1'. -' & A' D1' , '- . B&-0'A1 '-.' D1' 1>'010 # ' D1' A+'B1 001- <-A' ? D& ' ' <=& 10<'A D< D' & A<'-1A' &A' 0 <# '1A D< ' &C1-' &B<>< '&-' 0D< #1' ><A1' '-' D1' ' '&=' &-A&-' <-A' & D1 ' <B10' -1B100< ' &A' B&-+1-'1-' '=& ' D1' 0<>1 #1 K'L ' D'0' <-A' D1' !1<0 ' 2= <'-' 1 1 ' B<1A' <A' '-B?<' -1L ' B& >'- . D<' ?-100' A?1' B&- =&?<' 1=& >< '&-' #1' ><A1' &A' D<A' '-' D1' 0<'A' < 0' &=' <#<- &<-A' <-A' '=1<<-A' #1 K'L ' D<' <-A' D1' !1<0 ' &=' <'-' 'BD<1 D1-' -1L ' 1-0?'- . 0&' D<' <<-1 ' &=' F A&1-' & DR' >D 1' '-' D'0' 1<>'`&=' - .<-A9P' >< ' B& >1' <-A' #1' <BB1C 1A' '-' D1' 0% >1' < 0' &=' <#<- &<-A' <-A' m1<-A' D1 1' &' #1'? 1 1A' <-A' 0&A' <0' `0C11A' '/P' <0' <-' & D1 ' 1 BD<-A'010 D<' D1-'=& ' " 1=<?' '&='0?BD' 1=& >< '&-'' ' 0' 1D<-' -&' <--1 ' &=' 1 BD<-A'010' -& ' E&&A0' &=' D1' E &K'- . ' -& ' F& a><-0D'C' &=' D1' <-A0' <-A' < 0' KD'BD' D1' 0<'A' " ?a1' D&A1 D' <-A' &BB?C'1 D' 0D<' B&>1' '- &' D'0' 1<>' = 1 ' D1' 0<'A' !1< '&=' <'-' 'BD<1' ?C&-' <'-' &=' !& =1' ? 1' &=' D1' 1 BD<-A'010' D< '0' &' 0< 2' D1' &-1' <-' D1 1&=' &' D1' , '- . <-A' D1' & D1 ' <-' [ )' &' D' >' KD'BD' =' 0 ' 0D< 01'\1' D1' 0<'A' 1 BD<-A'010' '-' KD&01' <-A0' 0&1+1 ' D1 ' 0D< #1' =&? -A <-A' '=' <- ' ?' ' #1' B&>>1-B1A' D1 1<= 1 ' #1B<?01' A=' <- ' 0?BD' 1'\? 1' '-' KD'BD' <- ' 00?1' B&-B1 -'- . ' D'0' A'-<-B1' 0D< #1' <a1-' D<' D1' 0<'A' 00?1' 0D< #1' '1A' '-' D1' &?- ' KD1 1' D1' 0<'A' 1'\? 1' '0' D<A' <-A''-' -&-1'& D ' <B1;' <-A' D<' D'0' A'-<-B1' 0D' 1-A? 1' =& ' ''' 1< 0' '=' A?1' 1=& >< 'A-'#1' -& ' ><A1' K' D'-' D<' '>1 ' F D1 1<0' A'+1 0' &0 1 0' 1K 0' <-A' & D1 ' 'B ?<1 0' a11C' - . ' &0 1 '10' <-A' & D1 ' &?010' &=' 1j <'-' . ' &=' 'B ?<0' '-' A'+1 0' <B10' '-' D'0' 10 ' D<+1' C? BD<01A' D1' , '- . /0' 1 1 0' < 1- 0' 0&>1' &' D1>' =& ' 1 >' &=' '=1' &A' 0&>1' &' D1>' <-A' &' & D1 ' &'- ' =& ' 1 >' &=' D ' ' '+10' &' <a1' & 010' <-A' < 0' `=& ' D1' < '<.1' & =J P' D1' , '- . ' <-A' ^?11-' >& 1' =& ' D1' ' `C '+< 13P' <-A' 0' - . - <' ?B 1' <-A' &=' ' D<-'=& ' <- ' =1 D=?' 1 +'B1' &=' D1' , '- . & ' &=' D1' ^?11-' # 'B&&? ' &=' KD'BD' 1 1 0' < 1- 0' D1 ' A<' <a1' & 010' <-A' < 0' KD1 1' D<' -&' -11A' '0' <-A' # '- . ' D1>' &' D1' ' &0 1 '10' &A' & D1 ' @<B10' &=' D1' ' ==' - ' ' <-A' D1 1' a11C' D1>' 01B 1 ' ' 0&>1 '>1' ?- '' D1 ' D<+1' 0C1- ']]' A' & ']' A' &=' D1' ' ?==' &A' 0&>1 '>1' >& 1' <CA & <' . -1' A1\' R 1 i' I ' C< '10' 10' C'1?L' 1' A' ' " ?1' ' & ' I ' &BB?C'1 - 1' +'1-A &' ' 1-' 1' A' ' &'<>1' C?'0' 1' A' ' =10 ' 0? ' C ' -1' A1' =& =1' ? 1' A1' 10' ='BD<?-A'010' B10 <00<+&' ' @?-1' >&' 1' A1' B1&' <?' & ' I ' =&? 1' >&' 1' A1' B1&' < B1@@? ' H" C '=@1>1- ' 0C'01 &' ' 10' A' \' BD<-A'010' 1-' H?1@L' B&-H 0' >< '-0' H'@0' A'1- ' &+11\' 1 ' H' 0? ' B1&' &, ' CB@<><B'&-' M o'1' = '' ' 1- 1' 1C ;' 1>C0' I ' @1' H?' -\' &'1' &? ' A1 ?'= ' <A&-H10' C0BD1' -' 1-0? & ' A1A1'-0' @<' 11' A1' &?-A 10' I ' <?=0' @'1?L' -1B100< '10' I ' B&-8' +1-'1-B1\' < B1&' 1 ' 0" <0B?-1' 0? 1' , &'1=' B&>1-B1' <C 10' B1'' 1>C0' 1?1' C' B<?01' A1' <0B?-1' '1' 0<0 -' 1-' H?1@@ <0B?-1' '00?1' B&- <-' B1 ' & A'-<-B1' , &'1 ' C '01' H' @1' A' 1' '00?1' , &'1 ' '1' 1-' @1' &?- 11' &?' @<' A' 1' 0<0 -' , &'1 ' 1?1' I ' 1-' -?@@ <- 1' @'1?' G' @1' H?1@@ & A1' - -B1' @1-A 1 &' ' ?0H10' < C0BD1' -' C@1>1- ;' 1 ' C ' B1&' H' C' @<' 0&>&-H1' I ' B&>1-B1>1-' A?' B10 ' C01- ' C< @1' >1- ' @<' h 1' & A1-J-B1' 0&=' C@1'-1>1-' 1LC' 11' I ' A1=1-'-11' -?@@ A+1' 1=& >< B'&<' A1' C & '1' A?' Aa' " ?1' A1' @1\' >'001\' 1-H?& 1' 1?1' 1' A' ' @1' & ' B&-8' 0'A1 & ' @10' >'001' A1' <A+'0' I ' <001-' I ' @<?=@& ' 1' A10?'0A \' <A' & A1'-1' I ' 10 <#@'1' H' & ' CB'<>< B'&-' &=' =<' ' 1-' @<' ' 11' A1' &?-A 10' I ' <?R ' @'1?L' -1B100<-10' I ' B&-+1 ''1&11\' < B1&' 1- 1' B1A' I ' @1' =10 ' A1' 1'-' 11 1' @<A+'-B@1' CBD1' -' +1-/>' ' H' 0" <'-0" 0&' ' H' A?1' B&-'-?1@@ 1=& >< A&-' -1' 0&=' =<' ' I ' 1?1' 1-' @10' A' \' C< '10' A1' <#<- ' &@<-A' I ' m1=&-A' 1- 1' B1&' I ' @1' =10 ' A1' 1'-' 'BD1@' A&-H10' C0BD1' -' 1-0? & ' -0" H' &?' > < ' A1' A <C0' A1' @<' -1' =1' ' 1-' B10 ' &'<@>1' C&1 ' +1D' ' I ' 10 1' C1B1C 11' 1-' @10' >10>10' C< '10' A?' <8' #<-A' &@ &A' I ' m11@<-A9' @<' 10 1' ?@ 10' I ' +1-A?\' < L" = <-BD1>1-' B >1' <0B?-0' <?,0' ='BD<?-A'01R9' H' @& 0' C ' A1=<? 1' A1' '1' 1=& >< A&-' 1-' B1@@ C< '1' -? ' ><51' A10' BD<?-A'010' -1' #'1-0' A1' B B<00<-B1' -1' +<'. -1' A10' 10' I ' C< '10' H?1?L' '1' A' ' " ?1' '1-' ' I ' &BB?C'1' +'1-A C-' 1-' B10 ' &'<@>1' <C 10' '1' A' ' =10 ' A1' 1'-' 'BD1@@' 0? ' C1'-1' A1' =& =<' ? 1' A1' @10' 5BD<?-A'010' B10 <00<+&' ' @?-1' >&' 11' A1' B1&' <?' & ' I ' @<? 1' >&' 1' A1' B1&' < B1@@? ' H" C ' 1>1-' 01'01 <' @10' A' \' ='BD<?D' A'01.' 1-' H?AL ' B&HH10' ><'-0' H'@0' 0B<1-' &?+1 G 1' 0" <0B?-1' 0? 10' 0&' ' B&>1-B1' 1-' <C 10' C ' B<?01' A<0B?-1' 'A' 01'0'-1' 1-' H?1@@ <0H?-1' '00?1' B&- ?<-' B10 ' & A1@ -W-B1' , <C '01' H' @1' A' ' '00?1' 0&' ' '1' 1-' @1' &?- 11' &?' @<' A' 1' 01'0'-1' 10B 1?1' I ' 1-' -?@@ <? 1' @'1?;' 1 ' H' B10 ' & A1-0-B1' 1-A? 1 < C ' 01C ' <-0' 0 ' A?1' 1=& ><A&-' -1' 0&=' =<' ' A1A1'-0' B1 " 1>C0

@?-' H' B&>1' A'+/010' D&0 '@@1 0' # <0'1 0' I ' <? 10' +'8' <'@@1 0' .< A<?- \' D&0 '10' I ' <? 10' >1<0&-0' A1' 1 <''@' A10' +' <'@@10' 1'2 A'C01\' @'1?L' 1-' B10 ' &'<@>1' &-' C? j BD<010' 10' C< 1- \' A?' & ' <0B?-10' < 1?L' C ' >1' A1' +'1' 1 ' <0B?-1 ' < 1?L' I ' <? 10' &'- 1>1-' C ' >1' A1' @1? ' +'10' C ' <CC 1-A 1' BD1+<?@L' I ' BD< 1 10' C ' B< '<.1' A ' & ' I ' @<' &'. -1' C@?@0' C ' @&? ' 0?# '1' I ' 01- . @1 1' =&1 1' I8 C?==' ' C ' <0B?-' =&'<'@' +'B1' A?' & ' &?' A1' &'. <1'G' C' B&@&? ' A10' H?1?L' 10' C< 1- 10' '@0' &?>1@8' >1-' C A. -&-' BD1+<?@L' I ' BD< 1 10' &?' H' -?@@ #&8' 0&'. -1' 0&' 1' 1?L' <>10-1-' <0' @&? ' D&0 '10' I ' <? 10' @'1?L' A1' @&? ' <==' -' 11' 1 ' '@@1&H10' 1?L' 01B 1 1>1-' .< 8' A1-' <0B?-=&']' ?0H10' < <-B' '@0' &?-' A10C1-A?\' +'-' A &'1 0% 'H?< &e' A1-'1 0' A1' @1? ' 0 ? 1' I ' <0B?-1' =&' \

6!#& !/' ' I' "!'0!- ;+!/ . '' 2!' !-' A! "Z 0-+!2Z 6!/"!2Z ;!' 1 /!'&-' +4"] ; - ' C K ;! ."!' ## !+1 2

;02!' . ' 3 !- 2 . ' &# 0 +!"2' .' 1 E!' 30"k '!@ -#!' . ' ."2!2' -/' '""& *!2=

CD''0 I A&<H?10 =<B1 @10 C&00100&? 0 I A \ #U0 +<?L I A'< 1 10 C B1& <CC<'1 A1+0> C&'1- .<'. -1 A1@'+<- B1 A1 a2 BD1+<?@L I BD< 1 10 I <<B<-0 C'0H10 <<H2 '@0 &?- =< \ = -1 &+1B 1?L C '1@L BD1+<?@L I BD< 1 1 < a? +&@?- 11 1 A<0T;?= C1&C@1 A? & \ C 1'. -&- =-10 C =1 1 &@@1 <?-B1 I -1> 1 C 1<A 1 @1? D1+<?@L -1 BD< 1 10 '-0 H A'+001\ A? C1&C@1 A? & 1-'B10 -&#@1 &'<@>1 0&- .=?-A1>1- 1-A<?'<.1\ C @1\ A \ C1 -&? 0 <?L'#'1- C @1 -&-' C<'1>1- A1 @1 @&K1 A1 @1\ A \ BD1+<?L <BD< 1 '0 B&>1 C @< .0?-A1 BD< .1 H '@0 &?- C @1? > <--1 I = -10 =1' \ C @1? A1@ <?-B1 <C 10 H'@0 0&- <'-0 C '01\; 1 A' @1 & C <A+'0 I <001- A10 0?'0A' \ <A & A1'. -1\ 10 <#@'1\ H &? \ '1@L 10 C< 1- \ .W?- 1\ < <0'< = 1C0&-1 &?' C0&-10 1- - \ D&08 '10 # <01 '1 &? -1<0& A1 1 <'@@1 A? +'<'@@ &- +&'A1\ I A1 -?@@ 1==1= 1 1 0 <0B?-1 '1 .3?- 1 0&' .W?- 1\ < <0B?-1 '1 C0 -1 &? C0&-10 A1B 1-<C 10 H BD10B?-0 '1@L C< 1- \ 1-0 .W?- 1\ 0&'1- +0'A1\ I A1 -?@@ 1==1A 1 H -?@@ C0&-1 -1 C0&-10 C 1'. -1 -1 C 1'. -1- <0B?-' BD1+<?@ &? BD< 1 1- <0B?-' @'1? A1j A1'-0 B10 &'<@>1 >0<0 C A1@' <?-B1 A? <' 1 '0j B&?- <'@@'= &? &-10 <#@1'&?' '1@ C '01 M < 1?1 1 0 <0B?-1 '1 C0&-1 C0&= 10C'=='. -1' &?' . -1- <0B- BD1+<?@ &? B#< 1 1 A00B? 1 C0&-1' &?' C0&-10 00?-0 <. 1< '1- =<' < @1' C 00100 ?= C B1& I C @< A1@', <?-B1 A? <' 1 '0B&?= <'@@'= &? &-10 <#@1'&?' '1@L C '010 M &- 1?1\ H @& 0 @ &?' '@\ A1 H &? A1 H?1?L BD1+<?L &? BD< 1 0&'@ &?' 10 1-0 C '01\ I '@ &? '@\ A1 H &? A1 H1?L3 '1@L =-10 &?' C<'1>1- \ &>1 10 A1+0- 1D1 01 0&- C '01\ 1' &?' <'1- <BB'&- 1B& < 1#@1 A<>.10 1-B&?- 1 '? &?' B1 ='L <'-0 C 1'. -1' &?' C'. - <0B?-' BD1+<?L' &?' BD< 1 1'=-1\ &?' C<'1>1- \ 1- &- W '1 A1 B10 & A<=-B10 <+ ? \ &/0 <? & 010 C &.< '= I 1> -1-B1 A1 I 1-'@1\ C>'001\

>' C <A+'0 <001- I <? & 1 A10?'0A \ & A1'. -1 10 I .W?- 11 H @1 ' B&?- \ I @1? D+D'0B&?- \ I A1 a1\ I B= ?-' A1?L 10 &'01- C <-' A< 1'-' C<001 0&'1- H?'1 1\ I A'0BD0 =.1\ I 0&' H?' 1 I A'0BD< .1 1-B&?- 1 -=1 A' & <'. -1 @1 & I &? 0&-' @'1.1 C1&C@1 A1 @1\ C1- <@ 11\ '=& =1' ? 10 A1 '=< H B1HL & '<0B?-' A1 B1?L C& 1-= 'C&1 BD1 1 ' ; '?' =& B1 A1 0 < ? 1 ='' <-' a' '1 B1 --=1 A' 0&C?. -1 B @1 & B&>1 C @&BB?C<B'&-' &?' 1LCB'01 A1 @&==B1 A?' '0B&?- C@?'0 @&-.1>1- H C' <-0 C' <- B&>1 <' @1' &? C0BD1'-' <C0 @1' ? A1' &? \ <@>10 1-' <-' A?' 1'. -1' -=1 =' & <'. -1' @1' & H & 10 +'- 01C '0>1 ?0H10 <@ =10 A1 C '=BDB'&-' A1' --=1 "<>1' A&-H10 1-0?<- 1-' <-' A?' --=1 A' & <'. -1' +'- &1C '0>1 ? +1?' &? \ & 0' H' C' B10 C01- & A1-J-B1' B1?L' -1' -?-' A1' B1?L' 0&'1- 1LB?01\ &?' A'0BD< .1 TIK 0&' 1LBA01' &?' A'0BD< .1 =10B' -' <? 1' &==1-B1' &?' BD&01 =''' 1 C' 1'=' &?' <0B?-' A1?L' 1-' @1? A' \ &=='B1\ ?L" C? +1?' H' -? ' 0&' < B'11' C' <0B?-1' 0? 1' B&>1-B1' C @? 1-B&?- 1' <0B?-' C0&-1 <' 1B&? 1 @< A' C1-<@ 11' C C@?'0 @&-.1? &BB?C<B'&-' H C' <-' C' <- B&>1' <' @1' & <C 10 @1' A' =10 A1' @<' C? '=B<B'&-' A1' --=1' "<>1

D1-' D1 ><a1' D1' K-1 0 &=' D1' 0<'A' & 010 <-A' < 0 &'C< =& D1' 0<>1' #1=& 1' D< D1 B<-' .1 " 1@'+1 &=' D1' & 010 <-A' < 0 <-A' 0&>1' '@@ D1 D<+1' ><A1' <' ! -1' K' D' D1>' =& 0?BD' & 010 <-A' < 0 <' D1' ' F '@@ <-A' &=' 0&>1' &=' D1' , '-./0 1&C@1' D1 <a1' , -10 ` &' 0D1K' !<+&? <-A' -&' &' <a1'H D1' ' & 010 <-A' < 0 &' D< A'+1 0 1 0&-0 &=' D1' , '-./0 @'1.1' 1&C@1' '-' D'0 -&#@1' 1<@>9 #1' . 1< @ ' -A<><.1A' # D1' 0<'A' <a1 0 <0 K1@@ =& D1' &-8C< >1- &=' D1' 1' &=' D1' 0<'A' & 010 <-A' < 0 <0 =& D1' . 1< D< .1' D1 D<+1' =& D1' 1< 9 <-A' ! -10 ><A1' =& D1' " 1@'+1 <= 1 D1 '#1' 0& <a1-6 ? 0<'A' & A' D1' , '-.' # D1' A+'B1' <-A' 001- <=& 10<'A D< D' & A<' -1A' <-A' 0 <#D0D1A 9 D< ' <@@ 0?BD' 1 1 0 < 1- 0 . <- 1A' <- 1 0&-' & 1 0&-0 D&@A'-.' <- &0 1 '10 1KD&?01 9 & &?01' &=' 1 <'@'-.' &=' '=@?< D<'@ #1' K 'A' <-A' &=' -& ` <@?1' -& ==1= ' : <-A' '=' <- 0?BD' E <- ' #1' ><A1' & <- 0?BD' 1 0&-' & 1 0&-0 = &>' D1 B1=& '9 D< ' <@@ 0?BD' < 1- 0 . <- 1A' 0D<@@ #1' +&'A' <-A' &=' D -1' ==1^6 -A' D< ' -& 1 0&-' & 1 0&-0 0D<@@ <a1') ' & 01' & ' < ' '-' <- ' @<B1' K' D'-' D'0 1<@>9 #? ' # ' D1' " 1@'+1 ' &=' D1' < & 9 D1 '==9 <'@'==9 & ' &-0 <#@1' KD1 1' 0?BD' <a'-.' 0D<@@ #1' D<A6 <-A' '=' <- ' 0?BD' 1 0&-' & 1 0&-0 <a1' <- ' & 01' & ' < ' &=' <- ' 1 0&-' & 1 0&-0 K' D&?' . 11>1- ' ><A1' & D1' &00100& ' =& ' D11<>1 <-A' # ' D1' " 1@'+1 ' &=' D1' < B==9 D1 '==9 <'@'==9 && ' B>0=<#@1' KD1 1' 0?BD' <a'-.' 0D<@@ #1' D<A9 D1-' D1' & ' D1 ' = &>' KD&>' 0?BD' & 01' & ' < ' `'0 ' <a1-9 <-A' D1' & D1 ' &=' KD&>' 0?BD' !'= 1 ' & ' < >1- 0 #1' <a1-9 <0 '0 <=& 1' 1D1< 01A9 0D<@@ D<+1' <-' =@'& -' &=' 10C<00' <' D1' B& > >&-' <K' =& ' 0?BD' <a'-.0 <-A' D<' D1' & ' D1 ' D<' 0)' =11@1 D' D' >01@=' . '1+1A' >'0?BD' = '& -9 0D<@@ 1B&+1 ' 1#@1' " <><.10 <.<'-0 ' D'>' ' D1>' KD'BD' 0& <a1' <-' & 01' & ' > 9 ! '-10 ' < >1- 0 B&- < ' & D'0 A'-<-B1;' <+'-.' <@K< 0 &' D1' , '-.' D'0 1 &j .< '+1' <-A' D'0 181>'-1-B1' ='<-A' '-' D1' 1>'010

9 ' A+'B1 001- 9 %4 ? D& ' '<=& 10<'A' '0 & A<'-1A'<-A' . <- 1A' D<' D1' D1 '==0<-A' 0)' -A1' D1 '==0 \')' @1 a0 <-A' 1+1 ' &=' D1>9 KD'BD' K1 1' =C ' D1' 1< '@<0 ' C<001A9 0D<@@ #1' H?' ' <-A' A'0BD< .1A' D.<'-0 ' &? ' 0<'A' &+1 1' .-' & A' D1' , <-.' <-A' <@@ D'0' @'1.1' 1&C@1 9 &=' D1' 1-<@ '10 < A' ! & =1' ? 10 &=' '@' KD'BD' D1 ' & ' <-' &=' D1>' '.D ' =<@@ '-' & ' '-B? # ' =& B1' &=' D1' < ? 1' ><A1' D1' LL=' 1< ' &=' &? ' 0<'A' i &+1 >.?' & A' D1' , '-.9 <0' = ' D1' BB?C< '&-' & ' L1 A01' &=' D1' ='B1' &=' D1 '==' >.1 ' D<-' # ' < 1< 9 =' /')' = &>' D1' " < ' -1L ' <= 1 ' ==a' @< ' -=' @@' &?@0 9 '-' D1' LL+H 1< ' &=' D1' A. -' ==' & 0<'A' &+1 1' .-' & A' D1' '' -.' D< ' -&K' '0 9 '@@ D1' ! 1<0 ' &=' D1' ? '=' B< '&-' &=' ?' <A ' D1-' 1-0?' -.9 '-' D1' '.D 8<-A8 K1- '1 D 1< ' &=' &? 9 0<'A' &+1 1' .-' & A' &+'A1A' <@K< 0 ' D< ' # ' D'0 C 101- ' A'-<-B1' D1 ' -& ' -&-1' &=' D1>' 0D<@@ #1' 1LB?01A' & ' A'0BD< .1A' &=' <- ' & D1 ' ==1-B1' & ' D>.' A&-1' # ' D1>' & '<- '&=' D1>' '-' D1' '0<'A' ='B10 ' &+'A1A' <@0& ' D< ' -&-1' 0D<@@ #1' <>1 B1A' =& ' <- ' ?' ' B& > >1-B1A' # ' D'>' <.<'-0 ' <0 ' 1 0&-' & 1B&+1 ' D1' 0AA' 1-<@ 9 =& ' D1' @& -.1 ' &BB?C '-.' D<-' # ' D1' 1< 9)' = &>' D1' " < ' <= 1 ' D1' <'A' " < ' &=' @@' &?@0 9 '@@ D1' 0<'A' ! 1<0 ' &=' D1' ? '=' B< &-' &=' 2?' <A

4 ' 'E ' ')7 B') ' NR + L' RJ, 8
K)8 _

' 5 ('
' <0>&BD1' <0 :] ' J

&B!-#!Z&-' V +!Z -/' -# 2 &"!< &-' E&-*' 7 @ !-' -/' !&" b../Z 0-/!" .+.0" . ' &2 "!22[

9 F D1 1<0 A'+1 0 >'0 ?@1A 1 0&-0 &=' D1 &?- '10 <-A 1'.-'& '10 & <@0 '-' F<@10 <-A &=' D1@ "? BD '&=' <-B<0 1 @ '-' D1 0<'A < 0 A<'@ ' <a1 <-A ?01 & <a1 A'+ 0 1 0&-0 ` @<B10 'P <-A D< 1@0 '-' D1 0<'A &?- '10 "? D '<-A 1'.-'& '10 # ' D1 <>1 <-A ?-A1 ' &@&? ' &=' C'0 100 KD1 1 D1 ' D<+1 -& <--1 '&=' !11 1'.-'& @ -& ' <?01 & <a1 0?BD "'0j 100 #? '=1'.-' `0&>1P = '&-0 <-A ^?< 1@0 & . '1+1 <-A A10 & ' D1 =<' D=?@ 1&C@1 &=' D1 <'A &?- '10 "? BD ' <-A 1'.-'& '10 <.<'-0 ' < +' 1<0&-' <-A &-j 0B'1-B1'G <-A D1 <=& 10<'A 1 0&-0 E&&A0 <-A D< 1@0 0& <a1-# '-.'<-A'B< '&?'&=' D1 &?- '10 "? BD '<-A 1'.-'& '10 `<=& 10<'A KD1 1 D1 ' #1 <a1-@ & A'+1 0 & D1 ' @<B10 '-' -.@<-A <-A F<@10G <-A ><- ' '>10 =& ' <a'-.' &='0?BD "'0 10010 <-A '-' 10'0 <-B1 &=' D1>@ . 1< ' 001>#@'10 &=' 1&C@1 '& 0 <'>0 <-A ? A1 0 #1 ><A1 <-A D<A <-A '='' #1 -& ' D<0 '@ ' 1>1A'1A & D1=' -B&-+1-'1-B10 #1 @'a1 D1 1&=' &' `C? 0?1GOP &=' KD'BD <a'-.0 '-.'-.0 <-A <'-.0''-' D'0 1D<@=' -& /')' ?-'0D>1-' ' KD1 1=& 1 D1 1&C@1 &=' D1 0<'A < 0 A<'@ '<#&?-A'<-A'-B 1<01 ' ' `1+'@ E&+1 -<-B1G

: M20# ' E&-*Z 2 +' ;!' B!+.-@

? '0<'A &+1 1'.-' & A D1 , '-.@ K'@@'-.' & 1>1A 1>'010 # ' A+'B1 001-@ <-A a? #& ' ' <=& 10<'A D< D' & A<'-1A <-A 0 <#@'0D1A ' D< ' '=' 0> ' 1 0&-' <a1<-' E&&A0 D< 1@0 & 'C1 0&-' '-' <-' &=' D1 0<'A &?- '10 "? BD ' & ' 1'.-'& '10 <-A D1>' # '-.' & ' B< ' &' <-' C@<B10 &? ' &=' <-' &=' D1 0<'A &?- '10 ? BD ' & ' 1'.-'& '10 '-' KD'BD D1 ' #1 <a1-@ &' <-' D1 ' @<B10 D< ' <@@ <--1 ' &=' 0?BD <a'-.0 '-.'-.0 & ' < '-.0 0D<@@ #1 D<A <-A ?A.1A ! 1@&- G <-A '=' <-' 1 0&-' D1 1&=' #1 `A?@ P < <'-1A %<-' <--1 @ D<' D1 0D<@@ D<+1 L1B? '&-' <0 < 1@&-' 0D&?@A D<+1G <-A D<' -&' ><--1 ' &=' 1 0&-' '-' D1 <'A &?- '10 "? BD ' & ' '& '10 -& ' '--&-1 D1 ' @<B10 '-' F<@10 `< 10 1A9 P <BB?01A & ' -A'= 1A &=' ! 1@&- @ '-' <- ' <--1 ' 0D<@@ #1 <A>' 1A &' A'0B@<'>' ?' &=' D1 0<'A &?- '"? BD ' & ' 1'.-'& @ KD1 1 D1 '0 0&' -A' 1A <BB?01A & `< 10 1A /P &j +'A1A <@K< 0 D<' -&' 1 0&-' 0D<@@ #1 '-A<><.1A -& ' . '1+1A # ' D'0 A'-<-B1@=& ')' <a'-.@ K' D'-' D'0 11@ & '=& ' <- ' ><--1 '&=' <?01 KD1 1= h' "'0 100 & ' <a'-.' '0 @<K=?@ # ' D1 &>>&-' <K' &=' -.@<-A D'0 A'-<-B1 &'1-A? 1'=& ' !'+1' 1< 0@

% ." &.-Z ;@ &#!"Z . ' ! 02.8& 2=

@ F D1 1<0 A'+1 0 F< 1 8 <', ==0@ 1< BD1 0@ &>C &@@1 0 &=' D1 1< BD@ <-A' & D1 ' D1' ' "1C? '10 <-A 1 +<- 0 ?A D'-' D1' & 0 &=' D'0 <= -@ <-A' 0C1j B'<@@ ' K' D'-' D1' & 0 =' C&K1 @ @ >&? D@ "< @ >&- D <-A &&@@ # ' &@&? '&=' D1' ' ==' B10 A<@@ ' `A& F &-.=?@@ ' <a1@ P ' # ' &-0 <'-' &=' "'0 10010@ <-A' 10 0 ?C&-' D1' D'C0@ < .10@ <@1-.1 0@ <-A' & D1 ' 1001@0@ E&&A0@ <-A' =1 BD<-A'010 &=' D1' ,'-./0 `@'1.10P 1 BD<-0 &=' '-0 0<'A 1<@>@<-A' <>&-.'<'@ & D1 ' ?C&-' D1' , '-./0' `D1.1'0P 1 BD<-0 &=' E<0B&@.-@ >1-@ 1@<-A' E?1 -01 @<-A' 1 01 @ '-' D1' 'B&>'-.' 0>A .&'-.' '-' D1' 0'@A' & 0@ . 1<' D< .10@<-A' >C&0'@ A&-0G D<' '0 &'0< @ =&'1+1 ' '1B1'&=' ` 10B@& D/P '+' A' =&' 1+1 ' ?-A 1A'&=' <-+<0'+"A' =& ' D1' F 1'.D ' &=' 1+1 ' &-' &=' &-' L'' A' <-A' 0&>1 '>1' >& 1G <-A' a1K'01' &=' <'@ & D1 ' E&&A0' <-A' 1 BD<-A'010 =' D1' 0<'A @'1.1' 1&C@1@ <-A' & D1 ' 1 BD<-0 0' &=' D1' , =&./0' > ' G '-A # ' 0?BD' K & .=&@ "'0 10010@ 10 0@ D< .10@ <-A' >C&0' '&-0@ D1 ' A&' A'0B&? <.1' D1' <'A' 1 BD<-0' = 11@ ' &' B&>1' '- &' D'0' 0<'A' 1<D-@ <-A' &' ` 1 ?>9 JP' B&- < ' &' <@@ <K' <-A' EB<'0B'1-B1@

@>' H' B&>1' A' 01\' ><+<'@L' .&+ 1<' C0&-10 1 ' -' &?- 110' I' !'10 &'<@L' 1-' <=10' I' A1' "?BD'1' A1' <-1<0 =@ 1-' @10 A' \' C< '10 A1' &? '1-' <C 1' = .-&-' I'? 1-' A<CC 1-A 1' A' 01\' C0&-1\' F1-0 I' BD< '1?L' 1-' @1\' A' \' &?- 110 "?BD'1' I' = '1 @ C' @1' @&?-1' I' 0&?#\' B&@&? ' A1' A10 1001@ &-' '@0 &?- ' -?@@ ><, ' =11' = ' 1 ' -1' B<?01' A<CC 1-A 1' '1@ A10 1001@ >1<0=1 -&-' <BB'&-0 I' H?1 1@L' <'. 1+&' ' I' A10 & 1 ' @1' =&'<@@ C1&C@1' A10 A' \' &?- 110 "?BD'1' I' =/'10@ 1-B&?- 1' a ' 1<0&-' I' B&-0B'1-B1G 1 ' @10 A' \' C0&-10 1-0 I' BD< 1?]' <'-0" C '01\' <>10-1-' I '1< '&-' D& 0 A1' @1\' &?- 110 "?BD'1' I' '10' &?' B1?GB &-' C '01\@ <0 < C0 A' 01\' @'1?L' 1-' -.@1 1' I' E<@10G 1' >&@ =&' \' C ' C '01' A1' 'ALA108 10 10@ I' 1-' 10'0 1-B1' A1' B1?L@ .0?-A1\' <001>#@1K' A? C1&C@1' '& 10 ><D1 >10 I' >? A 10 0&-G =<' \@ I' 1?1\@ 1 ' %' '@ -1' 0&' ' D<0 '=' -1-' >-1A'1\' <?R0' 1-B&-+1-'1-B1<' 1-' < C 0?'1 ' 0&-' 01>#'<D@10G A1' H?1?L' C '010 <>108 -0-B1\' I' B< '<?-B10 1=' B1 ' C< '1' -?=" A?1' C?-'00D18 'D1-' 1 @ B<?01' A1' H?& ' @1' C1&C@1' A1' @10 A' \' C< '10 ? -1@>1-' D<#?-A&-' I' 1-B 1B<' ' 1-' ><+<'@L' .&+O8 -<?-B1;' @=& A' ' @1') & ' =1\' Ca-' 01m +&'@<-' 1'-18 A'1 ' C' <A+'01' <001-1' I' <?= & ' 1' 0?@0A' \' <A' & A1'.-1' I' 10 <#@'1@ '0" < B- ' C0&-1' C 1@.-1'<0B?-0 #'1 0 BD<@ '1?L' -' C0&-1' 1-' <0B -' A1' @10 A' \' &?- 110 "?BD'1' ?_0'10@ I' B1?L' <>10-1' ?'B< @1'<0' <0B?-0 1?L' D& 0 A<0B?-' A1' @10 A' m &?- 110 "?BD'1' &?' =@1 0' 1-' H?1?L' '@0'0&-' C '01\' <0 <0B?-0 <? 0 @'1?L@ H' &? \' > ' 1\' '1@L' C '010 <>1>/-B1\' &?' B< '<?-B1\'0&'1? ' 1?1\' I' <A ?.8 .'1\' =1@&-@ 1 ' '<0B?-1' C0 -1' A1-' 0&' ' < 1'-' <B+>18 >1-' H' '@ <'1 ' 1L1B?B'&-' B&>1' =1@&-1' < &'1 @ 1 ' H' -? ' >< ' C0&-1' 1-' @1\' A@ m &?- 110 "?BD 1' &?' = '10@ D1' 1-' -?@=1\' <? 0 @'1?L' 1-' E<@10@ < 1 1\' <BB?01\' &?' 1-8 A' 1\' A1' =1@&-@ <B?-1>B-' 0&' ' <A>'01' <' A10B@<' I @D& 0 A?' A' ' &?- 1' "?BD'1' &?' _ 1' &?' ' 10 ' <'-0" 1-A' 1\' <BB?01\' &?' < 1 \' ? +1?' &? \' =&' \' H' -? ' C0&-1' C ' C 1'.-1 ' A10 1001' A1A1'-0' 0&-' =&1@ &?' C ' <0B?-' ><51' B<?01' C' H& ' A10 1001' &?' C ' 01' 10 ' @&'< ' C' @<' B&1' =1 ' "1 .@1 1@ C' B10 ' A'-W B1' 0&' ' 1-A<><.1' ?' . 1+RG 10 ' &@A1-0-B1' A1-A 1 ' C/' B -a1' <-0

, >' B&>1' A'+ 01\' <'@@'=0' A1' =1<?10' . BD1&? 0' &?-8 &?@@ ? 0' A?' 1 BD1' I' <?R0' @1 ' A1C? 110' I' +=& \' A1A1'-0' @10' C& 10' A1' B10 ' &@<D-1@ I' 1-' 1 C1B'< ' A18 A1>\ 1m' C& 1\' A1' !&K1 @ @ >>&? D@ "1->&? D' I' &@1@' C' B&@&? ' A1' @1? ' &='B10' & B1C?0>1-' BD< .1&-' I' -&-' & 1' A1' &' 1-' <? 1@ C' A? 1001' A1' A10 10010' I' < 10 10' 0? ' @10' -'1=0' < .10' <@=1-.1 0' <?R0' +108 01<?@L' 1-0 I' ', BD<?-A'010' A10' @'1.10' A?' & '' BD<?-' \' A1' B10 ' A' ' &'<@>1@ 1' 1- 1' &? \' <?R0' 0? ' @10' @'1.10' A?' A' ' & ' < BD<?-' \' A1' E<0B&'.-1' E? <-' @<-A' E1 -101 ' I' E1 01 @ 1-' @&? '+1-<?-' ' <@<-' 1-' =1\' A' \'?SG I'.W?-A\' BD< .1\' '' <C&<B'&-0@ B10 <00<+&' 'C ' B '?-' C1B1' A1' 1B1B@& D' '' 'A@ C' BD?-' 1- \' A1' <-+<0@ +PA@' C' C& 0' A1' BD?-' &-1 ' A1' !1 1' L' @T ' I' <01?-1' = \' C@?'0@ I' 01>#@<#@1>><' ' A1' &? \' <?R0' 1-0' I' I D<?-A'010' A1' @10' A' \' @'1.10' I' A<?R0' ' BD<?-' \' A<>' 11' - 1' A' '0 + .-' ! ' @1' & G 1' C' '1@L' 1-?' &0 \' A10 1001\' < 10 10' BD< .10' I' ' >C&0'B'&-0' 1>C1BD1-' =10' A' \' ' BD<?< \' = <- D1 <1-' <' +1 ' '1-' B10 ' A' ' &'<@>1@ 1' <' C<001 @ 1 B&?- 1' &? \' =1 10' I' B&-0B'1-B1

&?- 110' I' ! '10' &'<@L' 1-' <=10' I' A1' "?BD'1' A1' <-1<0 =@ 1-' @10' A' \' C< '10' A1' &? '1-' <C 1' = .-&-' I'? 1-' A<CC 1-A 1' A' 01\' C0&-1\' F1-0 I' BD< '1?L' 1-' @1\' A' \' &?- 110 "?BD'1' I' = '1 @ C' @1' @&?-1' I' 0&?#\' B&@&? ' A1' A10 1001@ &-' '@0 &?- ' -?@@ ><, ' =11' = ' 1 ' -1' B<?01' A<CC 1-A 1' '1@ A10 1001@ >1<0=1 -&-' <BB'&-0' I' H?1 1@L' <'. 1+&' ' I' A10 & 1 ' @1' =&'<@@ C1&C@1' A10' A' \' &?- 110 "?BD'1' I' =/'10@ 1-B&?- 1' a ' 1<0&-' I' B&-0B'1-B1G 1 ' @10' A' \' C0&-10 1-0 I' BD< 1?]' <'-0" C '01\' <>10-1-' I '1< '&-' D& 0' A1' @1\' &?- 110' "?BD'1' I' '10' &?' B1?GB &-' C '01\@ <0' < C0' A' 01\' @'1?L' 1-' -.@1 1' I' E<@10G 1' >&@ =&' \' C ' C '01' A1' 'ALA108 10 10@ I' 1-' 10'0 1-B1' A1' B1?L@ .0?-A1\' <001>#@1K' A? C1&C@1' '& 10' ><D1 >10' I' >? A 10' 0&-G =<' \@ I' 1?1\@ 1 ' %' '@ -1' 0&' ' D<0 '=' -1-' >-1A'1\' <?R0' 1-B&-+1-'1-B1<' 1-' < C 0?'1 ' 0&-' 01>#'<D@10G A1' H?1?L' C '010' <>108 -0-B1\' I' B< '<?-B10' 1=' B1 ' C< '1' -?=" A?1' C?-'00D18 'D1-' 1 @ B<?01' A1' H?& ' @1' C1&C@1' A1' @10' A' \' C< '10 ? -1@>1-' D<#?-A&-' I' 1-B 1B<' ' 1-' ><+<'@L' .&+O8 -<?-B1;' @=& A' ' @1') & ' =1\' Ca-' 01m' +&'@<-' 1'-18 A'1 ' C' <A+'01' <001-1' I' <?= & ' 1' 0?@0A' \' <A' & A1'.-1' I' 10 <#@'1@ '0" < B- ' C0&-1' C 1@.-1'<0B?-0' #'1 0' BD<@ '1?L' -' C0&-1' 1-' <0B -' A1' @10' A' \' &?- 110' "?BD'1' ?_0'10@ I' B1?L' <>10-1' ?'B< @1'<0' <0B?-0' 1?L' D& 0' A<0B?-' A1' @10' A' m' &?- 110' "?BD'1' &?' =@1 0' 1-' H?1?L' '@0'0&-' C '01\' <0' <0B?-0' <? 0' @'1?L@ H' &? \' > ' 1\' '1@L' C '010' <>1>/-B1\' &?' B< '<?-B1\'0&'1? ' 1?1\' I' <A ?.8 .'1\' =1@&-@ 1 ' '<0B?-1' C0 -1' A1-' 0&' ' < 1'-' <B+>18 >1-' H' '@ <'1 ' 1L1B?B'&-' B&>1' =1@&-1' < &'1 @ 1 ' H' -? ' >< ' C0&-1' 1-' @1\' A@ m' &?- 110' "?BD 1' &?' = '10@ D1' 1-' -?@=1\' <? 0' @'1?L' 1-' E<@10@ < 1 1\' <BB?01\' &?' 1-8 A' 1\' A1' =1@&-@ <B?-1>B-' 0&' ' <A>'01' <' A10B@<' I @D& 0' A?' A' ' &?- 1' "?BD'1' &?' _ 1' &?' ' 10 ' <'-0" 1-A' 1\' <BB?01\' &?' < 1 \' ? +1?' &? \' =&' \' H' -? ' C0&-1' C ' C 1'.-1 ' A10 1001' A1A1'-0' 0&-' =&1@ &?' C ' <0B?-' ><51' B<?01' C' H& ' A10 1001' &?' C ' 01' 10 ' @&'< ' C' @<' B&1' =1 ' "1 .@1 1@ C' B10 ' A'-W B1' 0&' ' 1-A<><.1' ?' . 1+RG 10 ' &@A1-0-B1' A1-A 1 ' C/' B -a1' <-0

, >' B&>1' A'+ 01\' <'@@'=0' A1' =1<?10' . BD1&? 0' &?-8 &?@@ ? 0' A?' 1 BD1' I' <?R0' @1 ' A1C? 110' I' +=& \' A1A1'-0' @10' C& 10' A1' B10 ' &@<D-1@ I' 1-' 1 C1B'< ' A18 A1>\ 1m' C& 1\' A1' !&K1 @ @ >>&? D@ "1->&? D' I' &@1@' C' B&@&? ' A1' @1? ' &='B10' & B1C?0>1-' BD< .1&-' I' -&-' & 1' A1' &' 1-' <? 1@ C' A? 1001' A1' A10 10010' I' < 10 10' 0? ' @10' -'1=0' < .10' <@=1-.1 0' <?R0' +108 01<?@L' 1-0 I' ', BD<?-A'010' A10' @'1.10' A?' & '' BD<?-' \' A1' B10 ' A' ' &'<@>1@ 1' 1- 1' &? \' <?R0' 0? ' @10' @'1.10' A?' A' ' & ' < BD<?-' \' A1' E<0B&'.-1' E? <-' @<-A' E1 -101 ' I' E1 01 @ 1-' @&? '+1-<?-' ' <@<-' 1-' =1\' A' \'?SG I'.W?-A\' BD< .1\' '' <C&<B'&-0@ B10 <00<+&' 'C ' B '?-' C1B1' A1' 1B1B@& D' '' 'A@ C' BD?-' 1- \' A1' <-+<0@ +PA@' C' C& 0' A1' BD?-' &-1 ' A1' !1 1' L' @T ' I' <01?-1' = \' C@?'0@ I' 01>#@<#@1>><' ' A1' &? \' <?R0' 1-0' I' I D<?-A'010' A1' @10' A' \' @'1.10' I' A<?R0' ' BD<?-' \' A<>' 11' - 1' A' '0 + .-' ! ' @1' & G 1' C' '1@L' 1-' ? '&0 \' A10 1001\' < 10 10' BD< .10' I' ' >C&0'B'&-0' 1>C1BD1-' =10' A' \' ' BD<?< \' = <- D1 <1-' <' +1 ' '1-' B10 ' A' ' &'<@>1@ 1' <' C<001 @ 1 B&?- 1' &? \' =1 10' I' B&-0B'1-B1

&B!-#!Z&-' V +!Z -/' -# 2 &"!< &-' E&-*' 7 @ !-' -/' !&" b../Z 0-/!" .+.0" . ' &2 "!22[

: M20# ' E&-*Z 2 +' ;!' B!+.-@

3!"2.-Z &-/&# !/' !"!. ' 2 +' -.'/&2#+ &1

'&-*' .'" +'+ 7 0' &2 "!22!2

% ." &.-Z ;@ &#!"Z . ' ! 02.8& 2=

@ 1&2*.'!1 0-#!)' "! &/)' .+.(7! '/0!' $) &' <Z '"+'5 -

? !% ." &.-.02+@' # "*!+'' -/'R E! ' 'K (@+&!*!1!-' '#"!#!#+. ' 22! ("'&H L8

&? 1’ &? \’B?0 ?>10’ I’ 0?#0’A’10’ A?1\’ <’ -=1’A’ ’ = ’ @1’ & ’ <-’1- ’0>1- ’ A10’01\’ A’ \’ B?0 ?>10’ I’ 0?# A 10’ I’1-’.0?-A’A<><.1’ I’< 1 ’0>1- ’A1’@10’A’ \’ ’ BD<?- \’ I’@&? ’ 0?BB1 0&? 0’0’?&-’A?1’ 1>1A’1’1- ’ -1’ &’ ’1 1¦ ’<A+’0’ <001- ’ I’ <?= & ’ 1’ A100?’0A’ \’ & A1’. -1\’ 10 ’ I’ 10 <#@’1\’H’ @10’A’ \’=’BD<?- \’ @&? ’0?BB100&? 0’ I’ B@ ?-’ A1?L’ A1’ &? \’ ’1@0’ 1- ? ’1\’ A10 10010’8< 10 10’ BD< .1\’ I’ ’>C&0’B’&-0’ A10?’0’ 1B 1\’ <==<’ 10’ <’1?L’ &?’ <’ <0 ?-’ A1?L’ 0’#’1-’ C’ ’1@L’ <’@@’=0’ A1’ 1<?0’ 1 BD1&? 0’ I’ >- @@&? 0’ A?’ 1 BD1’ B&>1’ C’ &@@1A#&? 0’ A10’ A’ \’ ?0 ?>10’ I’ ?#0’A’10’ &?- &@@&? 0’ AB’ @1\’ >10>10’ ? +1’&? 0’ A10’ ?0 ?>10’ I’ ?#0’A’10’ 4’ A?’ 1 BD1’ <aa1 0’ &?’<0B?-R’<?,0’ &==’ 0’ @& -’ A1C? 11’ &?’ M+0- \’ C’@1? ’ B&><?-A>1- ’ & ’ <0B?-’ A1?L’ 1-<C 10’ C1?0 1- ’ <+&’ ’ 0? ’ B1 ’ .1 <@@’ # 1=’ A1’ 10C<0’ 1 B&?- 1’ ’1@L’ >1=’?0&? 0’ I’ B@’?-’ A1?]’ 0& &-B’@<’ =& ’ ’1’ A1’@1 ’ 5 ’ <’ 1B&?, 1 ’ 1-B&?- =1’ B1 L’ I’ B#?-’ A1?]’ 1-0” A1’ B1&’ BB- A]’ L@’=’G’ I’H’@1\’A’ \’ BD<? \’@&? ’0?BB100&? 0’ I’ B@’?-’ A1?L’ 1-0” . 1+1\’ B&>1’ A1+0- ’ 10 ’ A’ ’ C 0?1 & ’ ’ ’ C 0?1 <’ @<’ A’ ’ # ’1=’ A1’ F10C<0’ 1-B ?- 1’ @1\’ A’ \’ >1=<’0&’0’ I’ BD?-’ A1?L’ A1’ ’1@L’ 1’ ? ’10’ A’0 10010’ < 10 10’ BD< .10’ I’ ’>C&0’B’&D0’ <’-0” <==<’ 1L’ `B& >1’ A1 ’10’A’ ’A1A1<0’ A1?L’ >&’0’ C BD<-’<C 10’ ’1@L’ 1-8’ ? ’10’ A10 1 010’< 10 10’ BD< .10’ I’ ’>C&0’B’&-0’ <==<’ 10 P’ C’1?L’& ’<0B -’ A1?L’B&>1’A1 D’10’A’ G’ 1’1-’B<0’ / ’ @10’ A’ \’ BD<?- \’@&? ’ 0?BB100&? 0’ &H’ <0B?-’ A1?L’ -1’ C ?1- ’ >’1’@1’A’ ’ # ’1=’A1’ 10C<0’ A1’ ’1@L’1- ? ’10’ A10j 10010’ < 10 10’ BD< .10’ 4 ’ ’>C&0’B’&-0’ A10?’0A’ \’ 1-8’ B&?- 1’@10’ A’ \’ >1==<’0 ? 0’ -1’ -?@@’ A1?L’ A1A1’-0’ @10’ A’ \’ A1?L’ >&’0’ H’ @& 0’ ’@ @’ < ’ BD?-’ <? 1’ C0&-1’ A1’ @10’ @’1.10’ A?’ & ’ <’ C? 0?1 ’ @1’ Aa’ # ’1=’A1’ 1 C<0’ A1’ ’1@L’ 1- ? ’10’ A’0 10010’ < 10 10’ BD< .10’ I’ ’>C&0’B’&-0’ <==<’ 1\’ B&>1’ A1+[’@ ’ 10 ’ A’ ’ 1-B&?- 1’ &? \’ ’1@L’ >1=8’ =<’0C? 0’ I’ BD?-’ A1?L’ 0&@&-B’@<’ =&’’ >1’ A1’@1 G’ I’ <’ 1B&?, 1 ’ 1-B&?- 1’ B1?]’ I’ B@’?-’ A1’ 1?L’ 1-0” A1- ’ B&-+’A 1\’ L@’=’ ’ @1’ & ’A<+&’ ’ 1- ’ @’>1’ >&a11’ I’ ’@’ ?’ @\’ H’ C? 0?1 ’ +& &’1 ’ &?’ , &’1- ’@<? 1’ >&a1

)’ - !”+&-!/’.-’ !’ 6.+’ <SO!’ %’.$-

` &’ D1’ . 1<’ C 1 ?A’B1’ & =P’ &? ’ 0<’A’ & A’ D1’ , ’-.@’ ’-’ &0@’&=’ D’0’ 0)’ ?0 &>0’ <-A’ ?#0’A’10@’ <-A’ &’ D1’ . 1<’ ’ “<><.1’ /)’ &=’ D1’ 0<’A’ 1 BD<- 0’ <-A’ D1’ ’ ?BB100& 0@’?’ @10@’ A?1’ 1>1A ’ D1 1&=’#1’D<A’ ‘’-’ D1’ 0<>1@’P’ # ’ D1’ A+’B1’ 001- ’ <-A’ ? D& ’ ’<=& 10<’A ’ ’’0’& A<’-1A’ <-A’10 <#@’0D1A ’ D<’ D1’0<’A’ 1 BD<- 0@’ <-A’ D1’ ’ ?BB100& 0@’ <-A’ 1+1 ’ &=’ D1>@’ &=’ <@@’ 0?BD’ - ? ’10@’ “’0 10010@ 10 0@’ D< .10@’ <-A’ >C&0’ ’&-0’ <= ’ 1’ 1- 1A@’ &’ D1’ ‘ > <A1’P’ &’ D1>’ & ’<- ’ &=’ D1>@’ <0’ K1@@’ # ’0?BD’ F < 1 ’ <’@’==0@’ 1< BD1 0@’ <-A’ & > C &@@’ @1=0’ &=’ D1’ 1< BD@’ <0’ # ’ & 1A & ’ &=’ D1’ 0<’A’ ?0j & >0’ <-A’ ?#0’A’10@’ & > C &@@1 0’ &=’ D1’ 0<>1’ ? j +1 & 0’&=’ D1’ ?0 #>0’<-A’ ?#0’A’10@’<-A’&=’ D1’ 1< BD@’ <Ba1 0@’ & ’ <- ’ & D1 ’ ==’B1 0@’ & ’ D1’ ’ “1C? ’10’ & ’ 1 +<- 0’ # ’ D1’ ’ & > > <-A > 1- @’ & ’<- ’&=’ D1>’D1 10’ <= 1 @’ >< ’ D<+1’ D 1?C&=’ <’ .1-1 <@’ F ’ ’8&=’ 10C<00’ <.<’-0’ 0?BD’ ==1-A1 0@’ <-A’ 1+1 ’ C=’ D1>@’ <BB& A’-.’ &’ D1’ ! & >’&=’‘ D1P’ <_@’<-A’ &’ 1B&+1 ’<.<’-0’ D1>@’ <-A’ 1+1 ’&=’ D1>’ D1 1&=’0&’ &-+’ 1A@’ ! & ’ &?-A0@’ <-A’ D<’ D1’0<’A’ 1 BD<- 0@’ D1’ ’ ?BB100& 0@’<-A’1+1 ’ &=’ D1>’ &’ . ’1+1A’<0’<=& 1’ ’0’ 0<’A@’ 0D<@@’ C? 0?1’ D1’ 0<’A’ F ’ ’ &=’ 10C<00’ <.<’-0’ D1’ <’A’ ==1-A1 0’ <-A’ 1+1 ’ &=’ D1>@’ =& ’ 0?BD’ - ? ’10@’ “’0 10010@ 10 0@’ D< .10@’ <-A’ >C&0’ ’&-0’ 0&’ A’ #1’ ‘ > <A13 P’ <0’ <=& 1’ ’ ’0<’A@’ K’ D’-’ K&’ &- D0’-1L ’<= 1 ’ 0 BD - ? ’10@)’0 10014@ 10 0@’ D< .10@’ <-A’ >C&0’ ’&-0’ &’ #1’ ‘ > <A1’ VP’ # ’ D1>@’ & ’<’’ ’ &=’ D1>@’ <<’#1=& 1’ ’0’0<’A’G’ <-A’’-’B<01’ D<’ D1’0<’A’ 1 @’ BD<- 0@’ D1’ ’ ?BB100& 0@’ & ’0&>1’ &=’ D1>@’ A&’ -& ’C? 0?1’ D1’0<’A’ F ’ ’&=’ 10C<00’ &=’ 0?BD’ - ? ’10@’ “’0 10010@ 10 0@’ D< .10@’ <-A’ >C&0’ ’&-0’ <=& 10<’A@’ <.<’-0’ D1’ 0<’A’ ==1-A1 0@’ -& ’ <- ’ &=’ D1> ’ F’ D’-’ D1’ 0<’A’ K&’ &- D0@’ D< ’ D1-’ ’’ 0D<@@’ #1’@<K=?@’ &’ 1+1 ’ & D1 ’ 1 0&-’ &=’ D1’ , ’-. 0’ @’1.1’ 1&C@1’ &’ C? 0?1’ D1’ 0<’A’ F ’ ’ &=’ 10C<00’ &=’ 0?BD’ - ? ’10@’ “’0 10010@ 10 0@’ D< .10@’ <-A’ >C&0’ ’&-0@’ &’ #1’ ‘ > <A1’0P’ <0’ ’0’ <=& 1j 0<’A@’ <.<’-0’ <@@’ 0?BD’ ==1-A1 0@’ <-A’ 1+1 ’ &=’ D1>@’ <BB& A’-.’ &’ D1’ ! & >’ C=’ ‘ D1P’ <K@’ <-A’ &’ 1B&+1 ’ <.<D’0’ D1>@’ <-A’ 1+1 ’ &=’ D1>’ D1 1&=’0&’ &-+’=@’ ! & ’ &’>A0@’ D1’, ’-.’ &’ D<+1’ \)’ D1’&-1’ <@=@’ <-A’ D1’ ’ D1 ’KD’BD’ K’@@’ C? 0?1@’ D1’& D1 ’ F =

) . ’ ! ‘” +’ #02 0 1 !2’ -/’ 20; 2&/&!2’ /0!’0 - .+’ <2! / !’ ’ -/’ &-/ ! 0-#!’ Z / .-! <’ !”. & ’ ’ 6 :]Q KŁ’RJ L8

1 BD<- 0’ <.. ’1+1A’ D1 1# ’><8 D<+1’<’ F ’ ’ &=’ 10C<00’ <.<’-0’ D1’ ==1-A1 0’

&’ 1B&+1 ’ % ’ &?-A0

.’ ’ ’-’ D1’ ”1=<?@ %& D1 ’ 1 0&-0’ >< ’ 0?1’=&’ D1’ 1-<@

)) Qf ! ’ 0 ’ ’ -/; , I

-’ ”*&-!’ 6. 0+&

BE’=! ’ 7 ’ 8< ’&E3#’%’ ’\ ’ :

(--.’ H#’&”

=1’ & <’. -1’ _’ @1’ & ’ 1- ’ C?’0’ @1’ B&-H?10 1’ 0’0>1@’L0&” ’C< @1’=’1- ’ 1-?\’<’ F 10 >’1-’@1’=10 ’ A1’ 1’- ’ 1&-< A’ <-’ A1’ 0&-’ 1’. -1’ +’- ’ -&+10>1@’ A1@’ <A+=1’ I’<001- ’A10’= 0’10C?1@L’ I’ 1>C& 1@L’ I’<’@<’ 1H?10 ’ A10’ &10’1-’ >10>1’ @1’ C@1>1- ’ <0 1>#@1\’S Í C’ @<?B@’ & ’ 1’A’B1_@’<A’& A1’. -1\’ I’ 10=<#@’1R’A’1010’ & A1-3-B10’ I’ 10 < ? \’ 1-’@<’ =&? >1’H’ 1-01 1

’=’1>1- ’ H’ B&>1’ @1’ =<?@L’ <’ &? ’ &D-’ <A1’ -A><-’ 0& ’ >10> ’ &D-’ & >1 @’-<A.<’ 10’ -&>11\’ \C1 1 ’” A?’ , 1- @’@1’`01C ’0>1 P’ &? ’ A1’ ?A1’ <-’ A?’ 1’. -1’ --=1’ A’ ’ ’@1’ & ’ +’- ’ &1C ’0>1’ ’ ? DK1 a1’

)6-- * ’ * % ’ $ ’.! &21!

S%’ ’ D ’D5D ’ > C(!

, ’ &+1 1’.=@’ & A’ D1’ , ’-.@’ 1 = ’ D1’ ’L D’ <= 1 ’ D ’ &#H?10 @’ <’ D’0’ < @’<>’<’ D&@A1-’ < ’ F 10 >’-0 1 @’ ’-’ D1’ !1<0’ &=’ <’- ’ 1&-< A@’ D1’ ’-1@’ <-A8 K1- ’1 D’ 1< ’ &=’ D 0’ 1’. -@’ # ’ D1’ A+’B1’ <-A’ 001- ’ &=’ D1’ & A0’ C’ ’ ?<@’ <-A’ 1>C& <@@’ <-A’ <’ D1’ 1H?10 ’ &=’ D1’ & > > C-0’ =&’ D1’ 0<>1’ !<=@’<>1<’ <001>#@1A@’ <-A’ # ’ D1’ ? D& ’ ’ &=’ D1’ 0<>1@’ D< D’ & A<’-1A’ <-A’ 0 <#@’0D1A’ A’+1 0’ A’-<-B10@’<C’A’ < ? 10’ ’-’ D1’ !& >’ KD’BD’ =&@&K1 D

! @’ F D1 1<08@ 1’=1@01’ <’ & ’ &D-’ <A1@’-<>’-.’ D’>01@=’ &D-’ & ’>1 @’ @< 1’ `-<>1A’ P’ <C <’-’ &=’,1- @’ D1’ `+’’ ”< ’ &=’ ?@ @’ =#1LL+’?’ 1< ’ &=’ D1’ 1’. -’ &=’ &? ’ 0<’A’ &+1 1’. -’ C A’ D1’ , ’-.’ < ’ &? DK< a@

U # ++! /’ ’ ’&&H , ’ ’

Ó D’0’ < @’<>1- ’ K<0’ # ’ +< ’&?0’ ! & &.< ’&-<’ 1&- ’-?1A’ &’ G’ < ’ ” ’*%:*’ 8

+ ’ ’ A

’-’ D1’ &?- ’ &=’ ? 1 ₲ <-A’ D1’ ’L ’ ”< ’ &=’ ?@ ₲ D1’ <=& 10<’A’ 1< ’ =&=’ D1’ 1’. -’ &=’ &? ’ 0<’A’ &+1j 1’. -’ & A’ D1’ , ’- .9P’ < ’ ` ”1C =& A P’ <-A’ &BD10 1 ’ ’-’ D1’ &?- ’&=’ , 1- ₲ <@0&’ < ’ D1’ &K -’&=’ &BD10 1 ’ <=& 10<’A₲ <-A’ 1@01KD1 1₲ D ’ L ’ <-A’ L’ ’ ”< ’ &=’ ?@ ’ D1-’ -1L ’1-0?’-.₲ K’ D’-’ D1’ 1<@>’&=’ - .@<-A₲ =1@01@ ’ <-A’ <’ & &?0@ ’ ’><.’-1A’ D1’ , ’- ./0’ ”1< D₲ ”10 ?Bj ’&-’ <-A’ ?#+1 0’&-’ &=’ D’0’ 1<@>₲ ’-’ .< D1 ’-.’ <-A’ @1+ ’-.’< . 1< ’ ?>#1 ’&=’ D1’ , ’-./0’ 1&C@1₲ <-A’ D1-0’ 1LB’ ’-.’ &’ ><a1’ -0? 1= ’&-’ <.<’-0 ’ D1’ , ’- .₲ =<@01@ ’ <-A’ <’ & &?0@ ’ ’-’ D1’ @<B10’ <=& 10<’A₲ <-A’< ’ D1’ ’>10’ #1=& 1’ 1B’ 1A₲ <.<’-0 ’ D1’ , ’- ./0’ & <@ ₲ &K -₲ <-A’ ”’. -’ ₲ <-A’ D1 1’ <-A’ D1-’ ><A1’ <-A’ @1+’1A’ F< ’ =<@01@ ’<-A’ <’ & &?0@ ’<.<’-0 ’ D1’ , ’- .’<-A’D’0’ ’.D -100₲ -A’ 0)’ D&?.D’ D1’ #1’ A1<A’ <-A’ >’0A’’1+1A0’ 1 ’ # ’ D1’ <K’ &=’ D1’ <-A’ -& ’C?-’0D1A;’ ? ’0<’A’ &+1 1’. -’ & A’ D1’ , ’- .’ B&-0’A1 ’- .’ D1’ 1>’010₲ &’ C? ’ 0?BD’ <’ & 0’ ’-’ `=1< RP’ ’-’ ’>1’ B&>’-.₲ <-A’ ’ ` <+’- .3P’ &=’ D’’C01@=’ <-A’ &=’ D’0’ 1<@>₲ # ’ A+’B1’ &=’ ’’0’ & A0’ C’ ’ ?<@ <-A’ 1>C& <@ ’D’ D1’0<’A’ < @’<>1- ’<001>#@1A₲ <-A’< ’ D1’ 1H?10 ’ &=’ D’0’ & > >&-0₲ D< D’ & A<>1A’ # ’ D1’ ? D& ’ ’ &=’ D1’ 0<’A’ < @’<>1- ₲ D< ’ D1’ 0D<@@ #1’ &=’ D101’ 1<0&-0’ < <’- 1A₲ <-A’ D<’ # ’ D1’ <>1’ ? D& ’ ’D1’0D<@@ =& =1’ ’ & D1’ , ’- .’ <@@ D’0’ E&&A0₲ <-A0’ <-A’ 1-1>1- 0₲ 1- 0’ <-A’ &0010A&-0₲ KD’BD’ D1’D<A’ D1’ 0<’A’ ’.D D’ ”< ’ &=’ ?@ 0@ & ’ <= 1 ₲ <-A’ D’0’ @&&A’B& ?C ₲ <-A’A’0<#@1A’ =& ’1+1 ₲ <-A’ &@#1’B<@@1A’ <’ =1@01’ <’ & ’ F ’ D’-’ = 1’ 0<’A’ 1<@>’ =& ’ 1+1

₲ ’ ’0’ A<’-1A’ <-A’ 0 <#@’0D1A’ D< ’ D1’ <j ? 1’ ><A1’ D1’ 1B&-A’ 1< ’ C=’ D1’ `0<’AP’@< 1’+’= & ’&? ’ <-A’ -&#@1’ , ’- .’ 1- ₲ !< D1 ’ &’ &? ’ &+1 1’. -’ & A’ D1’ , ’- .’ D<’ -CK’ ’0₲ ’=’ D1’ 1<a1 0’ ’ ?B1’ <-A’ <=181&-A?= ’?C&-’ D1’ A ” 1<’<-A’ & D1 ’ @<B10₲ 0D<@@ 0 <-A’ ’-’ D’0’ ! & B1’ <-A’ #1’ B&-=’ >1A₲ &’-’-.’ &’ D1’ 0<>1₲ D<’ D1’ D<-B1@@& ’ &=’ -.@<-A’ =C ’ D1’ ’>1’ #1’-.₲ B<@@’-.’ &’ F >’ &-1’ =’ D1’ D’1=’ ?0 ’B10’ &=’ D1’ &-1’ 1-BD’ & ’&=’ D1’ & D1 ₲ 0D<@@ D<+1’@’a1’ &K1 ’<0’ D1’ &-01 +< & 0’ <-A’ & D1.’ &>>’00’&-1 0’ ’-’ D1’ 0<>1’ < ? 1’ 0C1B’=’1A’ D<+1₲ <+’- .₲ KD1 1’ ’ ’0’ B&- <’-1A’ ’-’ D1’ 0<>1’ < ? 1₲ W’ D<’ ’=’ D1’ & ’ D1 ₲ ?C ’-’ KD&>’ &>C@<’- 0’ 0D<@@ #1’ ><A1 ’ A& -& ’ <CC1< ’ ``&=’ <3P’ B1 <’-’ ’>10’ <0’ ’0’ D1 1’B&- <’-1A₲ D<-’ D1-’< <C’<0’ <-A’ , L’.1-A’ 0D<@@ #1’ <K< A1A₲ <.<’-0 ’ DD-’ & ’ D1>’ ?C&-’ KD&>’ 0?BD’ &>C@<’- ’ ’0’ ><A1₲ <0’ K1=’ &@ D1’ D1 ’=’&=’ D1’ C?- ₲ &=’ D1’ KD’BD’ D1 ’ #1’ ?CC&01A’ &’ #1₲ <0’ &’ D1’ D1 ’=’&=’ D1’ `0<’A ’ &?- ₲ FD1 1’ D1’ 0<’A’ &>C@<’- ’0D<@@ #1’ ><A1₲ J’ ’’0’ & A<’-1A’ ’-’ D’0’ C 101- ’ < @’<>1- ₲ D< ’ `D1’ 0D<@@ <K< A\P’<’ F ’ ’C=’ <C’<0’ &’ $ ’ D1 ’=’&=’1+1 ’&=’ D1’0<’A’ &?- ’10’@B&>j ><-A’-.’D’>’ ?C&-’ <’-’&=’<’ ?-A 1A’ &?-A0’ &’ ><a1’ &C1-’C &B@<>< ’&-’ ’-’ ` D1’ ’+1’ C?- 10’B&- ’-?<@@ 9/PX D<’ D1’ < ’ & ’ < ’10₲ `?C&-’ KD&>’ D1’ D< D’ B&>j C@<’-1A hP’ 0D<@@ <CC1< ’ <’ <’ B1 <’-’ ”< ’ B&- <’-1A’ ’-’ D1’0<>1’F ’ ₲ #1=& 1’ D1’0<’A’ D<-B1@@& ₲ ’=’ D1’ &>j C@<’- ’ &=’ D1’ 1>’010’ #1’ ><A1’ #1=& 1’ D’>’ <= 1 ’ D1’ !& >’B&- <’-1A’ ’- D1’ 0<’A’ < ? 1’2 0-A’ ’=’ D1 ’<CC1>’ -& ’<’ D1’0<>1’ ” < ₲ D<’ D1-’ D1 ’0D<@@ #1’ < <’- 1A’<-A’ B&-+’<’ &’ D1’ < ’0&’B&>C@<’-’-.₲ &=’ D1’ ==1-B10’ ’-’ D1’ 0<’A’ &>C@<’- ’0C1B’=’1A’₲ -A’ D<’ D1’0<’A’ < ’ &>j C@<’-<- ’0D<@@ #1’C 1=1 1A’ ’D<+1’ L1B? ’&-’ #1=& 1’< ’ ’ `’ 1’0’-’D<A’=& ’ D1’ , ’- .’/’P’ ’-’ D’0’ 1D<@=₲ -& K’ D0 <-Aj ’- .’ D<’ D1 ’0&’><a’- .’ ” 1=<?@ ’#1’<= > - 1A’&=’ 1<0&-;

1-’@1’ &?- 1’A?’ ? 1 ₲ I ’ -&+1 >1’ & ’ A1’ ?@’1’ <-’ A1’ 0?’0A’ ’ <’ ” 1 =& A’ I ’ &?BD10 1’ 1-’@1’ &?- 1’A?’ , 1- ₲ <?L” <-’ &D1D10 1’ 0?’0A’ ’ V I ’ <’@@&? 0’ @1’ A’0>1’ I ’ ? \’>1’ & ’ A1’ ?@’1’ A&-H1<’ C0BD1’-’ 1-0?<- \₲ A1’-0’ 1’ &’<@>1’ ” 1 - .@1 I 1₲ =<?L 1>1- ’ I ’ < &? &?0>1- ’ ><.1-<’ @<’ >& ’A?’ & ₲ A10 ?B1’&-’ I ’ 0?#+/0’&-’ A?’ B10 ’ A’ ’ &’<@>1₲ 1-’ B&’@@< ’ 5R @1+<- ’ . ?-A1’ -&># 1’ A?’ C1&C@1’ A1’ & ’ 1 ’ 1?@L’ 1LB’ <- ’ A1-0? 1 ’ 1-B&?- 1’ @1’ & ’ =1?]1>1- ’ I ’ <’ &? &?0>1- ₲ 1-’ @10’ @’1?L’ <+0- A’ \₲ 1 ’ @10’ 1>C0’ A1+h- ’ 1B’ 1\₲ 1-B&?- 1’ @1\’ ’<@ 1’B& &--1’ I ’ A’ .-’ 1’ A?’ & ₲ I ’ ’@@1&H10’ I ’ <A&-H10’ =’0 ’ I ’ @1+<’ .?1 1’ =<?L1>1- ’ I ’ <’ &? &?0>1- ’ 1-B&?- 1’ @1’ & ’ I ’ 0<’D<? 1001₲ 1 ’ B&>#’1-’ ** <’ H’ ’@ 10 ’ >& ’ I ’ >10BD1+1₲ 1-H?& 1’C’ @<’@1 ’ A1’ @<’ A’ 1’ R 1’ -’1-’ C?- 0₲ =1’ A’ ’ =’0 @1’ & ’ B&-0 A1 <- ’ @1\’ CD-’001\₲ C ’ #& ’1 ’ =’1@L’ <’ &? 0’ 1-’ A&’’ 1’ <’-0” <=’A 1’ 1-’ 1’-C0’ <+1-’ ₲ I ’ C ’0<@+<B’&-’ A1’ @? ’ >10>1’ I ’ A1’ 0&-’ 1<>1₲ C’ <A+’0’ A1]’ 801\’ _ 0’ 0C?1@L’ I ’ 1>C& 1@L’ 1-’@1’A’ ’ C< @1>H- ’ <001>#@1\’ I ’ <’ @<’ 1H?10 ’ A1’ 0 \’ &10₲ <A’ & A1’. -1\’ C’ @<?= & ’ 1’ A?’ A’ ’ C< @1>1- ₲ H’@ 0&=’ < 1’D ’ A1’ 10 1\’ 1<0&-0₲ I ’ C’ >10>1’ @<?B & ’ 1’ =& =<B1’ <?’ & ’ &A \’ 1\’ #’1 0’ R 10’ 1- \’ 1- 10’ I ’ C&00100’&-0₲ H?1?L’ ’@’ <+&’ ’ @1’ A’ ’ ` ’01C ’0>1’ ’P’ &? ’ A1’ ?@’1’ &?’ < 0₲ 1 ’ 0 -’ 0<-.’ B ?C 1\’ I ’ A’0<#@10’ C? ’ &? \’ &? 0₲ I ’ <’ -&>1=\’ A1’-\’ @1’ A’ ’ &’<@>1’ =<?@L’ <’ & ’ C ’ &? ’ & 0

, >’ & A1’. -1\’ 10 ’ I ’ 10 <#@’1\₲ ’ @1’ < ? 1’ =1’ ’ <-’ 01B&-A1’ A?’ ’=’<A.<’ 10’ +’B & ’&?0’ I ’ -&#@1’ & ’ 1- ’ C’1 ’ <’ >1’ & <’. -1’ _ ’ @1’ & ’ H’ & 00 ₲ A10’ ? &C& 0’ A1\’ 1?1\’ I ’ 0<?=1&-A’ 10’ 0? ’ @1’ D<? 1’ >11 1’ I ’ <?R0’ ’)(?L₲ 10 &’01’ 1-’ 0<’ =& B1’ I ’ 0&=’ B&-=1 >1\;’ <A &?0 <- ’ < B1’@’ H@1’ ED<?-B1 1 ’ ” 1 - .@1R 1’C ’ @1’ 1>C0’ 10 1<- ₲ <CC1@@<-0’<’@? ’ ?-’ A10’ BD’1=\’ ?0 ’B1\’ A?-1’ <-a’ &?’ A1’@<? 1₲ 1=’ 01>##@<#@1’ C&@< ’ 0’B&>1’ &- ’ @1\’ B&-01 +<8’ ? 0’ I ’ <? 0’ &>’00’&-1 ’ 1H’ >10>1’ B0 < ? 1’ 10C18’ B’=’1m₲ <?=’&?’’@ 10 ’ B&- 1-?1\’ 1-’@1’ A’ ’ 10 < ? 1₲ H’ 0” ’@ &?’ ’@0’ 0? ’ H 1?L’ B&>C@1’- \’ = &- ’ =1’ \₲ -<CC’1 1 1-’ > 1’ <@ I 1=-’ 1>C0₲ 0” B&>1’ ’@ (0’@<’ B&- 1-?\₲ ’A&-H10’ = &’1=’ ’ <.< A1\’ <C’<0’ I ’ L’.1-A₲ 1-B&?- 1’ @?’ ’ &?’ B1?L’ 0? ’ H” &?’ H?1?L’ ’@ 10 ’ B&>C@1D’1₲ <?L’#’1-’ <’ ’0B&?- ’ A?’ &?- 11’ A1’ H ” ’@0’ 0&- ’ 0?CC&01\’ A10 1’ &>1’ <@’ ’0B&?- ’ A?’ &&- 11’ &?’ @<’ A=1’ B&>C@1’- 1’ = &’1 ’Q? 1@ & A1’. -1\’ 10 ’ (-’ 110 ’ C001- ’ C< @1>1 ’ ’ H’ ’@ 0&=’ <.< A1’ # ’1=’ A?’ <C’<0’ <@ ’0B&?- 1’ A1’ BD10B?-’ A1’ @1\’ A’ \’ E&?- 11\₲ B&><?-A<- ’ @? ’ 0? ’ C1 -1’ A1’ 1- ’ ’ ’ <==’A 1’&, ’CB@<>< B@&-’ 1-’ B -a’ &?- 11\’B&-8’ ’-?1@L₲ H’@<’ C< ’1’ H?’ C< ’10’ 0? ’ H?1@’ &?’ H?1?L’ ’@ 10 ’ B&>C@1’-1’<CC’1 .1’ (?’<CC’1 .1- ₲ <@ 1’-’ &’ B&- 1-?\’ 1-’ >10>1’ @1’# ’1=₲ A1+D’ ’@1’ A’ ’ D<?-B1@@1 ’0” @1’ B&>j C@1’- 1’ A1’ @10’ CD-’0010’ 0&=’ =<’ ’ A1+W- ’ @? ₲ 0&@&-B’ @<’ =#? >1’B&- 1-?\’1-’ @1’ A’ ’ 10 < ? 0 1’0” ’@0’ -<CC’1 . -’ > 1’ <’ >10>1’ @1’ & ₲ H’ A&-H10’ @0’ &’1C’ <= 1’- \’ I ’ B&-+’= \’ <@ C< ’1’ 1-0” B >C 1’. 3-’ A1’ @1\’ &==1-01\’ ’ 1-’’1’ A’ 1’ B&>C@1’C ’10C1B’=’1\0 1 ’H’ @<’ A’ ’ C< ’1’B&>8’ C@1’.-W- ’ 0&=’ C==1 1’ A<+&’ ’ 1L1B?B’&-’ A1K ’ ’ ! ’ ! ! ’CR’1’ & ’ A<+&’ ’ 1-’ B10’ C< ’1₲ -’1- ’&#0 <-’ H’ ’@0₲ H’ 1<0” =1 > ’ A1= ? 1’ = &- ’ < 1’- \’ A1’ 1<0&-;

’6-- * ’ * %+’ $ ’.! &21!

. -’ ! &- !/’ . ’ ”! 2.-’H

B.” !& 0”!’ .-’20# ’ &-/!”

-#!++.’” -/’ &! ’ 02 &#!’2 +# ’ !’ +#E!’ 0”&2/&# &..-’ 2’ ’!’ !’ . 2!”’ .”Z 0-/<” !’ 2 &/’ 0 !=

3”.#!22 * &-2 !-/!”2

’5 !- ’ ’ # 2 .’ ”!L’ .-/0 2’ #.- &”1!/

-#!++.’” -/’ &! ’ 02 &#!’2 +# ’ !’ +#E!’ 0”&2/&# &..-’ 2’ ’!’ !’ . 2!”’ .”Z 0-/<” !’ 2 &/’ 0 !=

N ’ ’7 4 5 = ’E’ (’ = ’ &” L’7 6E ’ ’ ’7 W @ *( )’ ’ C N H’5 ’ ’E’ = ’7 7 R ’ K* + 8) 7)’ <P’ M (” 5’38) ’ ’@21 5 77’ 2 ’ ” D(’ .$.$”

1 ' & AA . - 1R' 10 ' H' - ?@@ C0&-1 9 H' <CC'1 ' 0? ' <0B?-' '1@ B&- C@1'- ' &?' # '1=' A10 1' <. A1 9 1-B .1' 1-' @<' C1'-1' A1' 1<0&-' B&- 1-?\' 1-' @1' A' ' 10 < ? 1 ' ? +1?' <?L" H' 0" <0B?-1' C &-1 9 1-B&?- 1' H1 ' A1@ # '1=' &?' CB@<>< B'&-' , <' <.< A1\ 9 0&' ' D& 0' A1' B10 ' &'<@>1 9 C' =11 1' A1' BDO?-A'01' &?' 1-' U ,+'B1' A?' & ' C' 0&-' B&><?-A18 C'1- 9 @1' 1>C0' A1' @<' C 11 ' CB@<- <A&-' =<' ' 0? ' '1@L' # '1=0 H' A&-H10' >10>1' @<' C0 -1' -1' C' ' 1-A<><.1' C' B10 ' <Q@1 9 '-0" H' '@ <CC'1 .1' C0&-<@>1- ' A1+3- ' @1' & ' 1-' 0<' D<?-R'1' A1A1'-\' ?-1' >&'0' C0BD1'-' <C 10' 0&-' 11-?1' 1-' B10 ' &'<@-@1' <' 10C ?-A 1' <' '1@L' B&' 8' C@1'- \ ' ? +1?' <?L" H' -?@@ C&00100&?' +' <'@@1 ' -1' 1 1 =& D' A<0B?-' -'1=' &?' +100'<?' H" -1' M <' C&- ' C< '1' <' <0B?-' A1@' &==1-B1 9 -1' CB? B=' B&?-01'@@&' -1' <=#1 &' <' @1' =<' ' 1- 9 ' -1' 0B'1- 1>1- ' -1' +&@?- < '1 <1- ' 10B1'+1' &?' . -1' <0B?-' C<C1' A1' @1\' #'1-0' 1-0" &###1\' I ' A10C&'@1\' 0? ' @1' >11 1 9 0&' '1-A<><.1\' C' B10 ' & A1-W- B1 ; 1 ' H' 1 0 ' &=A1-/= B1' &>1- ' I ' , <' 1-'80<=& B1' 1' C <1 ' & ' A1' B10 ' 01- ' C< @1>1- ' I ' -1> 1' A1+ - 9 1 ' 1-A?8 1 <' C' B -a' <A0' C0BD1'-' 1-0?<- \;' 1 ' H' -?@@ BD< 1' A?' C< A&-' 1-' < 0' <' .D@- '1 0' 0&' ' <@@&?<#@1' <' <0B?-1' C0&-1' &?' C0&-10' C ' <0B?-0' &==1-11\' ='? 1\' B&- DA1' A'" A' ' 10 < ?

'' ' @' <' H' B&>1' . >A1\' 1-B&- 1-'1-B10' I ' A<><.1\' &- <+10-?\' &'=1' -?A8)' @<' ' 11' " 1+0K%9 I ' C@?00&0' 1-' 1>C0' <+1-' ' 0&- ' 01>#@<#@1<' A1+1C'1 ' 0" C+'0'&-' E -1' 0&' ' 1?1 9 C ' B1&' H' A' 01\' I ' R 1'-\' C0&-1\' ' 1\1'-0' A?' A' ' ' 11' &- ' C? BD<01\' 5 ' .<' . -1\' A?' -R1' &+<' .''1' = ' @1' & ' 01 <@L' 10' C< 1- 0 9 1?L' C' 1- ' A10 1' 1L1>C \' A1' @&=='B1\' I ' &BB?C<B'&-0' A?' <' <@ 1' '0B&?- 1' D<>8' #@1 -' &@@1A ' A10' A'0>10' I ' H? -0\'>1\9 =1' ' 1\1'-' A?' A' ' ' 11' C ' +1-' ' <08 C< @1>1- \' -=1' A' ' &' <'. -1' @1' & ' I ' 01\' #1' 1 ' A1'= \' @<' A' ' ' 11;' R1' B ' &, <'. -1' @1' & ' B&-0'A1 <- ' @1\' MO>'001\' C' <A+'0' I ' <001- ' A10?'0A' \' <A' & A>. -1' I ' 10 <#D1 9 H' &? \' '1@L' 10' C< 1- \' <' <0B?-' C0&-1'&?' C &-10 9 & 1' ' 18' \1'-0' A?' A' ' ' 11' ? H" 1-' 1>C 8 <+1-' ' , &- 9 =<' 1\' ./?- 1\' ' <==<' 10' &?' <' .0?- '1 0' 0&'1- ' &'A10' I ' A1' -? '1 1B ;' 1 ' ? 1' B1&' 0" <0 ?-' T 1\1'-' A?' A' ' ' 11 9 & 1' 1 <- 9 &?' H')' 1>C0' <+1-' ' , <' C BD<B1' <A>1 ' C 1'. -1' &-' .<'. '1' <0B?-0' '1@L' 10' C< 1- \9 C' 1 ' ' A10 1' 1L1>C 1\' A<0B?-' A1' @1\' &==' B1\' &?' &BB?C<B'&-0' A1+H'=A' \' A1'-\' >10>1' @<' ' 11 9 =& =aB1' L@ ' Q @?-1' >&' 1' <' -=1' A' ' T?' @1' & ' I ' a? 1' >&' 11' <' @10' <' 1' I ' ' 1\1'-0' A?' A' ' ' 11' I ' @1? ' ?BB100&?00 1 ' H' @1' <' 1' C ' @1' 1>C0' 10 1<- ' I ' 01\' ?BB100&? 0' ^ ?1 ' I ' P ' C>001D ' <+&' ' I ' ><' - 1-1B'<BB'&-A?' A1= 1 9 <' A1-'<?-A1 ' @1\' A' \' L@' '' ' 1-B&?- 1' BD10 ?-- ' A1' @<' A' ' C0&-' &?' C0&-\' '1@L' ' 10' C< 1- \' A1L1>CB'&-' C BD<0<- ' <A'C1 <- ' @. -<- 9 `&?' .<'. -<- 0 4 @?-1' >&' 11' A1' @10' A' 1' L ' ' <'-0" 1B&, 1\' 8A10 1' <@ &1C0' -=1' A' ' _ ' @1' & ' ' 01\' D1' 1\9 5;' @<? 1' >&' 11' A1' @10' A' \' H< <- ' '' ' A10 1' <@ &1C0' A1@ <' 1' A?' A' ' ' 11' C ' @1' 1>C0' 10 1<- 9 I ' A1' @1\' ' 1\1'-0' A1' >1 -1' @<' ' 11' I ' 1? ' ?BB100&? 0 1 ' H' 1-' '1@L' <BB'&-0' A?' A1 1' 1-' <C 10' <' C 0?1 \' @1\' C< '10' A1=1-A<- \' -1' @1' C< '1' A1=1-A<- ' 1-' -?@@ >< ' 0&'1- ' -1' 0&' ' <A>'0' <' @1? ' @1

- !"+&-!/' .-' !' 6 . ++

]

-A' ' ' '0' & A<'-1A ' D< ' -&' 1 0&-9 KD'BD' <CC1< 1 D' ?C&-' <- ' 0?BD' &>C@<'- ' & ' F ' ' &' #1' <K< A1A9 0D<@@ '-B? ' D1' <'-' `<.<'-0 ' &? ' &+1 1' . -' 6 #' D1' , '- . P' &=' 1<0&-' B&- <'-1A' '-' D1' 0<'A' < ? 1 ' &+'A1A' <@0&9)' '=' <- ' 1 0&-9 <.<'-0 ' KD&>' 0?BD' F ' ' & ' &B@<>< '&-' 0D<@@ #1' <K< A1A9 #1' &? ' &=' D'0' 1<@>'# ' !1< ' &=' 1 BD<-A'01 9 & ' '-' D1' , '- ./0' 1 +'B1' # ' D'0' &> ><-A>1- 9 <' D1' '>1' &=' D1' !' 0 ' &j B@<>< '&-' ><A1' ?C&-' 0?BD' F ' 0 9 D<' D1-' D1' 0<>1' 1 0&-' 0D<@@ -& ' #1' '-A<><.1A' # ' D'0' B 9 0&' D<' D1' <CC1<' C1 0&-<@@ ' #1=& 1' D1' , '-.' '-' D'0' D<-B1 ' K' D'-' <' &- D' -1L ' <= 1 ' D'0' B&>'-.' '- &' D'0' 1<@>9 &' <-0K1 ' &' 0?BD' &>C@<'- 0 9 &+'A1A' <@0&' D<' -& K-1 9 'B ?<@@1 9 -& ' 1 1 8=& D' &=' <- ' D'C' & ' 108' 0A9 KD'BD' 0D<@@ = & ' #1' C< ' &' <- ' 0?BD' ==1-B1 9 -& ' &B? 1 9 &?-01@@& 9 -& ' #1 & ' &' D1' A&'-.' D1 1&=9 `- 'a-&K'-.' -& ' K'@@'-.@ ' 1B1'+'-.' -& ' <a'-. P' <- ' < ' &=' D1' E&&A0' 0&' &##1A' & ' 0C&'@1A' ?C&-' D18 1<9 0D<@@ #1' '-A<><.1A' # ' D'0' = ;' -A' D<' D'0' A@8' -<= B1' 0D<@@ #1.'-' > A' 0D<@@ #1' '-' D'088 ! & B1' A'1C' 0 ' " < ' &=' D'0' C 101- ' < @'<>1- ' <-A' -& ' #1=& 1 9 <-A' 0D<@@ 1-A? 1' # ' ! '+1' 1< 0' -1L ' 1-0?'-.;' -A' D<' -& D< 1 '&=' < A&-'D1 1<I K' &'#1' . <- 1A' 0D<@@#1' >@&K8 <#@1' &' <- ' 1 0&-' & ' 1 0&-0' =& ' <- ' ==1-B10' A&-1' B&- < ' &' D1' 0<'A' < ? 1

9 F D1 1<0' . 1< ' =-B&-+1-'1-B'10' <-A' " <><.10' D<+1' B&>1' -&K' &=' @< 1' '-' D1' ' '&=' & a9 <-A' >& 1' '-' '>1' &' B&>1' #1' @'a1' &' D<CC1-9 '=' &+'<&-' D1 1&=' #1' -& ' D<A@ =& ' D<' A'+1 0' <-A' B1 <'-' 1 0&-09 ' 'j \1-0' &=' D1' 0<'A' ' 9 D<+1' C? BD<01A' <-A' .& 1-' &=' &? ' &+1 1' . -' & A' D1' , '-.9 01+1 <@ 1 1 0' < 1- 0 9 =' 0)' D1 1# ' &' #1' 1L1>C 1A' &=' D1' ='B10' <-A' BB?C< '&-0' &=' < & <@ 9 D1 '==9 D< '#1 @<'-9 &@@1A@& ' C=' " '0>10' <-A' ?'-\'0>10 9 <-A' ' \1-' &=' D1' 0<'A' a ' &' C&>1' &' D1' < @'<>1- 0' &=' &? ' &+1 1' . -' & A' D1' , '-.' <-A' D'0' 1' 0 9 K' D'-' D1' 0<'A' ' ;' ? ' 0<'A' &+1 1' . -' & A' D1' '-.9 B1- 1 '-.' D1' 1- -010 9 # ' A8+'11' <-A' 001- ' <=& 10<'A0' D< D' & A<'-1A' <-A' 0 <#@'0D1A ' D< ' <@@ 0?BD' 1 1 0' < 1- 0' `. <- 1A' & ' &' #1' . <- 1A' &' <- ' C1 0&-' & ' 1 0&-0 9 -& ' ' '\1-0' &=' D1' 0<'A' ' 9 ' KD'BD' '-' '>1' B&>'-.' 0D<@@ #1' ><A1980 P 0D<@@ #1' +&'A9 <-A' &=' -&-1' ! ==1^;' -A' ==@& 1#+1 ' D< ' '=' <- ' ' '\1-' &=' D1' 0<'A' ' 9 D&K' #<-.' & ' KD'BD' '-' '>1' B&>'-.' 0D<@@ #1 9 A&' C? BD<01 9 <A>' 9 <a1 9 & ' .1 ' <- ' 0?BD' 1 1 0' < 1- 0 9 ==' 1 1# ' &' #1' 1L1>C ' &=' <- ' &=' D1' ='B10' & ' BB?C< '&-0' <=& 10<'A0' K' D'-' D1' 0<>1' ' 9 0D<@@ =& =1' ' ! & ' &?-A0 9 D1' &-1' <@=' &' &? ' 0<'A' &+1 1' . -' G KA' D1' , '-.9 <-A' D1' & D1 ' A=' &' D1' < & ' <-A' ' '\1-0' C=' D1' 0<'A' ' ' <-A' D1' ' ?BB10j 0& 0' G -A' D<' D1' < & ' =& ' D1' '>1' #1' -.' <-A' D'0' ?BB100& 0' `>< ' <-A' >'.D / P' D<+1' <-A' ><'- <'-' <-' A '&-' &=' " 1# 9 &' A1><-A' D1' 0<'A' ! & ' &?-A0' <.<'-0 ' 1+1 ' &=' D1' 0 ?A' 1 0&-' & ' 1 0&-09 C? BD<0'-.' <A>' '-.' <a'-.' & ' .1 <@.' ?BD' 1 1 0' < 1- 0' &=' L1>C '&-9 D1' &-1' <@=' &=' D1' 0<'A' ! & ' &?-A0' 0& 1B&+1 1A9 &' #1' &' D1' 01' &=' &? ' 0<'A' &+1 1' . -' & A' ' 1' , '-.' <-A' D'0' 1' 0 9 <-A' D1' & D1 ' <@=' &=' D1' 0<'A' ! & ' &?-A0' &' #1' &' D1' 01' &=' D1' < & ' &=' D1 9 0<'A' ' ' =& ' D1' ' >1' #1' -.9 <-A' &=' D1' '\1 0' &=' D1' 0<>1' ' '<-A' D> ' ?BB100& 0G <-A' D<' '-'0?BD' A' &-0' &=' " 1# ' D1 1<= 1 ' &' #1' C? 0?1A9 D1' < '10' " 1=1-A<- 0' N)' '-' -&' K'01' <@@ #1' <A>' 1A' &' D1' ' <K

K ')' . . '" 7 ! @-*+@' -. '" G ' N$ ' ' .+0- "&!+@' "!2#!@'!' ." E!' ']] ' . (!@' U) .' -@' 2. -!' ." 2. -!2 -. 7 !' & ! j !&-2' . ' !' 2!&/' & ! ! ' . '" 1 ' & ' ' @ 1 !' #. -&@-*' 2 +' ; ! ' 1 /!' *" 0- !/' ." .' K' " ' ' ; !' 1 /!' ." *" 0- !/' L J 1 @' '-!' !' "&!'/! !-/ 0-'

'3 !-2' !%! 1 &-*' 3!"2. -Z' ". 1' #!Z' &-' A. "E' /!#+ "!/' .&/

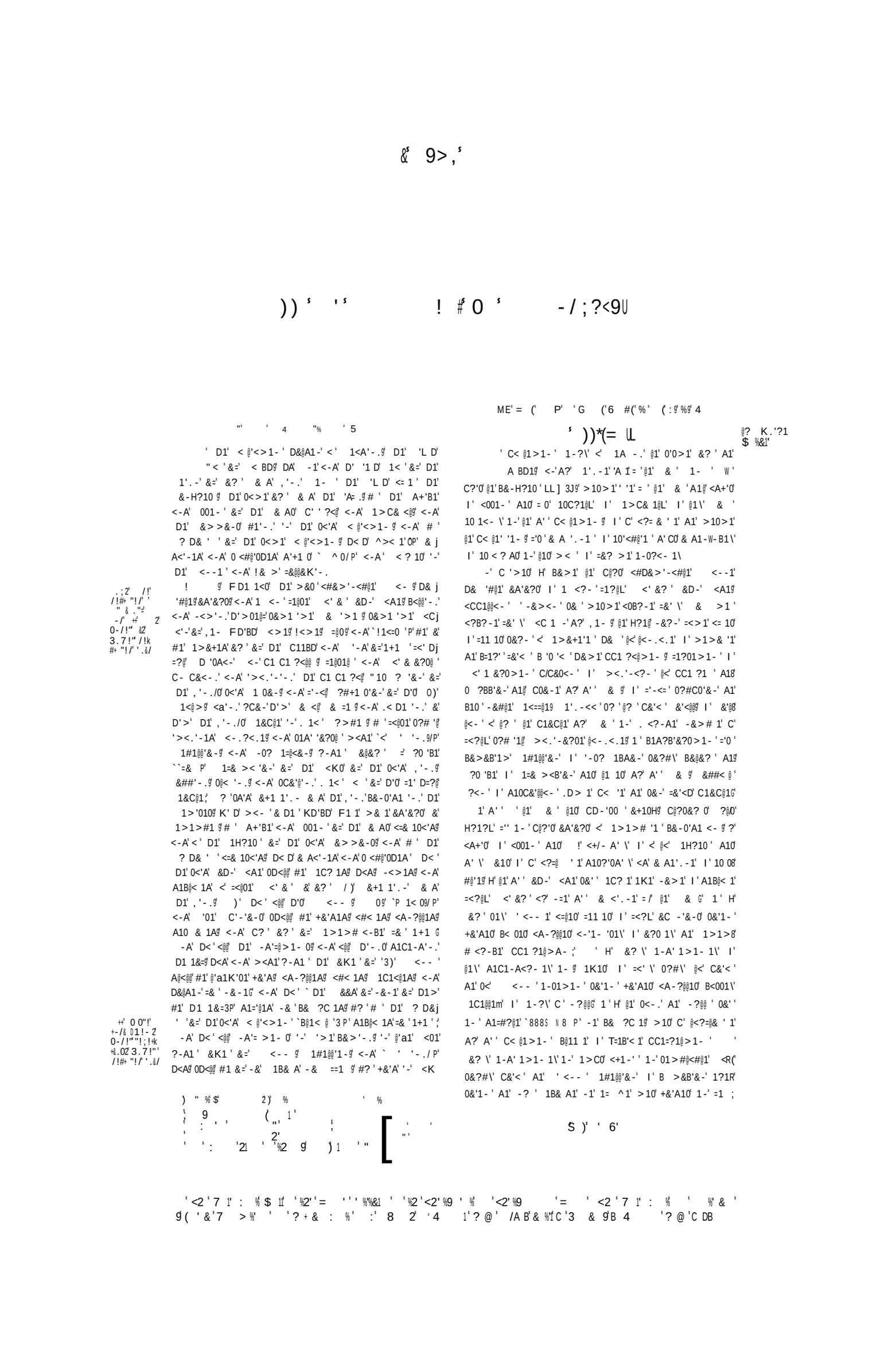
3!-&/ @' . -' . ; &-&-*' 20# ' 3 !-2

'&-*' .'" 3!"2. -Z' .0 ' . ' !'6! +1

3". '&2. ' .'" 7-!"Z' . ' & 2 ' C#

. -&-0 -#!' . ' &Z' 6

. ' 3 "/. -' ++. 7 ;+!



' &?\' @1Ơ C1 'B'&-Ơ #<'@'1Ơ <?' A' ' & ' 1=' 0&-' A< 1'-' C< @1>1-' 1 ?\' < F 10 ''" @1' 0'0 -1' &? ' A1' &+1>@J' <-' A1' 0&-' 1'. -1' L] 'L ' 1-B&?- 1' 0<' 1 F 1- ℊ C' @? ' -'1- ' <. 11R' 0&'1- ' C '01\' I ' 1#& 1\' 1-' &#@'+'&-' D& Ơ A1' 1>1># <?-B1ℊ B<0 1\' +&'A1Ơ <A-?@@1\' I ' <-'1- '01\' CC1= 1@>1- ℊ B&>1' BD&01' C C&01' 1-B&?- 1' "'1 @ I ' &-0B'1-B1ℊ 1-B&?- 1' 0<' 1.<@'1' 10 < 1' I ' C 1> -1 @B1' I ' <+? " A'0@'&-& <#@1' I ' -'1- ' 1 '-<#@1

1>' C ' B1&' H' @1' & ' -=1' &, < -' I ' A1+ - ' B10 ' 1>C0ℊ 0? ' R -Ơ 0?. .10 '&-Ơ I ' &>C@<'- 0R@ =<' \' <?L'ℊ #'1-' <'@? 'B&>1' <'@1\' 8=0' A1' `0& - '5' &?-01' '0? ' A'1010Ơ C0&C10Ơ A1' B10 ' 0&-' 1<>1ℊ C ' .= -A10Ơ '& 10Ơ 1L & 0'&-Ơ &C 0'&-Ơ' I ' . 1+&?Ơ &==1-010Ơ C' 1?L' =<' \ℊ 1-B&?- 1' 0< C1<Ơ I ' @1 10ℊ <0' +001m' A1' 0&-'@' 1 . 1' C1&C@1ℊ <A' A&-1' 1-' B&><?-A1>1- ℊ <?L'#'0-' C' 01\' # '1=Ơ A10&?#\' 0&-' .0?-A1' 01< ' A&>1' C' 01R' ' 10' A&' C '+1' 01<@eℊ A<CC< &1 ' A1+ ' @? ' 1-' 0<' D< 0 1' &?' A1+W- ' D< ' I ' 0&-' A' ' &?-0<'@'ℊ<Ơ i 1'-Ơ &? Ơ 1-' >10>1' @1\' # '1=Ơ &?' !1Ơ B&- 1-?\ℊ < 10C&-A 1' A1' @1\' C2>'001\Ơ @10' H?1?L' B&ℊ ><?-A1>1- \' 0&?-' I ' C@?0&? Ơ =&' \' &?-' 10 1\' A 0&ℊ #1'1\ℊ 1-' B&- 1>C ' A?' & ' -=1' &, < -' 5' 1 '. ?-A1' A<><.1' I ' A1@< 1' A1' 01\' A' \' B&>C 1'. -0- 1\' 1-' B1@ ' C< A1;' =1' A' ' ' @1' & ' B&-0'A1 <- ' @1\' C <'001\' C' @<?I & ' 1' 0?'0A' ' <A' & A1'. -1' 1-<= 1' I ' 10 <#@'1ℊ H' 0" <0BC-' @'1e' # '1=' ? 10' A1' C''+1' 01< ℊ 1-' <C 10' <' ' A' 1^1\' <' <0B?-1' C0&-1ℊ A<CC< &'1 ' A1+/- ' @? ' &?' -' A' ' &?-01' ' B&>1' A1+/- ' '10 ' A' ℊ '@@1&H?10Ơ < 10C&?-A 1' < <0B?-' A1' @1\' >'001\ℊ 1 ' A&-H10Ơ >10>1' @<' C0 >1' 1=?01' A1' 1B1+&' ' '1@ # '1=' &?' 10' &?' @1\' A10C'01ℊ &?' <#01- 1' @? ℊ &?' =? ' 1 1' 1' C/ B1 ' B<?01ℊ I ' -1' +1'. -1' I ' .< A1' 1' & ' A<CC 0 <?-B1' A&-1' <' @? ' C' @1' A' ' # '1=' &?' =10' A1' C '+1' 1<@eℊ 1 ' B1&' A?1>1- ' '='1' I ' 1- 1-A?1' < 0&-' &?-01'@ ℊ H' <AC-H10Ơ @1' #<?-BB@@1 ' "1 -.'1R 1' C ' @1' 1>CƠ 10 1<-' 1' ' C&'<' C' < A' ' <?A@& ' 1' A1' =<' 1' =1 1' # '1=' &?' # '1=Ơ A1' CB@<><B'&-ℊ A10 1' A' 1 1\' < @1' '0B&?- ' A1@' &?- 1' &?' @< C0&-1' 1-0" 1=?0<- ' A1' 1B1+C' ' '1@L' # '1=1' &?' =10ℊ &?' @1\' A1 '0<- ℊ &?' <# 1-ℊ <- ' &?' 1 <'<- ' @? ' C ' B1@ ' B<?01ℊ 10 ' A1> <?- ' &?' B&- 0<?- ℊ &?' 1- ' 1' &?U 1' C0BD '-'<A &'. /C ℊ 1 ' < @1\' '0B&?- 1\' A1' &?-A 10' C ' @1' 1>CƠ 10 1<' \ℊ A&-<?-' < @1\' A' \' '0B&?- 1\' 01 <@>1- ' 1-' B&><?-A1>1- ' C' @1' >10>1' H'@Ơ 0? ' C1 -1' A1' =& =1' ? 1' A1' ' 'ℊ =<B1 K' &, ' CB@<><B'&-' 1-' @< D1 1 #K-' A1' >10>1' @1' & - 1ℊ I ' 1-' @<' A' ' ' 11ℊ C' &'Ơ 01+ <@L' &? Ơ '> >1A'<- \' <C 10' @1' A' ' # '1=' &-=' # '1=Ơ 0&' ' &?' 0C'1- ' < 1?] ' A1@' 1\ℊ H' '1@ C0&-1ℊ < H' '1@ # '1=' &?' =10' A1' C '+1' 01<@e' M &?- ' A' 1= 1\ℊ B&>1' A1+/- ' R0 ' 1D1 01Cℊ <CC'1 .1' A1+ - ' @1' &?-0< ' A?' & ' &?' A1+/- ' @1' D<?-B1@@1 ' "1 -.@ 1' C ' @1' 1>CƠ 10 1<- ' A1A1'-Ơ ?-1' >&'Ơ C0BD1'-' <C 10' @1' A' ' A< <-' &? ' A1@ CB@<><B'&-' G ' 1 &/-1- ' @1' A' ' # '1=' &?' # '1=Ơ A1' CB@<><B'&-' A1+/- ' @1' & ' 1-' 0< D<?-R'1' A1A1'-Ơ 01C ' &? Ơ C0BD1'-' <C 10' @1' A' ' '1 B1' &? ' A1' CB@<><B'&-ℊ0? ' @<' A' ' C1 -1' A1' '=' ' @' ' 0'@ =@11' A1=<?@ 1' I ' -<CC'1 .1' > 1' A=1 -Ơ @1' A' ' >& 0ℊ @1' A' ' # '1=' &?' # '1=Ơ A?1>1- ' CB@<>1\' 1-' @1' A' ' D1 1 &K-1' I ' ' 11ℊ 1 ' @1' &?-01'@ ' A?' & ' + <><' ' <CC '0' I ' R ' '1'@< A' ' CB@<><B'&-' 1-' '1@ =&? >1' 1L1B? 1ℊ H' A&-H10Ơ 0" A1@ C0&-1' 0&' ' A1@ 10 < 1' A1' B&>1' " ?1' < H?10

' - !"&-!/' .-' !' 6.+

-A' <@@ D1' 1 ' '&-Ơ A1@'+1 1A' &' D1' 0<'A' , '- .' '-' D'Ơ @<0 ' < @'<>1- ' D&@A1-' <' =10 >'-0 1 ℊ D1' 'L D' "< ' &=' &+1>#1 ℊ D1' '-18<-A8 K1- '1 D' 1< ' &=' D'Ơ 1'. -ℊ <.<'-0 ' @''Ơ ` '- A P' # ' D'>' -& ' <. 11Aℊ 0D<@@ #1' <a1-'<-A' C? ' '-' #@'+'&-' `&? ' &=' D1'/'P' 1>1>j # <-B1ℊ ?-A&-1ℊ +&'A1Aℊ <A-?@@1Aℊ <-A' A10 & 1A' =& ' 1+1 ℊ <Ơ< D'-.' C? C&01A' <.<'-0 ' E&A' <-A' &-0B'1-B1ℊ <-A' <.<'-0 ' D'Ơ `' & <@'/'P' -0 < 1' <-A' 181>'-1-B1ℊ <-A' <@0& A'0D&-&? <#@1' <-A' ?- 1<0&-<#@1

ℊ =& <0> ?BD' <Ơ D1' , '-.' &? ' &+1 1'. -' & A' #1=& 1' D'Ơ '>1ℊ C&-' B1 <'-' ?. .10 '&-Ơ <-A' &>j C@<'- 0ℊ ><A1' <Ơ &' D'>' <Ơ &' D1' & AƠ &=' D'Ơ &?-B'@ℊ ?C&-' A'+1 Ơ 1 0&-Ơ &=' D'Ơ D'Ơ 1<@>ℊ =& ' . 1<' '& 0ℊ L & '&-0ℊ CC 100'&-0ℊ <-A' . '1+&?Ơ V ==<'B1Ơ # ' D1>' A&-1' <. <'-0 ' D'Ơ 1<B1' <-A' <K0ℊ &' @' 1 Ơ &=' D'Ơ @'1. 1' 1&C@1ℊ D< D' . '+1-' '-' &>><-A>1- ℊ <Ơ K1@@ # ' D'Ơ F ' 0' ?-A1 ' D'H' E 1< ' 1<@@ <Ơ # ' D'Ơ 1 1 Ơ &=' '+ ' 1<@@ &' <CC1< ' #1=& 1' D'>' '-' D'Ơ D<-j B1 ℊ & ' #1=& 1' D'>' <-A' D'0' 0)' &?DB'@ < ' B1 <'-' "< Ơ '-' D1' 0<>1' F ' 0' & ' 1 1 Ơ B&- <'-1Aℊ &' <-0K1 ' `' & 'P' D1' 1>'010Ơ ' KD'BD' &>><-A>1- Ơ #12' <-A' ><- ' '>10' D<+1' #11-' A'0&#1 1Aℊ '-' &- 1>C ' =' D1' D1' , '-.' ?' 0<'A' &+1 1'. -' & Aℊ <-A' &' D1' . 1<' ` '-A <-B1@P' "<>< .1ℊ <-A' "1@< ' &=' D'Ơ 0<'A' &>j C@<'-<- Ơ '-' D'Ơ 1D< =Ć ?' 0<-@ &+1 1'. -' & A' D1' , '- .ℊ B&-0'A1 '-.' D1' 1>'010ℊ # ' D1' ? D& ' '<=& 1j 0<'Aℊ D< D' & A<'-1Aℊ 1-<^1Aℊ <-A'0 <#@'0D1A' D< ' '=' <- ' 0?BD' F a' & ' 1 1 Ơ &=' '+ ' 1<@ D1 1<= 1 ' `ℕ A' 1B 1A' &' <- ' 1 0&-' &' <CC1< ' #1=& 1' D'>' & ' D'Ơ /)' &?-B'@ℊ < ' <=& 1' 'Ơ 0<'Aℊ D1 1' &' <-0K1 ' &' <- ' T=' D1' 1>'010ℊ <-A' D1-' D1' 0<>1' 1 0&-' 1=&01' &' 1B '+1' 0?BD;' F ' ' ' 1 1 0ℊ & ' D1>' A10C'01 ' '<#01- ' & ' K' DA <K1 D' D'>01@=& ' `' D'Ơ/'P' <?01ℊ <-A' B&>1' -& ℊ <-A' a11C' -& ' D1' "< ' &=' CC1< <-B1' .'+1-' &' D'>' # ' D1' 0<'A' F ' ' & ' 1 1 Ơ &=' '+ ' 1<@@ <-A' D<' A?@ ' B1 '=' 1A' <-A' a-&K-' &' D'Ơ &?-B'@ℊ D<' D1-' D1' D<-B1@@& ' &=' -.@<-Aℊ =& ' D1' '>1' #1'-.ℊ 0D<@@ D<+1' &K1 ' # ' D1' 0<'A' ? D& ' ℊ &' B<?01' < F ' ' & ' F ' 0' &=' &B@<><j '&-ℊ &' #1' A' 1B 1A' &' D1' D1 '=' &=' D1' &?- ' KD1 1' D1' 1 0&-' 0&' 1=?0'-.' &' 1B1'+1' 0?BD' F ' 0' & ' 1 1 0ℊ & ' D1>' A10C'0'-.ℊ &=' <#01- '-.' & ' K' DA <K'-.' D'>' =& ' ` D'Ơ 'P' <?01ℊ 'Ơ AK1@@'-.' & ' B&-+1 0<- ℊ & ' '- &' D1' &?- ' -1L ' <A &'-'-.ℊ <-A' &' D1' D1 '==0' &=' -AK" =& ' D1' '>1' #1'-.ℊ .'+'-.' &' #1' 0<'A' D1 '==0' 01+1 <@@ ' '-' &>><-A>1- ' # ' `D'>01@=9O" D<' D1 ' ?C&-' <'-' 53K ! & =1' ? 1' &=' K&' D?-A 1A' &?-AƠ 0D<@@ ><a1' &C1-' &B@<><'&-' '-' D1' D' 18 &F-'&=' D1'0<>1' &?- ℊ<-A' '-' D1' 0<'A' ' ℊ # ' D 11' 01+1 <@ "< Ơ '>>1A'< 1@ ' <@ 1 ' D1' 0<'A' F ' ' & ' F ' 0' 0D<@@ #1' &' D1>' A1@'+1 1Aℊ D<' 0?BD' 1 0&-ℊ &' KD&>' ?BD' F ' ' & ' 1 1 0' &=' '+ ' 1<@ D<@@ #1' A' 1B 1A' <Ơ <=& 1' ' ' 1D1 01Aℊ 0D<@@ <CC1< ' #1=& 1' D1' , '-./Ơ &?-B'@@ & ' #1=& 1' D1' D<-j B1@@& ' &=' -.@<-A' =& ' D1' '>1' #1'-.ℊ K' D'-' <' &-D' -1L ' <= 1' D1' 0<'A' @<0 ' "< ' =' &B@<><'&-Ć <-A' 0D<@@ 1 ? -' D1' 0<'A' F ' ' & ' F ' 0' &=' &B@<><'&-' #1=& 1' D1' , '-.' '-' D'Ơ D<-B1 'K' D'-' 1+1-' "< Ơ k0)' 8<= 1' D1' 0<'A' D' A' "< ' &=' &B@<><'&-ℊ ?C&-' D1' 0<'A' <'-' &=' K&' D?-A 1A' &?-A0' -A' '=' D1' ><a1' "1='' ?@ ℊ < 'A' A&' -& ' <CC1< ' ?A D'-' D1' 0<'A' &-D@ D1' 0<'A' F ' ' & 'F ' 0' A?@ 'C &B@<'>1A' '-' D1' 0<'A' D' 18 &K-'<-A' ' ℊ <-A' D1' , '-./Ơ &?-B'@ ?@ ' [)' B1 '='1A' &=' D1' 0<'A' &B@<>< 'B>' '-' 0?BD' ! & >' 1L1B? 1Aℊ D>' D1-' '=' 0<BA" 1 0&-' #1' &=' D1' 0 < 1' &=' < & Aℊ <Ơ <' " ?a1ℊ < H?'09

3! & &. -2 ' &-' 3 "+& 1 ! -' 5.' ! -' ' -.' ' *" - ! /' ;@' ! M&-* ' --0++! /

&2. ; ! /&! -#!' . ' !' M&-*(Ƶ V "& 2 ' C#

' -#!+)' &220! &Ƶ V "& 2' . ' 3",#+ 1 &. -' K' !"& 2 ;'" ! -/ ! "Ƶ .' ! '" ;! ." !' ;&1' .'" !' .0-#&+

B." ! & 0"!' L ' ! 0+ ' &-' 2!' . ' ' 3 ! !"

Q] - ! 1 ' "! * +&!] .0 !' . N$ ' ' +

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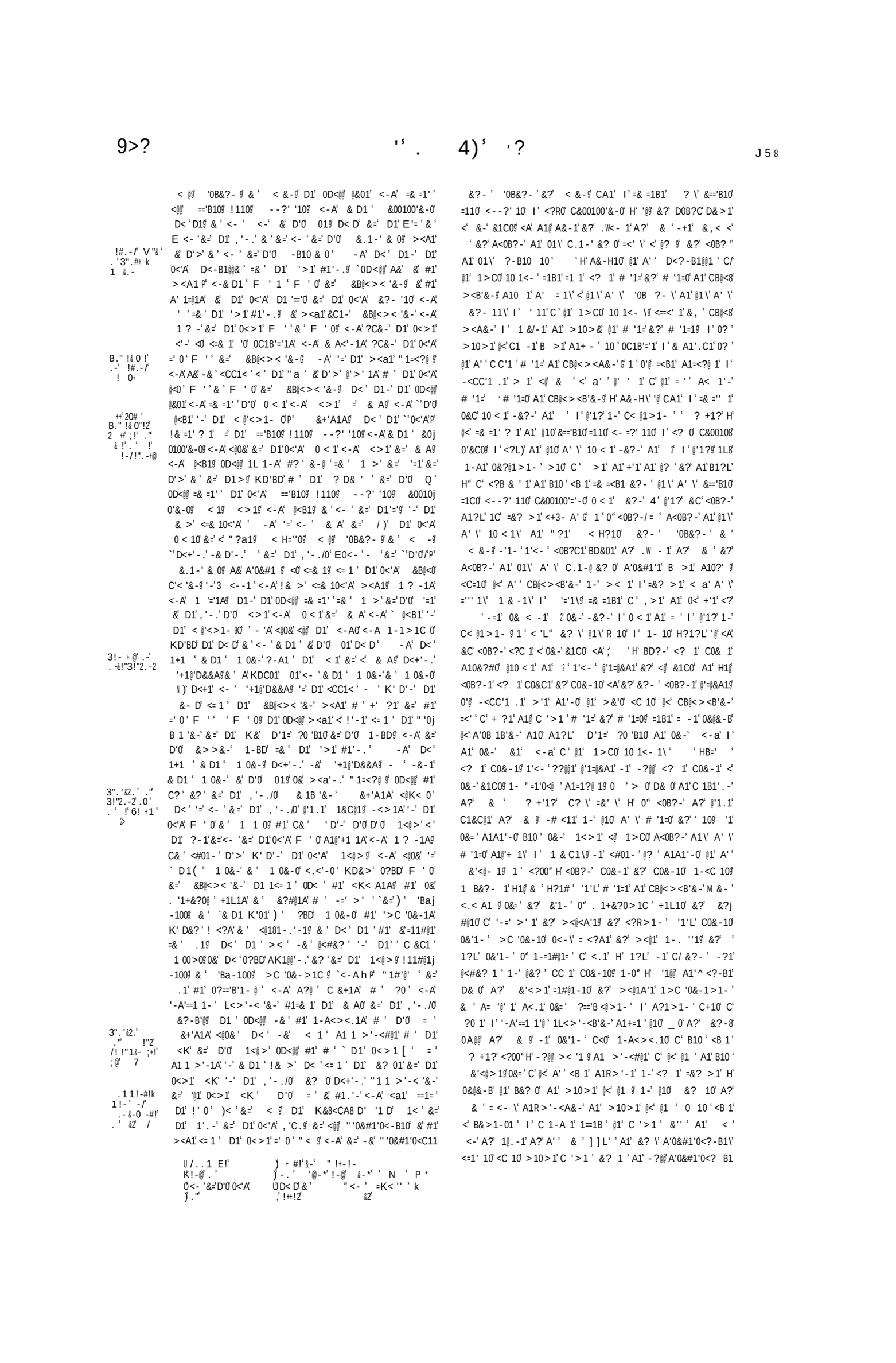

A1+0 B1 &? =< 1 A1-A? 1 C > 1 A1 1C <- H B10 C01- <= 1 0&' CB'< > 1 C @1 '0B&?- A1 B='?- &?- h A1 B1 = 1 1- B?- @@1' BD'1 A1A1'-0 >10' 1 @1 &?- 1 A1+3- @1 =10 A1 < '+' 1 A1 1'- & @- <C '0 1- @1 A' <-' LLL'

'' 1>' C B1& H B&>1 @10 E< A1'-0 A1 @10 < BD10 <A &'.- - 1\ < B& @&?A <CC1@@1\ @< 0 >< BD1 I @< F 10 >< BD1 &?- ?010 C &@? '-'0 10 <=<' 1 < <BD18 >1- \ I A< <BD'1 D&>10 C @&? B& C0 1-@10 &?-8 110 A1 & D?>D ?-'F' I' F 10 = 1-'@< '@@1' A1 &+A <0 1 0? -1 I 1=' -?@@\' <?R0 ''1?L <' 108 C&?-A 1'<0 1-A' 1> - \' C '010 1-@1 &? 10 <CC1@@1\' F< A1-' &? 10 A10 A' \ < BD10 C' < 1>C < 10 0?C8 C& 1\'10 1 =1'=\' 1-B&?-@ 1 @<, ?1 A10 1?10 A1'-0 @10 A' \ &?- 1\' I' '@@1G & 1 < A1 @10 '-'0 10 I' =@ 1 0 A10 A' \ &? 10 < B?-' =&' \' C' @&? 0'- .?@1 @?B 1 I' <0B?-1 =&' \' C' ><@'B1 H 1?L &- ' C& 1\' <i R 1'-0 C0&-10 &?- ' < <BD1 I' C 1'. -&- 0? 1?L A1 &? 1-' <? 1 A< <BD'1 A + F \' I 9C@?0& 0 C0&-10 #1-' .& -10 C @&? B& C0 0'#'1-' 1-' @1 &?- 1' 1 K a B&>1 1 <? 0 @'1?L D& 0 A<0B?-' A10 A' \' E&?- 11\' 1 & DO ?>#- ?># &?' F 10 " &?' '@@1' A1 &+1@@ D<0 1@@;

8% =1 A' _' @1 & B&-0'A1 <- @10 C>'0010 C @<?=@& 1 A10?'0 =' <A & A1'.-1 I 10= #@'1 H 0 <0B?- '-'0 1 A<0 ?-' A1 @10 ` A \ P &? 10 < <BD1 <0B?-' C0 R-1 C 0&-' B& C0 &?' C 1\' #'1<0 D& 0 A<0B?-' A1 @1\' A' ' &?- 1 0 A1 & D?># ?># &?' F 10 =' &?' '@@1' A1 &+1@ D<0 1@@ <' 10C&-A 1'1-' <0B?-1' A1 @1 'A' \' &? 10 & ' C B&@&? ' & ' B<?01' A<0B?-' H < 1' A1 1- 1' @1 - ' C '01' &?' <CC 1-A 1' 1-' 0<0B -' A1' @10 A' \' &? 10 H ' @' < < B='?-' C0&-1 @1' H?1 <+'1-A <1-0" A10 1' < <BD1 <0B?-' C0 R-1 C 0&-' B& C0 &?' C 1\' #'1<0 D& 0 A<0B?-' A1'

’-’ <- ’ K’01 <-A 10C1B’<@@ ’ ’-’ < <BD’-.’ &= <- ’ 0?BD 0 <-.1 1 0&- &##’-.’ & ’ 0C&’@’-.’ &= D’>’ ^D’0 D’C’P’ & ’ <- ’& D1 ’ ><--1 ’ &= E&&A0 & ’ <.<’-0 ’ <- ’ & D1 ’ 1 j 0&-’ &= D’0 @’1.1 1&C@1 D1 3 D<-B1@@& ’ &= -.@<-A =& ’ D1 ’>1 #1’-. Q<0 K1@@ =& ’ D 1 P ’’1@’+1 <-B1 &= <- ’ 0?BD 1 0&-’0& < <BD1A &#1’D<A `<0 &’ ><a1 10 ’ ?j ’&-’0P &’ 1+1 ’0?BD 1 0&-’0& &##1A &’0C&’@1A &= D’C & ’ E&&A0 & ’ &= D1 <@?1 D1 1&= 0D<@@ D<+1 ? D& ’ B<@@’-.’ &’D’>’<- ’ &= D1 ?0 ’B1 &= D1 &C1 1-BD & ’&= D1 & D1 ?C&-’ <’ ’@@ & ’ ’@@ ’ &>C@<’- ’ &’ D’>’ ><A1’-’ D’0 1D<@= &’ ><a1’0?BD &B100 &? ’ ’ D1’0<’A D<-B1 <0 K1@@ <.<’-0 ’ <@@ 0?BD ==1-A1 0 &’ # ’-.’ D1>’ ’- &’ D1’ , ’ ’./0 D<-B1 D1 1’ &’ <-0K1 ’ &’A’1’ < ’10 0&’ . ’1+1A ’-’ D’0 1D<@= <0 <.<’-0 ’ <- ’ & D1 ’ 1 0&-’ & ’ 1 0&-0 &’ KD&01’ <-A0 <- ’ 0?BD 1 0&-’ 0&’ < <BD1A D’C & ’ E&&A0’ 0D<@@ B&>1 <0 =& ’ D1’ ” 1@’+1 ’ <-A 10 ’ ? ’&-’ # ’ D1>’ &’ #1’ ><A1’&= D1’0<>1’ 1 j 0&- D’C <-A E&&A0 <0 0D<@@ 011>’ &’ D1’0<>1’ D<-j B1@@& ’ >&0 ’ 1LC1A’1- ’<-A’ -1B100< ’ -A’ ?C&-’ ` D’0$0 &B100 0&’ ><A1’ &? ’ &= D1’ 0<’A D<-B1  9’ D1’ 0<’A D<-B1@@& ’ =? D1 ’ &’ C &B11A’ ’-’ ` D’0 h ’ < 1 ’ =’ D1’ <01’ A&’ 0&’ 1H?’ 1 # ’ A+’B1’ &= <- ’0?BD’ ?0A11 &’ ><a1’ D1’ 1 0&-’ <-A’ 1 0&-0 <-.1 0 0&’ . ’1+1A &’ D<+1’ =?@@ ” 1@’+1 ’ <-A’ 10 ’ ? ’&-’ &= <- ’ 0?BD’ 1 0&-’ 0&’ < <BD1A <-A’ &= <@@ 0 BD D’C’ <-A’E&&A0 <-A’ <@0&’ &= <@@ D1’ ’ &0 0 LC1-B10 <-A’ &0010 `A’0#? 01AO ’ <-A’ 0?==1 1A’# ’ D1>’ ’-’ kD’0 1D<@=G <-A’ D1 1?C&-’ &’ `<K< A/P’ <@@ ><--1 ’ &= L1B? ’&-’ &? ’ &= D1’ 0<’A D<-B1 ’-’0?BD & ’ <0 0D<@@ 011>’ &’ D1’0<’A’ D<-j B1@@& ’ >&0 ’ 1LC1A’1- ’ <-A’ -1B100< ’ =& ’ 0?BD’ ” 1@’+1 ’ <-A’ 10 ’ ? ’&-’ &’ #1’ D?A B<@@’-.’ &’ D’>’ <- ’ 0?BD’ ?0 ’B1’ <0 <=& 1’ ’0 0 ?A;’ D’0’ Q ’ &’ #1.’-’ <-A’ <a1’ 1==1 I ’ D1’ ! ’ 0 ’ ” < ’ &= < ’ D1’ K&8<-A8 D’ ’1 D’ 1< ’ &= D1’ 0<’A’ , ’- .

6 !#& ’ . ’ !’ & 0 !’ I 6 + # H&

D@ F D1 1<0 ’ ’ K<0 & A<’-1A’ # ’ <’ < ? 1’ ><A1’ ’-’ D1’ ’>1’ &= , ’- .’ ’BD< A’ D1’ 1B&-A D< ’ -& 1< BD1 E<?.1 ’ = F ’-10 ?@-1.1 `!’-A1 9O P’ F 1’.D1 &@@1A=& ’ &= ?0 & >0 <-A’ ?#0’A’10 & ’ & > Cj &@@1 0D<@@ D<+1’ 0 < 1’ ’-’ D’0 =’B1’ =& ’ 1 <’ &= ’=1 & ’ =& ’ 1 >’ &= 1< 0 #? ’ D< ’ D1’ 0<’A =’B10 0D<@@ 1><’-’ ?-A1 ’ D1’ E&+1 - >1- ’ &= D1’ 1<0? 1 ’ &= -.@<-A =& ’ D1’ ’>1’ #1’-. -A’KD1 1’ ’ K<0 & A<’-1A’ # ’ D1’ < ? 1’ ><A1’ ’-’ D1’ ’>1’ &= , ’- .’ 1- ’ D1’ !&? D D< ’ D1’ ?@-<.1’ &= @& D0’ K’ D’-’ D’0’ 1<@>’ >< ’#1’B& > >’ 1A’ &’ ! 1 > & ’ ’-’ CC &+1 >1- <BB& Aj ’-.’ &’ D1’ ” ’ 1= ’&-’ &= D1’ 1<0? 1 ’ &= -.@<-A =& ’ D1’ ’>1’ #1’-. <0 ’-’ D1’ 0<’A < ? 10 >& 1’ =?@@ ’ ’0 A1j B@< 1A 1 D< ’ -& K’ D0 <-A’-. A’+1 0 1 0&-0 D<+1’ &# <’-1A’ D1’ , ’- ./0 1 1 0 < 1- 0 &= D1’ 0<’A ==’B10 <-A’ ?@ ’<.1 0&>1’ =& ’ 1 >’ &= ’=1 <-A’ 0&>1’ =& ’ 1 >’ &= 1< 0 &’ D1’ . 1<’ 1 ?A’B1’ &= D1’ , ’- . <-A’ &= D’0’ 1&C@1 <-A’ B&- < ’ &’ D1’ 0<’A < ? 10 ? ’ 0<’A’ ’8& A’ D1’ , ’- .’ B&-0’A1 ’- .’ D1’ 1>’010 D< D’ & A<’-1A’ # ’ D1’ ? D& ’ ’<=& 10<’A ’ D< ’ <@@ 1 1 0 < 1- 0 ><A1’ &= <- ’&= D1’ 0<’A ==’B10’ & ’ ?@-<.1’ & - ’ 1 0&- <.<’-0 ’ D1’ 1=1Q &= D1’ 0<’A < ? 10 0D<@@ #1’ +&’A <-A’ &= -&’=& B1 ’ -A’ D< ’ -& 1 1 0 < 1- 0 &= <- ’&= D1’ 0<’A ==’B10 ’ ?@-<.1 0D<@@ #1’ ><A1’ D1 1<= 1 #? ’ # ’ F < <- ’ &= ’ ’@@ 1<@1A’ # ’ D1’ 1<j 0? 1 ’ &= -.@<-A =& ’ D1’ ’>1’ #1’-. - 01- ’ # ’ D’>’ > & D1’ D< -B1 <0 ’ ’ D< D’ #11- <BB?0 & >1A’ #1=& 1’ D’0 ’>1 ’ -A’ D< ’ <@@ 1 1 0 < 1- 0 ><A1 & ’ & #1’ ><A1’ D1 1<= 1 &= D1’ 0<’A ==’B10 & ’ ?@-<.1

b” - ’ . ’ &#!2 .’” -@-<. ’ #.-’ ” ”@ .’ !’ 2 &/’ 0 !2’ /!#+ ”!/’ ’.&/ ’ 3 !- 2 !’”! . ’2 +# !’ ;@V ”)’ ” - ’ ”. 1’ !’ ”! 20”!” +#’ . !”2 /!#+ ”!/’ ’.&/

(. ’ & ’ # 2 .” ’ -/’ 2 .’” ”!2/ 0<-’ .’ ;!’ 1 /! @ 0?BD 0 D< V ><A1’ Q ”.-.)’ = ’= &’’ ’ ’

e N $ ’ ’

1-’ <0B?-’ ><51 iB 1-’ 10C1B’<= ’ 1-’ < <BD<-’ A<0B?-’ ’1 10 <?-.1’ C0&-1 &##<-’ &-’ A1 &’@@<-’ A1’ @? ’ A1’ , ’1= &?’ <0B?<0’ <? 0’ > < ’ A10’ #’1-0 &?’ 1-B&- - 1’ <0B?-’ <? 1’ C0 -1’ A1’ &-’ @’1.1’C1&C@1 @1’ D<?-B1@@1 ’ ” 1-8 .@1 1’C ’ @1’ 1>C0 10 1<-’B&>1’C ’ @<’A1@’C<?-B1’A<0B?-1’ ’1 C0&-1’’00’-’ < <BD1’A10 1’1K1 1 ’B&>1’C 10 ’ ?A&-’ <’= ’ 1’ <’ BD?-’ ’1 C0&-1’ 1-0” &##1’ &?’ A10C&’@1’ A1’ -’1= &?’ #’1-0 &?’ A1’ @<’ +<@?1’1- ’ 1’ ’ <?=@& ’ 1 <CC1@@<- ’ <’ @? ’ <0B?-’A10 ?0 ’B10 A1’ @?-1’&?’ A1’ @<? 1’ <-a 0? ’ #’@@1’ &?’ #’@@10 A?’ B&>C@1’?’ =<’ ’ <’ @? ’ 1-’ B10 ’ C< ’1 C ’ = ’= 1’ <?=’1_’CB1001’ D& 0 A1’ @<’ A’ ’ D<?-B1@@< ’1 0’#’1-’ 1-B&?- 1’ &? \’ ’1@L’ &==1-A&? 0 <’ @10 <>1-1 ’ ’ @< D<’>I ’1’A?’ & ’@@1&H10 <’ 10C&?CA 1’<0 C< ’10 ’00’-’ . 1+=10 1-’ B10 ’ C< ’1 B&>1’1-B&?- 1’ <0B?-’ <? 1’ C0&-1’ ’ C0&-10 <0 H?1@L’ ><’-0 <0B?-’ ’1 C0&-1’ ’00’-’ < <BD1’ -’1= &?’ #’1-0 M <’ ? &?- ’ +1-?\ B&>1’C ’ A1@’ <?-B1’ I ’ 10 ’ ?B’&-’ C’ 1?L’ <==<’ 10 A1’ >10>1\’ @10 C0&-1’ -1’1= I ’ #’1-0 B&>1’01>#@1 <’ <’ >10>1’ @1’ D<?-j B1@@1 ’ C@?’0 1LC1A’1- ’ I ’ -1B100< ’1’ ’ ? ’ 1@@1’ CB1001’ 1-0” =<’ ’ D& 0 A1’ @<’ A’ ’ D<?-B1@@< ’1’ @1’ A’ ’ D<?-B1@@1 ’ C@?’0 <+0- ’ <’ CB1A1 ’ 1-’ B1 ’ >< ’1 9 0” @1’ B<01’ 1-0” 1H?’1 ’ C’ <A+’0 A<0B?-’ ’1 ?0 ’B1 A1’ =<’ 1’ @<’ C0&-1’ I ’C0&-10 10 <-.10 ’00’-’ . 1+1 ’A<+ ’ ’C@1 -’A1@’ <?-B1’ I ’ 10 ’ B &-’A< B?-’@’1 C0&-1’ 1-A’ < <BD1 1 ’A1’ &? \’ ’1@L’ -’1= I ’ #’1-0 1 ’ <?00” A1’ &? \’ @1? 0 B&0 10 1Lj C1-01 I ’A1CA10 <’ \’ I ’ 0?== 1<’ C’ 1?L’ 1-’ B10 ’ C< ’1 1 ’ &? ’ ><5 A1L1B?B’&-’ 0? ’ B1 A1=<’ 1’ D 0 A1’ @<’ A’ ’ D<?-5’1 1-’ A1 =&? >1’ B&>1’01>#@1 <’ <-’ A’ ’ D<?-j B1@@1 ’ C@?’0 1LC1A’1- ’ I ’ -1B100< ’1’ C ’ 1 A1@’+<?-B1’ I ’ 10 ’ ?B’&-’ A10 1’ 1?1\ <CC1@@<-’ <’ @? ’ <0B?-’ ’1 ?0 ’B1’ B&>1’ A1+0- ’ 10 ’ A’ G B10 ’ < 1’ <’ 1A>1-B0 ’ I ’ C 1-A 1’ 1==1 ’ @1’ C ’>1 ’ &? ’ A1’ <’ ’ <-’ A?’ A’ ’ & ’ LLL’ 0

1>’ H’ &>1’ 10 &’ ’ & A1’. -1’ C’ @10 < ? 1’ =<’ ’ 1-’ @1’ 1>C0 A?’ & ’ ’BD< A’ 01B&-A H’ -?@@ 1 BD1&? ’ E<?8 .1& ’ A1@ -1’ ?@-& ’ &-&? ’ &’0&? ’ &@@1=@& ? ’ A1\’ ?0 ? >1\’ I ’ ?#0’A’10 &?’ & - &@@&’< &@ ’ 10 < 1’ 1-’ 0&-’ &==’B1’ C ’ >1’ A1’ +’1 &?’ R>1’ A10 <-09’ >10 H’ @10 1=’ \’ &=@’B1\’ A1>=&’1- ’ A10&?#0 @<’ .& -<- -11’ A?’ 10& 1 ’ ” 1- .@1R 1’ C ’ @1’ 1>C0 10 1<- G <?L” 10 &’ ’ & A1’. -1’ C’ @10 < ? ’=<’ ’1-’ 1>C0 A?’ & ’ 1- ’ @1’ H?< ’ H’ @<?-<.1’ A1’ A <C0 A1’- ’ B10 ’ &’<@>1’ C&1 ’10 1’ B&>’0 ’ < =1 >1’ &?’ 1-’ <CC &?1>1- ’ 0&@&-B’ @<A+ 0 A?’ 10& 1 ’ ” 1- .@1 1’ C ’ @1’ 1>C0 10 1<- G B&>1’1-’ @10 A’ \’ 10 <@ ? 1\’ C@?0 C@<’ ’1 <1- ’ 0&=’ A1B@< 1G ?-H?& 1’ 1@ -’1- ’ & 0 <- 9 A’ 010 C0&-10 &?’ &C 1’. -1\’ 10 C< 1- 10 A?’ & ’ A10 A= \’ &=’B1R I ’ <?@-<.1 <0B?-0 C’ >1’ A ’ +’1’ I ’ <0B?-0 C’ >1’ A10 <-0 <? .W?-A1’ C &A’B1’ A?’ & ’ I ’ A?’ C1&C@1’ I ’ 1-B&?- 1’ @1\’ A’ \’ 10 < ? 1\G =1’ A’ ’ _’ @1’ & ’ &>@A1 <- ’ @1\’ C >’001 <A’ & A1’. -1’ C’ <?B @ & = 1’ A10?’0A’ 9 H’ &? \’ N 10 C< 1- 10 =<’ \’ A<0B?-’ A1\’ A= \’ ==’B10 &?’ ?-<.1’ <@ <0B?-’ C0&-1 1-B&?- 1’ @1=8 =1 1’ A1’ @10 A’ \’ 10 < ? 1\ 0&’1- ’ +&’A10 I ’ A1’ -?’= &’ B1 ’ W ’ H’ -?= \’ 10 C< 1- 10 A<0B?-’ A10 A= \’ C==’B10 &?’ ?-<.1’ 0&’1- ’ =<’ \’ 1-’ <C 10 >10 C’ .< <- ’ A1’ #’@@1’ 1-01<@1’ C’ @1’ 10& 1 ’ ” 1- .@1 1’ C ’ @1’ 1>C0 10 1<- 9 1- &’1m C’ @? ’ 1-’ @<@ D<?-B1@@< ’1’ B&>1’ ’ <A’ 10 1’ <BB?0 ?>1’ A1+= ’ ’ B10 ’ 1>C0 ’ ’ H’ &? \’ 10 C< 1- 10 =<’ \’ &?’ <==<’ 10 1-’ <C 10 A1\’ A’ \’ ==’B10’ &?’ ?@-<.1

?' <? 1' .< <?- ' ' ?' #@@@1' A?' 10& 1 ' 0&' < ' +&'A1\' ' A1' -? ' 1==1 ' ? +1?' &? \' =&' \' H' B10 ' I 1' -1L8 1-A1' C<0' -1' 0&' ' ?A'B'< ' -1' A<><.1&?0' < - 1' 0&8 ,< -' A<>1' @<' &'.-1ǧ @1' '-B1ǧ 1' "?1' A1' ?,ǧ <0 1-#1 ' 1 0' A1' 1=@ ' <A10' "?1' A1' F < ǧ -1' <0' <' 1' I ' & <@ 1' A1' &'>A 10ǧ <0' @1\' <' 1' <'@@'=1' I ' &@<@ 1' A1' ' 1' A1' F -BD10 !ǧ B&>1' < <0B?-1' .J?- 1' &?' . @- 10' A'>'01' &?' A' -'010' A1@ ?@-<.1ǧ &?' <0B?-' .W?- 1' &?' . 10' A<0B?-' 0J>1' &?' 0&>10' A1' >&-1 ' A1@ =1 >1' A1@ ?@-<.1' < B1?L' . ?- 1\' =<' \' &?' B&-=1 >1\6 -1' < -? ' &? & @1 ' 1'<- ' <0B?-0' &=='B10' D& 0' A?' & 10' A? & ǧ -1' < &D-' 1- B&a' 10H?'1 ǧ < E @10' 1'-B@&' 10H?'1 ǧ -1' < <0B?=' A1\' >1-'<@@ R+0- 10' A?' & ' -1' M 0- 1\' A?' &'.-1ǧ A<0B?-' .\?- 1' &?' . ?- 10' A<0B?-' &=='B1' &'" &=='B10' =1' < B1?L' A1+0- ' B10 ' 1>C0' &+1' @1\' =110' ' .<.10' A1' @<?-1'1-' 1>C0' A?1\' ' <BB?0 ?>1\'

1>' H' B&>1' <?' C< @1>1- ' 1-?\' < F 10 h' <-' +'-8 '0>1' A?' & ' HC 10 ǧ 10 &' ' & A1'.-1' ?' <? & ' 1' A1' >1 >1' @1' C< @1>1- ' H' -? = C0&-1' A1\' @'1.10' A?' & ǧ 1-B&?- 1' H?1 ' @1L'.1-' , < <. A1' &?' ? @<.< '1' C-?-B'1ǧ <@ 0? 1' A?' & ' &?' <@ 0? 1' A1' C< '1ǧ 1-' 1>C0' <+1-' ' 1-' @1' &?- 0' A1' <-B<0 ǧ =& =<B1' <0 ?-0' A1' 01\' #'1-0' &?' BD< 1?L' R 10' &?' 1- 10' 1-' <0B?-'<? 1' &?- 0ǧ =& Hǧ 0&?@1>1- ' @1\' #'1-0' I ' BD< 1?L' R 10' I ' 1- 10' @1' H?1?L' @10' C0&-10' 1-0'' &? @<.10ǧ &?' '@0' 1-j B&?- 1'H? ?L' '1@1L'.1- ', <'<.< A1ǧ 1-'@1'A' ' &?- 1'A1' <-B<0 ǧ &?- '1-' >10>1'@1' &?- 1'C' 1 '0' 1<0&-' A< B?-' '1@ ? @<.< '1' <@ 0? 1' A?' & '&' ' <@ 0? 1' 'P' A<0B?-' <? 1' C0&-1' C-&?HB1' A1'-\' @1' A' ' &?- 0' A1' <-B<0A' `-1 X '0&' ' =& #< 1' -1' A'0<#@1' A<0B?-' <<-'1 ' A<BB'&-ǧ -1' < B@<'>1 ' <0B?-' ><51' A1-D1 ' <?-B1' D& 0' A1' >10>1' @1' &?- 1ǧ `' h-1' A'0<#@1' < `C 0?1 ' < B?-'$ 0' ><5' A<BA&-' D& 0'A1' >10>1'@1' &?- 0$0P' -'1- ' &#0 <- ' <?A1@ ? @<.< '1' 1-B&?- 1' @? ' C-&?-B1G B&>1' 1-'@1' A' ' 10 < ? 1' C@?0' C@<'-1 <1- ' <CC'1 ' : @1' H?1@@ 10 < ? 01' & ' 10 ' 1LC' 1' C' B<?01' H'@ 1 &' ' & A1'.-1' A0-A? 1 ' >10' C? ' 01C ' <-0' <A&-H1\' C0BD1'-' 1-0?<- \@ @1' H?1@ 10 < ? ' =1'0 ' C &@ =' >#@1' 1 ' -1B100< '1' < @1\' @'1.10' A ' & ;' 1' A' ' _' @1' & ' @1\' C>'001<' B&-0'A1 <- ' C' <A+'0' I ' <001-' A10' W 10C?1@L' I ' 1-H 1@L' '@1'A' ' C<L@1> ' <001>#=1\@ <@ 1H?10 ' A1\' A' \' B&10' ' C' <?A'& ' 1' A1' >10>1' @1' C< @1>1- ' <A' & A1'.-1' 1 ' 10 <#@'1@ H' @1' A' ' <A'0' 10 <j ? 1' 0&' ' 1-' 0<' =& B1' I ' +0 ?1@ A.-<- ' 1=1A@ I ' =& B1' <' A< 1'-' ? ' A1' < BD1' <-' A1' 0&-' 1'. 1' LLL ' I ' < B1@@? ' &? ' CC1 ?1@>1- ' A A? 1 '

1>' H' B&>1' 1-' @1' C< @1>1- ' 1-?\' < F 10 =@" @1 0'0>1' &? ' A1' &+1>#' <-' A?' A.-1' - 1' 2' @1' & '+'- ' &1C '0>1ǧ 1-' @<A@ A1@ 10?>CA&-ǧ 1- 1' <? 1\' BD&010ǧ =&'0 ' & A1'.-1' 1 ' 10 <#@'1' C' @<?A@& ' ' A1' >10>1' 1' C< @1>1- ǧ ' C@1 &' ' <' @? ' A1' C 1-A 1' 10?-@1 ' 0 '01 ' ' 1 1'.-1 ' 1-' 1\' ><'-10' I ' C&00100'&-' B&? \' &-& 0' D<0 1@L' A.-&? '10' '@@10' '@@<.10' <-&' 0' R 10' 1- 10' 1- 10' 1,0'&-0' F<0 10' !110' !11' !1 >10' B M+'B1ǧ &+1' &?' ' @&? ' <CC 18' -=1B1\' 1-' -.@1= /1' E<@10' B 1-' @8<' < BD10' A'B1@@10ǧ @&-A' E? 0-10' <@1'0' B 1-' @1m' < BD10' A'B1@@10' H?1?L' @1' A' ' & ' 1?001 ' .0?- 1' C' 01\' ' 10' C< 1- \

)' K' - !"+&-!/'.-' !' 6.

0'0?1 ' BD10B?-' ' <&' '4¢ ' '<

' & D1 ' F < <- ' D<-'# ' '@@ &=' D1' 1<0? 1 ǧ 0D<@@ #1' +&'A' <-A' &=' -&' ==1A@ ' &+'A1A' <@K< 0ǧ D< ' D'0' A" 0D<@@ -& ' 1L 1-A@ -& ' #1' C 1 ?A'B'<@ -& ' D? =?@ &' &? ' &+1 1'.-' <A ' D1' ^?11-ǧ D1' '-B1ǧ D1' "?a1' &=' ?Ba'-.D<>ǧ &' D1' -D1 ' & 0' &=' 1- '@< 1' "?a1' &=' F < K'Baǧ -& ' &' D1' < & ' <-A' &> >&-<@ ' &=' & -j A&-ǧ -& ' &' D1' < & ' <'@'==0ǧ <-A' &> >&-<@ ' &=' D1' ' '&=' F '-BD10 1 ǧ <0' &' <- ' E <- ' & ' E <- 0ǧ "1>'01' & ' "1>'010' &=' D1' ?@-<.1ǧ & ' <- ' E <- ' & ' E <- 0' &=' <- ' ?>' & ' ?D'0' &=' &-1 ' &=' D1' 1 >' &=' D1' ?@-<.1ǧ & ' D1>' . <- 1A@ ><A1ǧ & ' B&-=' >1A6 -& ' &' <- ' &>C &@@1 ' D<+'-.' <- ' ==' B10' &? ' &=' D1' ,'-./0' # 0ǧ -& ' &' &D-' 1- B&a' 0H?' 1ǧ -& ' &' E @10' 1'-B@&' 0H?' 1ǧ -& ' &' <- ' &=' D1' ,'-./0' Q& ' ^?11-/0' &? ''&@A' 1 +<- 0ǧ' P' &=' <- ' E <- ' & ' E <- 0' &=' <- ' ==' B1' & ' ==' B10' &' D1>' ><A1' #1=& 1' D'0' '>1' K' D' D1' !110' <-A' F <.10' &=' &@A' '>1' A?1' <-A' <BB?0 &>1A

ǧ F D1 1<0' <' D1' < @'<-'1-' D& A -' <' F 10 j >'-0 1' D1' K1- '1 D' 1m '&=' DA' ,'-.' D<' -&K' '0ǧ ' K<0' & A<'-1A' # ' ? D& ' ' &=' D1' 0<>1' < @'<>1-ǧ D<' -&' 1 0&-' &=' D1' ,'-./0' @'1.1' 1&C@1ǧ <.<'-0' KD&>' <- ' L'.1-A' =0 '<@@OP' #1' <K< A1A' & ' ? @<K ' C &-&?- 1Aǧ <' D1' ,=&./0' ?' ' & ' <' D1' ?' ' &=' D1' < ǧ '-' '>1' &' #>1' '-' D1' &?- ' &=' <-8 B<0 1 ǧ `0D<@@OP' =& =1' ' <- ' &=' D'0' E&&A0' & ' D< 1@0ǧ <-A0' & ' 1-1>1- 0' '-' <- ' & D1 ' &?- ǧ `#? '<@@/P' &-@ ' D1' E&&A0' & ' D< 1@0ǧ <-A0' <-A' 1-1>1- 0ǧ KD'BD' D1' 1 0&-0' 0&' &? '<K1A@ & ' D1 ' <.<'-0' KD&>' 0?BD' L'.1-A' ` D<@@ P' #1' <K< A1A' '-' D1' 0<'A' &?- ' &=' <-B<0 1 ǧ D<+1' '-' D1' 0<>1' &?- '6 <-A' # ' 1<0&-' &=' <- ' ?BD' ? @<K ǧ <' D1' ,'-./0' ?' ' ' <' D1' ?' ' &='<- ' & D1 ' 1 0&-ǧ C &-&?-B1A' K' D'-' D1' 0<'A' &?- ' &=' <-B 1 ǧ D1' ` ''<@" P' -& ' #1' =& 1#< =1A' -& ' A'0j <#@1A' &=' <- ' ><--1 ' &=' A '&-ǧ -& ' &' B@<'>' <- ' ><--1 '&=' -D1 ' <-B1' &? ' &=' D1' 0<>1' &='- ǧ -& ' A'0j <#@1A' &' C? 0?1'<- ' <--1 ' &=' I '&-' &? ' &=' D1' 0<>1' &?- ǧ -& K' D0 <-A'-.' 0?BD' ? @<K ' <.<'-0' D'>' C &-&?-B1A6 <0' ' D1' 0<'A' < ? 1' >& 1' =1@@ ' <CC1< ǧ 1 D6 KD'BD' < ? 1' '0' -&K' 1LC' 1Aǧ #1B<?01' ' ' K<0' & j A<'-1A' &' 1-A? 1' #? ' =& ' 1+1-' 1< 0' D1-' -1L ' 1-j 0?'-.ǧ KD'BD' < ? 1' K<0' C &=' <#@1' <-A' -1B100< ' &' D1' ,'-./0' @'1.1' 1&C@1,' ? ' 0<'A' &+1 1'.-' & A' D1' ,'-.ǧ B&-0'A1 '-.' D1' 1>'010ǧ # ' A+'B1' <-A' 001-' &=' D1' & A0' C' ' ? A' <-A' 1>C& <@ '-' D1' 0<'A' < @'<j >1-' '<001>#@1Aǧ <-A' <' D1' 1H?10 ' &=' D1' 0<'A' &>j >&-0ǧ <-A' # ' D1' ? D& ' ' &=' D1' 0<>1' < @'<>1-ǧ D< D'& A<'-1A' <-A' 10 <#@'0D1A' D< ' D1' 0<'A' @< 1' < ? 1' 0D<@@ #1' '-' D'0' =& B1' <-A' +' ?1ǧ <a'-.' ==1 ' <-A' !& B1' <' D1' @<0' " < ' &=' < BDǧ D1' D' '1 D' 1< ' &=' D'0' 1'.-ǧ <-A' = &>' D< ' " < ' &' 1-A? 1' =& ' 1+1

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9 F D1 1<0' '-' ` D1' 0<'A'/'P' < @'<>1-' B&>j >1-B1A' <' 1<A'-.' D1' 'L D' " < ' &=' < BD9 D1' LLL ' 1< ' &=' D1' 0<'A' , '- .9 <-A' <A &? -1A' &' F 10 >'-0 1 ' '@@ D1' L''' ' " < ' &=' ! 1# ?< 9 < ?#0'A ' A<@@1A' &?-Aj <.19 F<0 . <- 1A' &' D1' 0<'A' , '-.' G D< ' '0 &' 0< 9 &=' <@@ ><--1 ' &=' 1; BD<-A'01' &=' 1+1 ' 1 BD<- ' " 1-'\1-'<-A' @'1-9 <0 K1@@ &=' 1 BD<- 0' &=' <-01' <-A' @>'<-19 <0 &=' <- ' & D1 ' 1 BD<- ' @'1-9 B< '1A' &?' &=' D'0 1<@>9 & ' # &?.D ' '- &' D1' 0<>1' # ' F < ' &=' 1 BD<-A'01 9 &=' D1' <@?1' &=' 1+1 ' LL' L' ' A G ` &' D<+1'W' ' &' D' >' `< 3'P' D1' D' A' " < ' &=' C '@ -1L ' &>'-.9 =& ' 1 >' &=' D'0 '=1' -< ? <@@ K' D' `<' 1 <'-' LB1C '&-'J' ' '-' D1' 0<>1' E <- ' 0C1B'=' 1A' G # ' =& B1' &=' KD'BD' ' D1' , '- ./0 ?# 1 0' 1 BD<- 0' " 1='' \1- ' &=' D'0 D'0' 1<@>9 0D<@@ #1' BD< .1<#@1' &' C< ' &' D1' , '-.' L' A ' &=' D1' <@?1' &=' LL0 ' &=' <@@ D1' ' F &&@1-' @& D09 C<00'-.'&? '&=' D1' 0<>1' <= 1 ' D1' 0<'A' D' A' " < ' &=' C '@@ KD'BD' 0D<@@ #1' & D1>' +1 ' . 1< ' ' >C& <#@1' D< .19 <-A' >C&+1 '0Dj >1-' &=' <. 1< ' < ' &=' D1' C&& ' 1&C@1' &=' D'0 1<@>9 <-A' C1 <A+1- ? 1' <?01' &=' 10 <'-' <-A' >C1A' >1-' &=' 1 <-B1' &=' <@@ <--1 ' &=' F &&@1-' @& D0' ><A1' K' D'-' D1' 0<>19 KD'BD' 0D<@@ B<?01' # ' &B100' &=' ' >1' =1K' @& D0' &' #1' ><A1' '-' D1' 0<'A' 1<@>9 <-A' D1 1?C&-' . 1< ' A@1-100' <>&-.0 ' D'0' C&& ' @'1.1' 1&C@19 <-A' <' >1<-' &=' " 10 ? '&-' &=' D'0' <+ 9 <-A' 0D<@@ B<?01' D1' F &&@0' &' #1' &=' @100' <@?19 &' D1' . 1< ' " 10 ? ' -' &=' D1' E &K1 0

' 0 < 1' ' <' 0' E? 0-10' * = '
(#1 \' KD1 D1 ' D< * ' h
h ='B10 /' 0D?@A' h D1' B1 1'- 1'
h D'0 &' #1' D<A' = &' ** < :'
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&?' 1-' <0B?-' <? 1' >< 1' A1C?'0' @1' C > 1 ' &? ' A1' 0&-' 1'. -1G 1 'H' &? \' > < 'A10' .D > 1\' A1\' 1- 10' BD< .10' ^' <- - ?' 11\=1' \' C@ 9 A1@ 0 < 1' A1-#1'' <?-B1' C ' R > 1' A1' +'1' &?' R > 1' A10' <-09 <' <0B?-' C0&-1' &?' C0&-109 <C 1-8 A 10' A<0B?-0' A1\' CD-'001\' &?' %1' 01\' B?0 ?>1\' &?' 0?#8 0'A'1' &?' <@-<.1@ &?' A1' 0&-' <-<C1 9 &?' <@' &?' 1-' 0&-' 10B1'C ' &?' <? 1>1-=9 &?' 1-' < B?-' <? 1' @'1?9 &?' <0B?-' A1?\9 &-' A1\' C=' 1\' C+1-J- 1\' A1?L' &?' A<0B?C0' A1?L' A1'-0' 0&-' &'<@>1' @&-A' E<@10' E? 0-10' <'1'0' I ' 1-' @10' < BD10' A'B1@@109 0&'1 ' +&'A1\' I ' A1' -?@@ 1==1 G' B&>1' 1-' @1' A' ' 1' A1@ ,10?>CB'&-' C@?'0' C@1'-1>1-' 10 ' A1B@< 1\' ' C ' B1&' H' A&< 1' I ' <>#'.?' 1' 10 ' 1-19 H?1@@1'H' =110' .<.1\' 1.< A10' C=' 1\' I ' <<R0' BD&010 9 0C1B8 <- \' I ' A1@ <?-B'1-' 1>C0' C 1'. -<- \' <0 &=='B10' 1-' @1\' &? ' A1' 01\' -&#@1' C.1-' &? 0 9 M &'1- ' 10?>1\' =1 1'. -1\' 1-' @1\' ==@<'-1\' A?' & 9 &?' +&'A10' C' , ?1' A?' A' ' < ' &?' -&-G C ' 1'- 1' I ' C@<'-' A11@< <A&-'1< 9 =1'= '@1' & '<@ 1H?10 ' A1'901\' A' \' &10' C' @< & ' 1' A10?'0A' ' <A' & 8 A1'. -19 H' @1\' A' \' < 1' I ' & A1-W-B1' A1@ 10?>CB'&-' -1' &@1- ' ?A'B'<@L' <0' <0B?-' A1\' 01\' &=='R0 A<0B? '0 =110' .<.1\' 1.< A10' &?' C=' 10' A?10' &?' < 1'. =- 1\' <? '1@L' &=='R5 B&>1' =& 1- ' @1' C '>1 ' &? ' A1' 0&-' 1'. -1' &?' A1+W- 9 C' B<?01' A10' '1@L' &=='B10' &?' &BB?C<B'&-0G ' H' @1\' A' \' =110' .<.1\' 1.< A1\' I ' C=' 1\' -1' 0&'1-' B&>C '010' A1'-\' @1' A' ' 1' A1@ 10?>CB'&-9 <@ 1>C0' A1@ =<'0<<B1' A1' >10>1' @<B ' -1' <C 109 -1' A1A1'-0' <0B?-1' <? 1' B '&?' A1-/-B1' =<' ' 1-' 0&-' A' ' C< @1>1-' G >10' H' &? \' '1@L' .<.1\' =110' 1.< A10' I ' C=' 1\' 0&'1-' I ' A1> 1-' <' &? \' I ' <' BD10B -' '1@L' &=='B10' I ' &BB?C<B'& 9 B&>1' B1 L'=' 1-' @1' C '>1 ' &? ' A1' 0&-' 1'. -1' A1+W- G <0B?-' < 1' A1@ 10?>C '&-' < ? 1' A1-/-B1' &?' C+'8' 0'&-9 &?' <0B?D' <? 1' <B 1' = ' ' <H' B&-= @19 <0B?-' A&>1' &' @ <>#'.?' 1' 1-' 'B1@ ' B&- 1-?\' -'1-' &#0 <-

1>' H' B&>1' 1-' B10 ' A' ' =201-' C< @1>1-' B&>1 B1\' < 1A -.' @1' A' '0'0>1' &H ' A1 < BD1@<-' A?' A' ' & ' LLL 9 I ' <A &? -1' < F 1 >' 1H?10' H?< & 0\'>1' &? ' A1' ! 1 1 9 =?1001 ' .0?- 11' <?' A' ' & ' ?-' 0?#0'A'1' <CC1@@1' &?-A<.19 B10 ' <00<+&' 'A1' &?' > < '' BD<?-A'01\' A1' B@'?<' , BD<?-' A1 -0 ?' I ' <@'1-9 <#'1 ' A10' BD<?- 1\' A1' <-0\1' =1' @>m' .-1' B&' 1A<0B? ' <? 1' 'MBD<?-' @'1-9 < '1\' D& 0' A1' B10 ' &'<@>1' ?' <CC& 10' 1-' @1' >10 <1' C' +&@1' A1' '' BD<?-A'01 9 A1@ +<@?1' A1' BD?-' LL0 ' L ' A G A<+&' ' <' H ' <' @1' '1 B1' &? ' A<C 1@" C0BD1'-' +1-W- 9 C ' >1' A1' 0< +'1' -< ? 1 9 &+10H 9 R 1 -' 1LB1C '&-0'1-' >10>1' @<. /@> 1' 0C1A 9 ='1 \G C'=& B1' A1' H?1@@ <B ' @1\' ?#.1 0' A?' & 9 BD<?- \' A1 -0 -0' A1' B10 ' 0&-' 1< > 19 , B&'1- ' BD< .1<#@10' <' C<@1 ' <?' & ' L' ' A ' A1@ +<@?1' A1' +'- ' 0&?\0 9 A1' &?' @&? ' A <C0' @<= ?\' C<00<- ' D& 0' A1@ >10>1' <C20 @1' A' ' '' ' &?' A<C 1@@ 9 ' &'1- ' <' 1?L' &C' .0?-A1' 1>C& =<#@1' BD< .1' I ' 1 C&, 0 >1- ' A1@ .W?-A1' C< '1' A?' C& 1' C1&C@1' A1' B10 ' &'<@>19 1 ' 1-' <+1- ' ?1' B<?01' A1' 10 1'- ' I ' 1>8 C1A >1- ' A1@ ? R<?-B1' A1' &?' > < ' A <C0' @< -?\' =<' \' A1' -\' @1' >10>19 @1' H?1@ B<?01 <' C' CB1001' A?' 1>C0' C1 ' ' A <C0' 10 1= A \' 1-' @1' Aa' &'<@>19 1 ' Y ' B1&/ .D>A1' ?A'= 1' 1- 1' 01\' C&, 10 @'1.10' .1-\9 I ' >&'1-' A1' A10 ?B8' B'&-' A?' 0&-' -<+'1 9 1 ' B<?01 <' 01\' @< -1\' A10 1' A1' >1'-A 1' +<@?1' <' @<' .=' >A1' A10 ?BB'&-' A1' @1\' E &K1 0

0? ʻC1'-1ʻA1ʻ &'0ʻ 1- \'@'C1\ʻ9ʻA&?- ʻ@1ʻ & ʻ - 1ʻ &,< -1ʻ = ʻ A<+&' ʻ@?''1ʻ >&' 1ʻ9ʻ1 ʻ @<? 1ʻ >&' 1ʻ <ʻ @<ʻ C< '1ʻ Hʻ 0?1 <ʻ @1ʻ A' ʻ # '1=ʻ A1ʻ CB@<-@<B'&-'G ʻ Hʻ @<ʻ A' ʻ C< '1ʻ '00'- ʻ . 1+1ʻ C&'1 ʻ <+&' ʻ <BB'&-ʻ A1ʻ A1 1ʻ 1-ʻ B@'?-ʻ A1@ʻ B<0ʻ 1-8ʻ B&?- 1ʻ@1ʻ A' ʻ '0B&?- ʻ C ʻ@<ʻ >&' 11ʻ A1\ʻ A' Rʻ &'0ʻ 1- \' @'C1\ʻ '00'- ʻ =& =<' \' &+1ʻ CB1001ʻ A1@ @<.< '1G ʻ Hʻ @<ʻ C< '1ʻ &?ʻ C< '10ʻ9 A1=1-A<- \ʻ 1-ʻ <0B?-ʻ '1@ <BB'&-ʻ A1ʻ B ʻ 1<ʻ <C 10ʻ 1-B&?- 1ʻ <0B?-ʻ '0B&?- ʻ &?ʻ '0B&?- 1\ʻ <ʻ C 0?1 0ʻ9 <@@1.<ʻ -?@@ C 1BB'&-ʻ -1ʻ .<ʻ.1 <ʻ 0<ʻ @1 ʻ9 -1ʻ M=<ʻ 1B1?ʻ <==<' 1ʻ &?ʻ C@1A1 ʻ <0B?-ʻ =& 1'-ʻ C@11ʻ9 A10 1ʻ '1ʻ 1-ʻ <0B?-'<? 1ʻ @'1?ʻ Hʻ @<ʻ @1ʻ 0H'0A' ʻ # '1=ʻ=&?-A?ʻ 0? ʻ B10 ʻ & A1-3DB1ʻ 10 ʻ ?1\

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' # ' D1ʻ <B1ʻ &=ʻ E&A9ʻ , '-.ʻ =ʻ -.@<-Aʻ <-Aʻ ! <-B1ʻ9 <-Aʻ & Aʻ &=ʻ 1@<-Aʻ9 D1ʻ 'L Dʻ <= 1 ' D1ʻ &-H?10 ʻ9 < ' D'0ʻ <=@'<>1- ' D&@A1-ʻ < ' 10 >' '0 1 ' D1ʻ '- Dʻ " < ' &=ʻ ?@ ʻ9 D1ʻ D 11ʻ9<-A8 D' '1 Dʻ 1< ' &=ʻ D'0ʻ 1'.<ʻ9 # ' D1ʻ A+'B1ʻ <-Aʻ 001- ' &=ʻ D1ʻ & A0ʻ C'j ' ?<@ <-Aʻ 1>C& <@ʻ9 <-Aʻ D1ʻ & > >&-0ʻ &=ʻ D'0ʻ 1<@>' &=ʻ -.@<-Aʻ9 # '-.' '-ʻ D1ʻ <>1ʻ < @'<>1- ʻ9 ><A1ʻ <-Aʻ & A<'-1Aʻ B1 <'-ʻ A'-<-B10ʻ <-Aʻ < ? 10ʻ)ʻ =& ' D1ʻ B& > >&-ʻ F 1<@ Dʻ &=ʻ D1ʻ0<>1ʻ 1<@>ʻ9 '-ʻ D1ʻ ! & >ʻ=&@@&K'-.

! ʻ9 ? ' =& 10<'Aʻ & Aʻ D1ʻ , '-.ʻ9 &-0'A1 '-.ʻ9 D&K' Dʻ <'&=ʻ@< 1ʻ - -1ʻ A'+1 0ʻQ' &?0D&@A'/'P' 1 +<- 0ʻ9 <0 K1@@ʻ &=ʻ & A0ʻ9 <0ʻ &=ʻ & D1 ' 1 0&-0ʻ &=ʻ .&&Aʻ " 1. 11ʻ9 0D& @ ' <= 1 ' D1ʻ " 1< Dʻ =ʻ D1' ' 0<'Aʻ & A0ʻ <-Aʻ <0 1 0ʻ9 +'&@1- @ ' <-Aʻ '& &?0@ ' D<+1ʻ < 1-ʻ <-Aʻ 0C&'@1Aʻ D1ʻ E&&A0ʻ KD'BDʻ K1 1ʻ &=ʻ D1ʻ ' 0<'Aʻ & A0ʻ <-Aʻ <0 1 0ʻ < ' D1ʻ ' >1ʻ &=ʻ D1ʻ ' " 1< Dʻ9 <-Aʻ D1ʻ <>1ʻA'0 '#? 1Aʻ <>&-.0 ' D1>ʻ9 &ʻ D1ʻ >C1A'>1- ' &=ʻ D1ʻ L1B? '&-ʻ &=ʻ D1ʻ F '@@ʻ &=ʻ D1' ' 0<'Aʻ & A0ʻ <-Aʻ <0 1 0ʻ9 <-Aʻ &ʻ D1ʻ . 1<ʻ " '0C@1<0? 1ʻ &=ʻ E&Aʻ9 <-Aʻ <@0&ʻ B&- < ʻ & D1ʻ " ? ʻ <-Aʻ ? Dʻ KD'BDʻ D1 ' &?.D ' &ʻ D<+1ʻ D<Aʻ &K< A0ʻ D1' ' 0<'Aʻ & A0ʻ <-Aʻ <0 1 0ʻ9 <-Aʻ &'<ʻ 0)ʻ C1 '@&?0ʻ L<>C@1ʻ '-ʻ '>1ʻ &'B& >1ʻ9 ?-@100ʻ A?1ʻ 1>1A ' '-ʻ D'0ʻ 1D<@=ʻ#1ʻ C &+'A1A;ʻ F D1 1j =& 1ʻ D1ʻ 0<>1ʻ & Aʻ D1ʻ , '-.ʻ9 # ' D1ʻ A+'B1ʻ 001- ' <-Aʻ ? D& ' ' <=& 10<'Aʻ9 D< Dʻ & A<'-1Aʻ <-Aʻ 10 <#D 0D1A' D< ' <= 1 ' =?@@ -=& >< '&-ʻ ><A1ʻ &ʻ D1ʻ D<-B1@@& ' &=ʻ -.@<-Aʻ =& ' D1ʻ '>1ʻ# '-.ʻ9 # ' D1ʻ L1B? & 0ʻ &=ʻ<- ' 0?BDʻ & A0ʻ & ' 1 0&-ʻ9 ' K&ʻ &=ʻ D1ʻ 0<'Aʻ L1B? & 0ʻ9 &=ʻ S]0?BDʻ '& ʻ9 <a'-.ʻ9<-Aʻ C&'@'><A1ʻ9& ' D1 1<= 1 ' &ʻ #1ʻ >< A1ʻ9 # ' D1ʻ `` &?0D&@A 1 +<- 0ʻ &=ʻ D1' ' & ' D'0ʻ 0<'Aʻ 10 < & ' <= 1 ' D'0ʻ " 1< Dʻ9 D1ʻ 0<>1ʻ D<-B1@@& ʻ9 # ' D1ʻ A+'B1ʻ &=ʻ D1ʻ D'1=ʻ ?0 'B10ʻ &=ʻ D1ʻ , '-./0ʻ 1-BDʻ9 <-Aʻ &=ʻ D1ʻ &> >&-ʻ 1-BDʻ9 <-Aʻ D'1=ʻ < &-ʻ &=ʻ D1ʻ ! LBD18ʻ H?1 ' =& ' D1ʻ ' >1ʻ #1' -.ʻ9 & ' K&ʻ &=ʻ D1>ʻ9 0D<@@ D<+1ʻ &K1 ' &ʻ ><a1ʻ0&ʻ >< - ' <-Aʻ 0?BDʻ F ' 08ʻ9 &ʻ #1ʻ A' 1E1Aʻ &ʻ 0?BDʻ D1 '=0ʻ # ' D1' ' " '0B 1 '&-ʻ9 <0ʻ &ʻ D1>ʻ ' '-ʻ D'0ʻ 1D<@=ʻ0D<@@ 11>ʻ -1B100< ʻ9 &ʻ ><a1ʻ&C1-ʻ &B@<>< '&-

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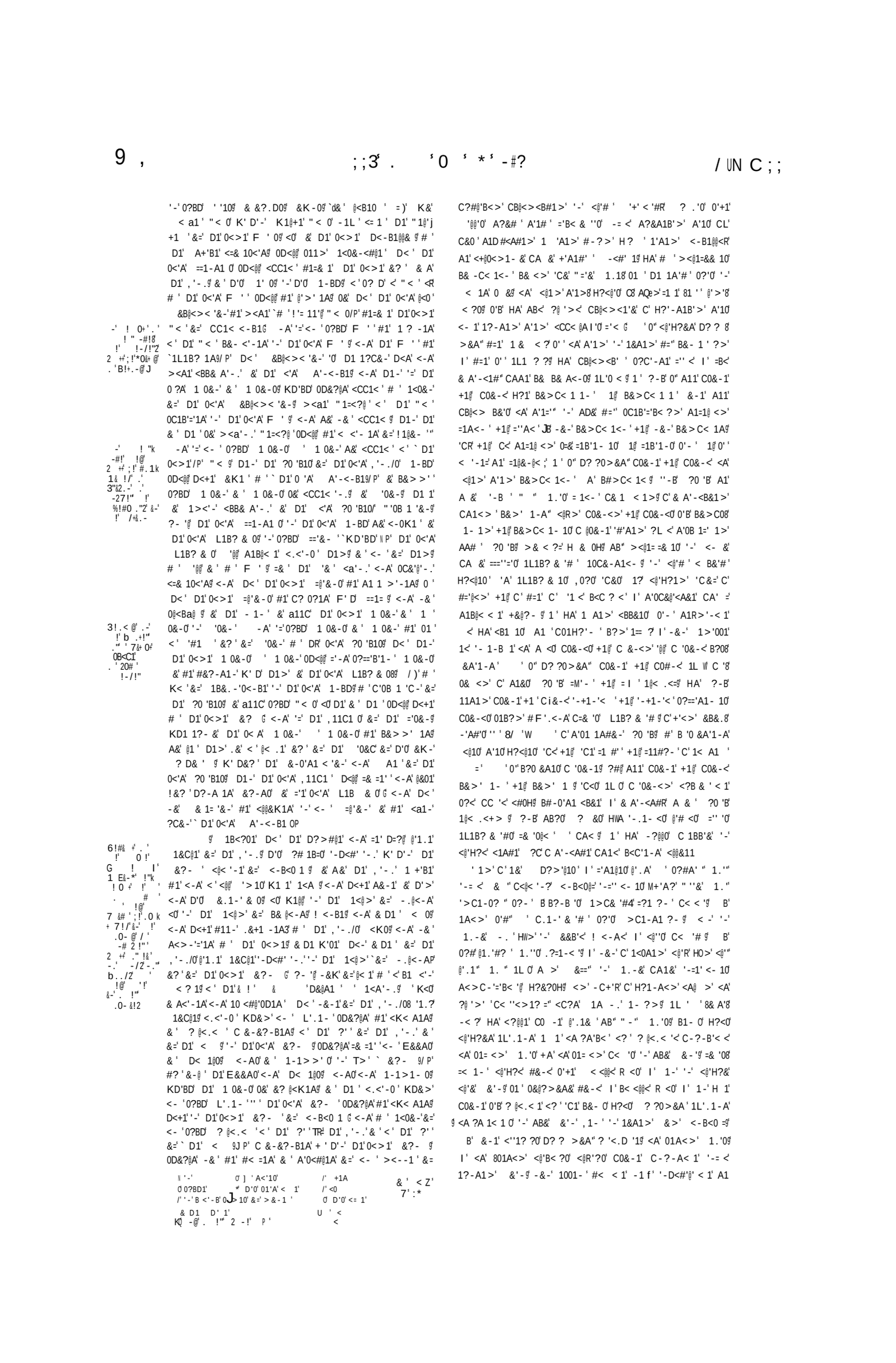

H?<B? F8' 0 <BB I 1 (f ' <A' B@<>< -A' H?<@1>B? f ' `0 D1 1A' 8 < 1>' 1L ' 1?-A1>' &==' 8 -1B' '-D<#'@' < 1' <A' 1H?1-A' H?<>B?' -H8 <BB I 1>' `/' -1H8 <A' B@<>< -A' H?<@1>B?>H8 D1 1A' < 1>' (' 1L 0 1?-A1>' & >' -1B' '-D<#'@' < 1' <A' C018 H?1-A' H?<>B?> f ' <BB&1>0P' 1L 0 1?-A1>' &' -ZP' -&-' &#0 <- 1' D? ?0>&A" ? @<.< '<' B&- 0 'C<0 C ?-B'< <G C? ' '-' 1&A1 -' <= ?' C@1-'?0 <CC< 1 ;' B' &-1' 1 ?0A1>' <= ?0 0" <@'H' ' =& '-01B?0 '-' A >' &==" C<@< '-?' 1-' 1 8 I ' < =H?1>'@'.1& ?>' -'' 1.'0 '- 1 ='R1 8 <?' <@'R' <@'H?<>' CA'B&1>' >? A " <C ?>' &=1'<'-' 17 <@'HC<>' <@'< -' =18 @&-'<>'0 +1' 0-0. 100'&-1>' CC1 < 8 0'+1 '<@'H?1>' B&-8 < ?>' =<R1 8 +1 <@'H?<>' <@'<>' &==1-0<>' B&>' 1 ' '-= < AB>' &==" <-B<0 8 HA' ?-B' 'C1'-?@@<>' < <>' C?>B 1>' -1 f ' =& '0= ? <>' '-' D<B' C< 1' = 1 1 8 -'0" 0&@?>&A&' A1' #>&" #&-'0 H?1' D? ?0 '&A" =& '-01B" <@10 D& '#'@10 &=!1-0<0 CC1 <- 10 I ' B&==' @ 1- 10 '-= < AB@C' &-" C<@<j '-?' ='1- 8 H?" C' -< & 1' C< 1' -'BD @ '-= < 1?-A1>' &>' @'1- 8 H?< A1' B<?0< AB'0 =# '-01B' '0B'1- '#4 -?@@?>' B?8 @?>' C?-'A&1>' -1 f ' A1CA' ?>' #&= & ' '-' @1.1' <A' 1= 18 -<-A' 0'+1' 10 '-.1-A' ' 0' A1' D? ?0>&A" CA'A&'#' >? 8 A '0 I ' =1@&-''0 8 1 ' <@'< CC1 < 1' '-= < AA>' &'-' B<?0< ' I ' '-A'10 <?A<B'<>' C0#1 8 B&- 0 @1.10 B& &- ?-' I ' A' .-' <j 1>' 1.'<0 '-' 1< C< 18 <B' 1B'<>' '-' 10 'BA 1' @1.?>' A<' " -" 1.'0 <A' .0+1' A<>C-?' <B' `'=' -<@1>'Ù ' A10 ?BA I 1>' AQ& ' 0?#A' & ' -1B-&-' D.1& ' '-' &'-' C<@<A>&' C 'B&;' ^?<CCR' C=< ?0 " 0' 1L' >'00< B&-0'A1 < 0 A1' <+'0<8 >1- &' <001-0?' I ' <?A@& ' < 1' C0AB'0 +&@?' 'B&-B100' ' & 8 A'-<+' ' 0 <#'@'+' 8 HA' AA?0 <A ?0 0?C'?0 1B' < ?0 I ' <A' A =>' ?@ '>&' C< @' >1- ?' <C?A' 1A -.' 1A' ?0' <A-?@@1 ' <B?1 ' I ' -?@@'?0 '.& '0 1L'0 < ' ' ?@ ?0' C' B&-01 8 +<B&1' -H?'@@' < 1' H?'1 1' I ' C<B1' & >' @'.1& ' 0?& 8 <>' '-= < AB>8 &>' C<@< '-?' HO>' <@'& ' f 1& ' 0?& ' 1L 0 &>' C0AR>' '-= < 1.-'" -. 8 'A1>' " -0' 1L' `<? & @8 < 1' CAB</4' B&-B100' ' & A'-< ' ' I ' 0 <#'@' ' 8 HA' H?&A ' 'DAB<>1- ' 1>C& 1' =? ? ' B<C'1-A' B& <>' <#H?&' ?0 'B' A1@ " -" 1.'0' '-= < AB>' &>' C<@< '-?' <-B<0 8 <?' B& <>' <@'H?&' 'B' '-' ? -&' 0?&' '-' &>' C B&@ C' H &A' <@'H?< C0&D< 1@ C &-1@ 0?CC&0'=' C' 'A1>' '-AB<>1- ?' 1001' 1@ =?'001' '-=' <-' 0' 1' B&-,0<-e 1L 0 AB>' &>' <-j B<0 ' I ' '-= < <@'H?1>' <@'C' &>' -= < 1.-?' -.@@ B<C'1 ' P' D1#' ' C' ,1AB>' A?&A1B'>' ' & 8 H?&' ' 1& ' 1- 1' R <0 I ' 1-' <?' <@'H' < <@'< C0&-< 1@ C &-'0 <A' 1& " ?0? < '-= < 1?-A1>' &>' <-B<0 ' <A' <--??' +<@& 1>' 1- ?>' 0&@'A& "G 1 ' -?@@?0 CB100?0 = 1 ' 1L 0 <@'H?&A' >&" '-AB<>1- ?@ <- 1H >' A1#' 1' '-H?' < ' I ' 1L<>' -1 8 B& <>' ?0 'B' A1 ' " -" 1.'0' '-= < AB>' &'-' <=@1<0 ' C' 1>C& 1' 1L'0 1 8 ? ?' =2AB" ' A1< & 10 I ' 1& ' H?'@ ' 1>C& 1' D? ?0>&A" '-A <>1- " R <0 I ' 1-' '-= < A<-' &>' <-B<0 ' <A' <--??' +<@& 1>' 1- ?>' 0&@'A& ' ?@ 0 &>'< 8&5< = ?1 ?-' I ' ?' ;' 1' 0" '-+18 -'< ' C' 1L<>'-<B&1>' AB&d' ?0 '1' C' 1>C& 1' 1L'0 1-' '-=' < AB'>' &>8 H?&A' '-AB< & 1 ' C2AB" I ' 1& ' H?@= ' 1>j C& 1' D? ?0>&A" '-A <>1- " 'B' B<C " <0' I ' 1-'<A'<--??' +<@& 1>8 0?C/A1>' -[-' D?1 ?-8 HA' ?-B' 'A1>' # ' >1- ?' H?&<A' D? ?0>&A" C0&-<>' +1@ C0&-<0 0'B' '-A <' 0?CC&0'" C' AB< '-AB<>1-< 1001' '-D' <-' +1@ B&- 00>' 1L 0 AQ>' &>' <-B<0 8 +<B??' I ' -?@@'?0 1=1?0 1L'0 <

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'K' - !"+&-!/'.-' !' 6.++

A@'&-8 -& ' &' B@<' >' <-=' ><--1 ' -D1 ' <-B1' &? ' &=' D1' 0<>1' &?- 8 '(')' -& K' D0<-A'-.' `<- ')' ? @<K ' <.<'-0 ' D1>'C & -&?-B1A6 <0 '-' D10<>1 '= ' A& D' >& 1' C@<'-@ ' <CC1< ;' -A' # ' 1<0&-' &=' D1' 0<>1' =@8' '=' <- ' `!& 1'.-1 ')' 0D&?@A' B&>1' '- &' D1' 0<'A' &?- ' <@<' '-18 <-A' 0D&?@A' 0@< ' <- ' &=' D1' @'1.1' 1&C@1' &=' &? ' & A' D1' ,'-.8 & ' 0)' 0D&?@A' B&>>' ' <- ' 1<0&-8 ? A1 8 <C18 &##1 8 & ' \)' & D1 ' !1@&- '& ' 10C<008 & ' ><a1' <- ' #D <A 8 & ' A&' <- ' & D1 ' ==1-B1' K' D'-' D1' 0<'A' &?- '&=' <-B<0 1 8 D< ' D1-' D1' 0D&?@A' D<+1' -& & D1 ' ?-'0D>1- ' -& ' ! & =1' ? 1' '-' D'0 1D<@=8 #?' &-@ ' &=' 0?BD' E&&A0 KD'BD' 0?BD' ! & 1'.-1 08 A&'-.' <-A' B&>>' j '-.' 0?BD' D& '#@1' ==1-B108 D<+1' K' D'-' D1' 0<'A' &?- ' <@<' '-18 KD'BD' =& ' D1' >&0 ' < ' D<+1' -& D'-.' K' D'-' D1' 0<>1' &?- 6 =& ' KD'BD' <?01' D1' 0<'A' ! & A.-1 0 a-&K'-.' -& 1 '@8 ?-'0D>1- 8 -& ' &0 &=' E&&A0 '-' D1' <K8 &' 1= <'-' & ' 10 <'-' D1>' &=' i?BD 1<0&-08 ? A1 08 <-A' ! 1@&-'108 `#1' D1' >& 1' 1-B&? <.1A' A<'@ ' &' B&> -'' D1' 0<>1' K ' F ' D1' 0'AA' &?- 8 <-A' .'+1 D' D1>' ?A<B' 'A>@ ' &' &==1-A'\' 'a.-'-0 ' D1' <K0' &=' D1' ,'-.8 #'0 &K-'<-A' "'.-' ' /)' <-A' <@0&' '-' 10 <'-' &=' D1' ,'-./0 =<K08 &' D1' . 1<' &00' <-A' ='-<@ "18 0 ?= '&D' &=' D1' 0<'A' @'1.1' 1&C@1' <-A' ?# 1^0' '-' D1' 0<'A' &?- ' <@<' '-1' ;' F D1 1=& 1' D1' =& 10<'A' & A' D1' ,'-.' B&-0'A1 '-.' D1' 1>'010 # ' D1' A+'B1' 001-' <-A' ? D& ' ' <=& 10<'A 8 D< D' K'@@1A8 . <- 1A8 0)'\<-A' "! ! +!/ 10 <#@'0D1A' D<' D1' /)' A" #1=& 1' 1D1 01A' <-A' ><A1' <' D1' 0<'A' @<0' <@'<>1-'D&@A1 '<' 1<A'-.8 0D<@@ #1' <A-?@@1A8 +&'A8 <-A' 0 <-A' '-' -& ! & B1' -A' =? D1 8 =& ' D1' &-01 +< '&-' <-H?'@@' '$ ^?'1>100 <-A' 1<B1' &=' <@@ D'0 @'1.1' 1&C@1 8 <0 K1@@ K' D'-' D1' 0<'A' #?- ' <@<'-18 <0 &=' & D1 ' D' ' @'1.1' 1&C@1' &?' &=' D1' 0<'A' &?-@ 8 K'=@''-' D1' 1<@>'&=' -.@<-A8 D1' <>1' & A' D1' ,'-.8 # ' ? D& ' ' <=& 10<'A8 D< D' . <- 1A' & A<'-1A' <-A' 0 <#@'0D1A' D<' 1+1 ' -A'=@>1-'D1 1<= 1' &' #1' <a1-'#1=& 1'<-' '&=' D1' ,'-./0' ?0 'B10' '-' D1' 0<'A' &?- ' <@<'-1'&=' <-B<0 1 8 & ' #1=& 1' <-' D1 '=-' D'0' &? -' '-' D1' 0<'A' &?- 8 KD1 1# '<-' 1 0&-'& ' 1 0&-0` # 1 ' 0?CC&01A' # ' DA' 0<>1' -A'A@>1-' &' #1' & ' &' D<+1' #11-' '-D<#' '-.' & ' B&-+1 0<-' ?' &=' D1' 0<'A' &?- ' &=' <-j B<0 1 8 <-A' K' D'-' <-' & D1 ' &?- ' K' D'-' D1' 1<@>8 C=' -.@<-A8 0D<@@ #1' <a1-' <-A' D<A' # ' D1' 1 A'^' &=' K1@+1' 1-8 KD1 1&=' 1+1 ' &=' D1>8 & ' 0&>1' & D1' 1 0&-' 1 0&-0' &' D1' ' 018 K' D'-' D1' 0<>1' #?- ' &=' <-B<0 1 8 0D<@@ D<+1' 3')' &' D1' 1< @ ' <@?1' &=' <-' ?-A 1A' D'@@'-.0' 2 -A' -&' &B100' 0D<@@ #1' ><A1' &?' &=' <-' 0?BD' -A'^>1-8 #1=& 1' ' '#1' A?@ ' '-H?' 1A' <-A' 1L<>' -1A8 #1=& 1' D1' ,'-./0' ?0 'B10 $K' D'-' D1' 0<'A' &?- ' &=' <-B<0 1 ' =& ' D1' '>1' #1' -.' F D1 D1 ' D1' 0<'A' -A'= & 0 <-A' 1+1 ' &=' D1>8 <' D1' '>1' &=' 0?BD' -A'= >1-' `0& <a1-' D<A' <-A0' <-A' 1-1>1-0' K' D'-' D1' 0<'A' &?- ' &=' <-B<0 1 ' &' D1' 1< @ ' <@?1' &=' <-' ?-A 1A' D'@@'-.0' <#&+1' <@@ D< .10;' -A' '=' ' ' #1' =&?-A' # ' L<>'-< '&-' &=' D1' 0<'A' ?0 'B10' =& ' D1' '>1' #1' -.' K' D'-' D1' 0<'A' &?- 8 D<' D1' <'A' -A'=@& 0 <-A' 1+1 ' &=' D1>8 <' D1' '>1' &=' 0?BD' -A'==>1-' 0& <a1-8 #<A' -& ' <-A0' <-A' 1-1>1-0' &' D1' 1< @ ' <@?1' <=& 10<'A8 D<' D1-' D1' 0<>1' -A'^>1-0 <0' &' `0?BD' F ' 1 0&-0' 0&' '-A'= 0A8 0?CC&01A' # ' D1' 0<'A' -A'B j >1-0' &'#1' '-D<#' '-.'`<-A' B&-+1 0<-&& ' &=' D1' <'A &?- ' &=' <-B<0 1 8 0D<@@ #1' +&'A' <-A' &=' -&' ==1=8

<-.'"/&2 ;+!/' .'20!' -@'- <' ##&.-'.0 !'. '
!' 2 1!' .0- !')'20#
' ."!@-' 1 -')' !+@2')'!-@'
F # 02! ' -/' / ++@' !-;.+/& ' @1!' .'/.' ' . ' +' 20# ' &-*!2' 7& &-0!'.0"!'Y ! 2!&/' .-- !' :]'@'
"' &-' ' " &!' ('2!&/' N' %'
N' +.-/!2' %' !-!1!- !2'
!-@'20# ' 2.-'.'" .'.'"
' # 7#

!'2 &/'
0 !'
+ ! / '

'7 '
2 !' .2!'
0".."2' 102'
;!'7 .'2 +'
K < '&-' !'
.0- @' . '
-# 2 !"'
B."!&*-!"2'
/7!++&-*'
&-'. !'"
.0- &!2

’7 ’ 2 !’ .2!’ 0".”2’ 102’ ; ! ’7 .’2 +’ &- / &<’&-’ -. !’” .0- @’ 3!”2.-2 /7!++&-*’&-’ !’ .0- @’ . ’ -# 2 !”

-A’ <@0&’ ’1’ 0<>1’ & A’ D1’ , ’- .’ &=’ D1’ A+’B1’ <-A’ ? D& ’ ’<=& 10<’A’ D< D’ ℕ)’ . <- 1A’ & A<’-1A’ <-A’10 <j #@’0D1A’ D< ’ 1+1 ’ -A’= >1- ’ = &>’ D1-B1=& D’ &’ #1’ <a1-’ K’ D’-’ <- ’ &?- ’ &=’ D1’ 0<’A’ 1<@>’ <-A’ &?’ &=’ D1’ 0<’A’ &?- ’ &=’ <-B<0 1 ’ #1=& 1’ <- ’ ?0 ’B1’ & ’ D1 ’=’ ’-’ D’0’ &?>’ KD1 1# ’ <- ’ 1 0&-’ & ’ 1 0&-0’ /)’ 0?CC&01A’ # ’ D1’ 0<>1’ -A’B >1- ’ &’ #1’ & ’ &’ D< 1’ #11-’ B&-+1 0<- ’ & ’ ’-D<#’ ’-.’ K’ D’-’ D1’ 0<’A’ &?- ’ &=’ <-B<0 1 ’ <-A’ K’ D&?’ 0?BD’ &?- ’ KD1 1’ ?BD’ -j A’B >1- ’ 0D<@@’ D<CC1-’ &’ #1’ <a1- ’ D<@@’ #1’ <a1-’ # ’ 1 A’<’ &=’ K1@+1’ 1-’ KD1 1&=’ 1+1 ’ &=’ D1>’ & ’ 0&>1’ & D1 ’ 1 0&-’ & ’ 1 0&-0’ & D1’ ’ 01’ 0D<@@’ D<+1’ <-A0’ <-A’ 1-1>1- 0’ K’ D’-’ D1’ 0<>1’ &?- ’ KD1 1’ D1’ 0<’A’ -A’<>1- 0’ 0D<@@’ #1’ <a1-’ &’ D1’ 1< @ ’ <@?1’ &=’ <-’ ?-A 1A’ D’@@’-.0’ -A’ D<’ -&’ &B100’ #1’ ><A1’ &? ’ &=’ <- ’ 0?BD’ -A’<>1- 0’ #1=& 1’ ’ ’ #1’ A?@ ’ 1L<>’-1A’ <-A’ 1-H?’ 1A’ #1=& 1’ D1’ , ’- ./0’ ?0 ’B10@ D<+’-.’ &K1 ’ &’ <K< A’ <- ’ &B100’ ?C&-’ 0?BD’ -A’B j >1- 0@ KD1 D1 ’ D1’ 0<’A’ -A’B & 0@ <-A’ 1+1 ’ &=’ D1>’ < ’ D1’ ’>1’ &=’ 0?BD’ -A’B >1- 0’ <a1-@ & ’ <- ’ & D1 ’ 1 0&-’ & ’ 1 0&-0’ &’ D1’ ’ 01@ D<A’ <- ’ <-A0’ & ’ 1j -1>1- 0’ &’ D1’ 1< @ ’ <@?1’ &=’ <-’ ?-A 1A’ D’@@’-.0’ K’ D’-’ D1’ 0<>1’ &?- @ <#&+1’ <@@’ D< .10@ KD1 1’ 0?BD’ -A’B >1- 0’ D<CC1-’ &’ #1’ <a1-’ -A’ ’=’ ’ D1’ =&?-A’ #1=& 1’ &? ’ & A’ D1’ , ’-.@ & ’ <- ’ &=’ D’0’ ?0 ’B10@ D<’ D1’ 0<’A’ -A’B & 0@ ’<- ’ &=’ D1>’@ D<A’ -& ’< ’ D1’ ’>1’ &=’ 0?BD’ -A’B >1- 0’ <a1-@ -& ’ D<’ -&-1’ & D1 ’ &’ D1’ ’ 01’ D<A ’ <-A0’ <-A’ 1-1>1- 0’ &’ D1’ <@?1’ &=’ <-’ ?-A 1A’ D’@@’-.0’ # ’ 1< @ D<’ D1-’ D1’ 0>A’ -A’B @ >1- @<0’ &’ <- ’ 0?BD’ h)’ 1 0&-’ & ’ 1 0&-0@ 0?CC&01A’ # ’ D1’ 0<>1’ -A’B >1- ’ &’ #1’ & ’ &’ D<+1’ #11-’ ’-D<#’ ’-.’ & ’ B&-+1 0<- ’ K’ D’-’ D1’ 0<’A’ &?- ’ &=’ <-B<0 1 @ 0D<@@’ #1’ +&’A’ <-A’ &=’ -&’ ==1B

@ F D1 1<0’ A’+1 0’ ==’B1 0’ ’-’ D1’ , ’- ./0’ L j BD1H?1 @ A&’ <a1’ !110’ <-A’ F <.10’ &=’ D1’ , ’- .@ =& ’ D1>01@+10’ <-A’ D1’ ’ @1 a0@ =& ’ L1B? ’&-’ &=’ D1’ ’ ==’B10’ ’-’ D1’0<’A’ LBD1H?1 @ D<’ -& K’ D0 <-A’ - .@ D1’ 0<’A’ ==’B1 0’ <-A’ D1’ ’ @1 a0’ A&’ <a1’ &=’ D1 ’== @ 0@ BD1< & 0@ <-A’ <@@’ & D1 ’ BB&>C <- ’ ’-’ D1’ <’A’ LBD1j H?1 @ . 1<’ ’<-A’ ` 1LB100’+1’ 0@ E’= 0@ !110@ <-A’ 1K< A0@ =& ’ L1B? ’&-’ &=’ D1’ ’ ==’B10@ <.<’-0’ <@@’ 1<0&-’ <-A’ &-0B’1-B1@ <-A’ K’@@’ -& ’ 1L1B? 1’ D1’ ’ ==’B10’ =& ’ A1@’j +1 ’ -.’ &=’ D1’ 0<’A’ CB >C <- 0@ ’@@’ D1 ’ D<+1’ 0?BD’ ``1LB100’+13P’ !110@ E’= 0@ <-A’ 1K< A0@ KD’BD’ B<?01 D’ D1 ’=’0’ 0BD1< & <’ >’A’ & D1 ’ BB&>C <- 0’ &’ <a1’ ``# ’ L & ’&-’ 1LB100’+1’ !110@ E’= 0@ <-A’ 1K< A0’ `/)’ &=’ D1’ , ’- ./0’ @’1.1’ 1&C@1’ ’-’ D1’ &?- ’10’ KD1 1’ = 1’ ’ ==’B10’ #1@ 0)’ &’ D1’ . 1< ’ ’’ <>< .1’ <-A’ ’’ 10 ?B ’&-’ &=’ <@@’ D1’ 0<’A’ BB&>C <- 0@ <-A’ <@@’ D1’ 1&C@1’ <=& 10 ?A;’ -A’ F D1 1<0’ ’ ’ A& D’ C1 <’-’ &’ A’+1 0’ ==’B1 0’ ’-’ D1’ 0<’A’ LBD1H?1 @ # ’ 1<0 -’ &=’ D1’ ! 110’ <-A’ F <.10’ KD’BD’ D1 ’ <a1’ &=’ D1’ , ’- .@ &’ 1- 1 ’ @1<0@ <0’ F1@@ #1 K’L ’ D1’ , ’- .’ <-A’ D1’ < @ <0’ #1 K’L ’ < ’ <-A’ < @ <-A’ /)’ < A&-0@ F ’ 0’ &=’ @@&K<-B1@ ?A.1>1- 0@ <-A’ & D1 ’ - ’10@ K’ D&?’ ! 110’ E’= 0’ & ’ 1K< A0@ D1’ 0<>1’ =’ 1 ’ <-A’ 1+1 ’ &=’ D1>@ -& K’ D0 <-A’ -.’ D1’ ’ 0<’A’ ! 110’ <-A’ F <.10@ K’@@’ -& ’ 1- 1 ’ <- ’ @1<@ D&?.D’ ’ B&- <’-’ #?’ <@=’ <’ &= @ 1LB1C ’ D1 ’ =& ’ D1’ 0<’A’ - ’ D<+1’ ``L]+’ D’@@’-.0@ +’’ ’ C1-B1@ LL’ D , -.0@ & ’ L’’ ’ D’@@’-.0’ ’’’ ’ C1-B1’ <’ D1’ @1<0 @ <-A’ =& ’ D1’ - ’ &=’ @@&K<-B1’ &=’ 1+1 ’ < A&-’ <-A’ F ’ @ KD’BD’ D1 ’ & ’ <- ’ &=’ D1>’ A&’ 1- 1 ’ =’+A’< 0&1+1 ’ D& -100’ D<’ ’ ’ #1@]’0 @ -A’ >& 1&+1 @ D1’ BD’1=’ @1 a’ &=’ 1+1 ’ &=’ D1’ 00@A’ ==’B1 0’ <a1 D’ =& ’ D’0’ <#&? @

0 0 $
/ D1 ’ = ’ ’
:’ &? <.’&?0’ /’ #’
ℏ& ? 1 <.1&?0’<-A’ /’=& D1’ 1’01’A’&=’B10’A& ?:’ ’’ 1 ’ ’ &’ D< ’ D1’1LB100’+1’ <a -.’ ’0’ .’ VL L
<=& ’ &’ 1- 1’ /’ ℏ > @ -&#@10

B’ 1B’<>’ ’A1>’ ” -0’ 1L’ A1’ <+’0<>1- &’ I ’ <?= &@ ’ < 1’ =2A’B ’ +&@?’ ’ B&-B100’ ’ & A’-<+’ ’ I ’ 0 <#’@’+’ @ H?&A’ H?&A ’ ’-AB<>1- ?’ 1>C& 1’ =? ?=’ B<C’1-A@ ’-= <’ <@’H?1>’ &>’ AR” 1.?” 0?” I ’ 1L 0’ AB>’ &>’ <-B<0 =@ B& <>’ <@’H?&’ ?0 ’B’ +1@ ’B’ ’-’ ?-&@ 0 @&@ C ’ H?&A’ <@’H?<’ C &-<’ +1@ C0&-1’ 0?CC 0’@ C’ ’A1>’ ’-A#<><’ ?>’ 1001’ +1@ =’@’001’ ’-@’’ <-=’ 1@ B&C 0<-@ ’-= <’ AB>’ &>’ <-B<0 ’ 5.’ 1L 0’ <@1>’ &=’@ ?D” >&” ’-AB<>1- <’ B<C” B&- ’. - @ B<C’1 ’C’ , 1A >’ A?&A1A>’ +’ & ’ H?&’ ’U& ’@’1- 1’ <@’ I ’ 1-’ <?’ <@’H?<’ <@’<’ C0&-<’ +1@ C0 -1’ <A’ 1& ’ ?0?>’ <A’ <C-+K’ +<@& 1>’ 1- ?>’ 0&@’A& ’ ’-= <’ 1?-A1>’ &>’ ?@ ’&’-’<’ & <’ #” @’@-&’ ’-j AB<>1- <’ B<C” B& ’-.?- ’ ’0” ’-+1-’< ’ B& <>’ ” -&’ 1.1’ +1@ B& <>’ <@’H?&’ ?0 ’B’ 0?& ’ HA’ AQ’ ’-AB< & 10’ <?’ <@’H?’0’ C& @ 1>C& 1’ D? ?0>&A” ’-AB<>1- ” 0’B’B<C ’@ -&-’ D?1 ?-’ +1@ -&-’ D?’ ’ -1B’ <@’H?’0’ <A’ 1& ’ ?0?>’ D?’ ’R <0’ I ’ 1- <’ <A’ +<@& 1>’ 1- ?>’ 0&@’A& ’ C’ <-- @ HA’ ?-B’ ’-AB<>1- ?’ CAB>@ H?&<A’ <@’H?<>’ D>&” <@’<>’ C0&-<>’ +1@ C0&-<0’ 0?CC&0’ ’ C’ D? ?0>&A” ’-AB<>1- ’ 1001’ +1@ =?’001’ ’- ’’ <-” 0’+1’ B&-+0<-’ -==<’ A =>’ &>’ <-B<0 @ +<B??’ I ’ C?@@’?0’ 1= ?0 1L=1 <

1>’ HA’ B?>’ A’C0@ =’B’< ’” ’-’ BOB’&’ ” -” 1.’0’ ’’ CB’C’<=’ ’=1&A<’ I ’ +<A’<’ A1’ 1.1’ C’ 01’ I ’ B@’B’0’ 0?’0’ C’ 1L1B?A&1’&=’B’& ’ `0?& ’0` ’ ’-’ BO ’&’C0AB&@1&’ -&-’&#0 <- 1’ = B” &=’B’< ’” I ’ 1& ’ B@’B’@ A1’ ’B1B >’ ’ ’#’ 0B<1 & ’#@ <B’ & -’# ’<@’’0’B&>C? <- ’# ’ ’-’ AB&’ BOB’&@ ><.-<’ I ’ 1LB10@ 0’+<’ A&-<’ =1&A<’ I ’ 1.< A<’ C ’ 1L BC1’ &=’B’& ’ 0?& ” B<C’?- @ B&- 0’ &’-1>’ &-1>’ I ’ B&-0B’1-B’<>@ I ’ &=’B’< ?<’ C’ A1@’#<B&1’ AB& ’ B&>C? <-B’?’ 1L1H?” -&@?- @ H?&?0H@ D ?0>&A” 1LB1 i 0’+<’ =1&A<’ `` 1.< A<0P’ I ’ A&-<’ #1<>@ H?1’ B<?0<- ’ @B1B&>’ 10’ 0B<1 & 10’ I ’<@’&0’ 1&>C? <- 10’ 1]B100’+<’ =1&A<’ A&-<’ I ’ 1.< A<’ A1’ CC’&’ ” -” 1.’0’ 1L & H?1 1@ C’ &=’B’& ’ 0? ’ 1]1B?B#1’ ’-’ &>’ < ’#0’ ?#” &=’B’<’ 0?C’ 1L’0 ?- @ 0’B’ H?&A’ 1LB1 0’+<’ <CB’ ’ B1A’ ’ <A’ . 2 1’ A< <C-?’ I ’ A10 ?BA&1>’ &’>’ AB& ’ B&>C? <-B’?’ 1B-&-’ CC@” C2AB’;’ B’ 1B’<>’ B?>’ A’ , 0’0’ &=’B’< ’’0’ ’-’ AB&’ BOQ’&@ &-1’ =1&A& ’ I ’ +<A’& 0’ SO!’ CB’C’?- ’ A1’ 1.1@ C@’ <’ < -’ ’-R’ ’C’>’ 1.1>’ 1 ’ C< 1>’ HJ>’ ’-R’ C< 1>’ I ’ C< 1>@ -1B-&-’ CA&-’’B&10’ #=’<’ <@@&B<A&-?’ ?A’B’<’ I ’ <@’<0’ ’-01 B&10@ <#0H@ =1&A’0’ A&-’0’ 0<+1’ 1.< A’0’ ’-01 1 1’ C ’-1< @ ’’A1>’ &=’j B’< ’” I ’ 1& ” .?’@ ’ -&-’ &#0 <- ’#’ =1&A’0’ I ;’ +<A’’0’ 0?’0’ CAB’0’ <@’H?&A’ C@’ ?>’ @’B1 ’ B&- ’-1< ’ -’0” >1A’1 < 1>’ ?-’-0’ & ?@” ’-01 1 1’ -&@?- @ -’0” ’C ’ C’ AB<’ ’-01 B&1’ +’.’- ” I ’ 01L’ 0&@’A&0’ I ’ &B &’ A1-< ’&0@ +’.’- ” 0&@’A&09’ +1@ 10A1B’>’0&@’A&0’ I ’H?< ?& ’ A1-< ’&0’<A’ > > ?0’ D1<- G B’ C’ ’-01 B&1’ <@@&B<B&’0’ B? ?0@ ’ CA&-<B&’0’ 0’+1’ # -0@ H?<>’+1@ H?&A’ ’C” <? ’ <@’H?’0’ ’C& ’ ’-01 ’ ’ <? ’ ’-01 ?- @ B? ?0B?>H@ # 1+’ < ’0’ 0’ @ A1B1 -’ 0&@’A&0G 1 ’ ?@R’?0’ C ’-j B’C<@’0’ B ’B?0’ H?& ’ ’ AQ& ’ &=’B@< ’& ’ B<C’ ’ C’ @<# & 1’ 0?&

% .” &. -<’ #. 1 1& !/’ ; @’ !’ &#!”Z . ’ ! %# !SO!’” H

<- ?@-' A1' C< '#4' <B' B&>C? <'' '#4' CAB'0' BC'<- ?' < '-.' '
<A' RA<- ' C' 1 -' A1' 1&' H?&A' <. ' 0??0' CB1C' ' H?1'
A&-<' I ' 1.< A<' H?&-A<>' B&>C? <-B'^' <A' 0?><>'
+'.'- '' >< B< ' H?&-A<>' A1B1 -' @'# < ' A1B1 -' >< B< '
<A' >'-?0' < '-.?- ' <A' .W+1' A<>C-?' &CC00#-1>' I ' <A8'
-'BD'@<AI1>' CC,' CAB' ' B' 1A<>' B?>' A',01' B&>'08'
0'&- 0' 0C<@10' A' f '0' ?0 'B' C<B'0' I ' <'A0' '-' H &' ' &>'
-. ' C' A1@'#<A 1' =1@&-?' I ' <'A0' B<?0'0' 0'-' A'=1A1'
H?< ' B&>'00'&-^' +' ? 1' ?0 ' ' 0'B' <00'.-' <@'H?&' 1>j
C& 1' 01A1-' I ' A1'' '<-' =1@&-10' I ' <@'H?<-A&' #>&''
&>'00'&' -&-' A0@'#< G I ' 1&' -&-' &#0 <- 1' H?'A<>' AB& '
= A< '& '+' ? 1'&' B'& '0?& 0'+&@?- ' =<R1' A'0 'BBA1>'
C0?0' D? ?0>&A'' &>'00'&-< '&0' 1 &>'<#'@1>' <A' R ?>'
A'1>' <A' B&>'00'&-1>' ?<>' B?>' &'-'# ' 1L' '#4' =& '0=B'0'
1 &=-<-A' ' A' H?1 -' A'1>' @'B1 ' H?'A1>' &>'00'&-< '''
B&>C< 1<-' I ' C' 1& ' 1L1C?0<B(1' 0<B >' dR 1- ' C? ' @1L'
+?@' HA' 'C'' ?L <' =& ><>' B&-@'00'&-'0' 01A1 ?-' I ' C '8'
0&-10' A1A#<+1 C- ' 1@ <@'R' HA' -?@@<' D? ?0>&A'' B&>'00'&'
<A' 1& ' ><-?0' A1+1-' ' '-' H?&' <0?' 'C'' '-' @1.1' 1L& <- '
<AD?B' 1&' -&-' &#0 <- 1' ==' B'< '''' AB'' -&+<0' A'0 'BB&10'
= ?0' AB&0' &>'00'&-< '&0' 0B '#1 1' &@?- ' <A' A'0 '-.1-A'
'C&0' ` I '0'B P' '-=' -' 1' H &? H@' &>'00'&-< '''' AB'' ='-1>'
B?>' 'C&0 <A' +&@?- < 1>' 0?<>' =1RA ;' 1'< ? ' '' -0'
1L' C>'00<' B&-0'AB <'0@' A1' <001-0?' A-& ' 0C?<@'?' I '
1>C& <@'?' <B' <A' 0C<'1>' 1H?'0'A&1>' & & '0' CAB1'
-1B-&-' <? I & ' < 1' 1 ?0A1>' C< @'<>1- '' A'-<+' ' I '0 < '
#'@'+' @' HA' H?'@' ==' B'< '?0' '-' AB&' BB/'&' H?'' <@'H?<' =1&A<'
0'+1'+<A'<' A1' 1.1' C' 1L1B?B 1' &' B'' 0?'' CB'C' @' HA' 'C'' I '
1& ' H?'@' &>10' B&>C? <- 10' '-' AB&' BB='&' '-' D&B' H?&A'
&=='B'&'0?&' C '-1 ' 1>C& 1'B&-. ?&' A1@'#1- G 1 ' HA' 'C'' -1B'
1&C' <@'H?'0' -1B' <@'H?'0' B@'B& ' 0? ' <C'<-' -1B' B<C'<'
<@'H?<' A&-<' =1&A<' 1.< A<' C>'00?>' +1@' 01B? ' < 1>' C'
<@'H?<' 1' H?<>' 'C'' =<B'1-' ' '-' &==' B'&' 0?&' CA &' C' <@'8'
H?'#:' B(>C? <- '#4@' 1LB1C '0' AB'0' +<A''0' I ' =1&A'0' H?1'
'C1' CB'C' ' A1' 1.1' C' 1L1B?B&1' 1 ?0A1>' ='B'' ' <@+&'
01>C' HA' H?'@' A I C' ==' B'< '& '@H?'#4' C '-1 ' &-1' &=='A&C'
0?& ' <A' '-01 1-A' C@' <' CA&-<B 10' #-<' <@'&B<A&'0' I ' ?8'
A'B'<@ CH'C1' C&0 ' ' C' '-01 B&1' C=' '' CA&-<1#'0'#=' 0' 1B& A''
0'+1' ?A'B'' H?&A' +1'' H?1' B&- '-1 ' >1A'1 < 1>' & ?@'@
?L <' @&-.' ?A'-1>' I ' @<@' @'A'-1>' '-' A & BB '&' <#'
<- 'H?1' ?0' < <0@' A?&0' 0&@'A&0' I ' -&-' C@?0' G I ' C' @@H' C@' &'
CA&-<B 1' #=' 1B& A&' +1@' ?A'B'&' H?&A' +1@' H?1' B&- '-1 '
& ?@&' '- 1. ?>' H?< ?& '0&@'A&0' I ' -&-' C ' - 0 I ' C' '@@&'
C@' &' CA&-<1C1' #=' 1B& A&' 0'+1' ?A'B'&' H?&A' +1@' H?1'
B&- '-1 ' >'-?0' >1A'1 < 1' & ?@'' +'.'- '' A1-< '&0G I ' C'
'@@#' C@' &' CA&-<B#1' #=' 1B& A&' 0'+1' ?A'B'&' H?&A' +1@'
H?1' B&- '-1 ' CD'0' ?L <' <=1 <-B'<>'0'+1' H?<- ' < 1>' G 1 '
HA' -?@ ?0' AB& '' ==' B'< '& ' -1B' B@'B& '' 0?& ' CB'C'<'
<@'H?<' =1&A<' -1' ' +<A'<' -1B' <@'H?&A' <@'?A' C='B??' A1'
<@'H?'#4' BA@1=@& '#' A1B'><' H?'- <@0' A1B'><' A1>B1C0'
C= E' A-&' 1.'' B&-B100<' 0'+1' B&-B1A1-A G' 1' HA'
D? ?0>&A'' ==' B'< '''' '-' AB&' BB '&' H?'' D1- ' CC 10 < 1>'
0B '#1-A'' &-1' &==' B'& '0?& ' A'0 ', 0?0' ?0 ' ' C<B'0' A'-'
1.'0' 0'+1' <@'H?&0' <@'&0' &>'00'&-< '&0' <A' 1L <=@<0' 0?<0'
A1=1 1-A@' HA' 'C1' -1B' <@'H?'0' B@'B& ' 0?& ?@ C&0 HW>' A '
?0 ' ' 0'+1' &>'00'&-< '''' A1#' <>' 1LB?0<B&1>' C? '0?C'?'0'
1B' <R' =1 - @' <? ' 1L <B <0' 0?<0' '-' ?=' A1 ?@1 '- @

) - !''+&-!/'.-' !' 6.++

`<0' K1@@' &=' 1+1 ' & =P' D1' 0<'A' < '10' N)' BB&>C <D 0 '
<0' <>&?- 1 D' &' D1' D' A' < '&=' D<' D<' D'0' <0 1 '
A'A' <a1@' KD'BD' E'= 0' <-A' 1K< A0' &=' 0&>1' BB&>C8'
<- 0' <>&?- 1 D' &' D1' ?>' &=' K1- ' < a0@' &=' 0&>1'
1-' &?-A@' <-A' 1-' < a0' <' D1' @1<0 @' &' D1' . 1<'
''<>'<.1@' CC 100'&-@' <-A' ?-A&'-.' &=' D1' 0<'A' 1&C@1' ;'
-A' <@0&' F D1 1<0' A'+1 0' 0C1B'<@' &>>'00'&-0' #1'A' 1B 1A'
&' A'+1 0' ?0 'B10' &=' 1<B1@' <-A' <@0&' &' & D1 @' '-' 1+1 '
$ &?- ' &=' -.@<-A@' =& ' D1' ''1@'+1 <-B1' &=' !1@&-0' <-A'
& D1 ' <?010@' #' +' ?1' &=' KD'BD' &>>'00'&-0' D1' ?0@'
@' 'B10'0&' <00'.-1A@' 0&>1 '>1' A&' 0' '<-A' A1@'+1 ' !1@&-0@' /)'
<-A' 0&>1 '>1' 0?BD' &>>'00'&-' '0' -&' A1@'+1 1A' G <-A@'
D<' -& K' D0 <-A'-.@ 0&>1' &=' D1' 0<'A' ='B1 0@' #' +' ?1'
&=' D1' ' ='B10' K'@@' ><a1' '' 0 100' <.<'-0' 0?BD' &>j
>'00'&-1 0@' 1 ? -<#@1' ' <' B1 <'-' '' < @' &' 1 ? -' D1' '
&>>'00'&-' K' D' <@@' 00?10' =& =1' @' ` &' #' 1 ? -1A' 3P'
'KD'BD' '' < ' D&?.D' 0&>1' `&=' D1' <'A' &>>'00'&-1 0'
A&' <CC1< @' <-A' =& ' D1' ' LB?01' A&' ><a1' <-' < D@' <0'
3 '@1' K'@@@' D<' D1 ' D<+1' 0' 1-'<-A' A1@'+1 1A' D1' 'j
0&-1 0' <BB& A'-.' &' D1' ! & >' &=' D1' &>>'00'&-@' &'
& D1 K'01' D<' -&' 0 BD' &>>'00'&-' B<>1' &' D1' ' <-A0@'
'-' KD'BD' <01' D1 '#1' '-' D1' <K' A' BD<=.1A@' 1 @' D'0'
-& K' D0 <-A'-.@ D1' 0<'A' ='B1 0' K'@@' K ' 1' -1K' '' 0j
1001' <.<'-0' D1' 0<'A' &>>'00'&-1 0' &' A'0 <'-' D1>@' '
`<-A' 0&' >='-' 1@ 9W P' '@@' D1' 0<'A' &>>'00'&-1 0' D<+1'
><A1' `<' !'-1' <' D.' ' F '@@' C P' ? '0<'A' &+1 1'.-' & A'
D1', '-.' B&-0'A1 '-.' D1' 1>'010@' # ' D1' 001-' &=' D1'
& A0' C' ' ?<@<-A' 1>C& <@@<-A' <' D1'0C1B'<@' 1H?10'
&=' D1' 0<'A' &>>&-0@<-A'# ' ? D& ' ' &=' D'0' < @'<j
>1-@ D< D' & A<'-1A' <-A' 0 <#@'0D1A' D<' 1+1 ' ='B1'
`&=0 P' D1' 0<'A' LBD1H?1@ KD'BD' <a1 D' <-' ' !110' & '
F <.10' &=' D1>'-.' =& ' L1B? '&-' &=' D'0' ='B1@' /)'0D<@@'
A1@'+1 ' < ' D1' BB&>C <@' 0' '-' D1' 0='A' LBD1H?1 @'-'
D<' D<' &' `D'0 == ' B 1' <CC1 <'-1 D@' '-' <' B&-+1-'1-'
'>1' G -A' D<' D1 ' -&' -&-1' &=' D1>@-&' -&-1' &='
D1' ' @1 a0@' <a1' <-' E'= 0@ ! 110@ 1K< A0@' &>'00' &'
? 1 @' =&' <-' D'-.' KD'BD' D1 ' 0D<@@' A&' '-' D1' ' 0<'A'
='B1' =&' <-' BB&>C <D 0@' 1LB1C ' D1' 0<'A' ! 110' <-A'
F <.10' KD'BD' D1' <a1 D' &=' D1 '-. '=& ' D1' L1B? '&-' &='
`D'0' W P' ='B1' <+'-.' <@K< 0' D<' 1+1 ' &=' D1' 0<'A'
='B1 0@' &' KD&>' '' C1 <'-1 D' # ' 1<0&-' &=' `D'0'
='B1' W P' &' 1- 1' @1<0@' < A&-0@' F ' 0' &=' @@&K<-B1@'
<-A' ?A.1>1- 0@>< ' <a1' =& ' D1' 1- 1 '-.' &=' D1' '1<U
< A&-@' F ' @' 1B& A@' &' ?A.1>1-@ D<' B&- <'-1 D'
<@=' <' &@@@' <BB& A'-.' &' D1' 1-. D' <-A' 1<A D' &=' #'A'
'>10' ?01A' '-' D1' 0<'A' LBD1H?1 @' K&' D'@@'-.0@' %4
-&' >& 1G -A' =& ' ` D1' 0< > 1 @1<@' F ' @' < A&-@
1B& A@' &' ?A.1>1-@ D<' B&- <'-1 D' <' KD&@1' &@@@'
' ' D'@@'-.0' <-A' -&' >& 1'G -A' =& ' ` D1' 0<>1' P' @1<@
< A&-@' F ' @' 1B& A@' ' ?A.1>1-@ F D'BD' B&- <'-j
1 D' @100' D >' <@=' <' &@@@' LL' C1-B1G -A' =& ' `=&1'
<>1' P' @1<@' < A&-@' F ' @' 1B& A' &' ?A.1>1-@
KD'BD' B&- <'-1 D' >& 1@' <= 1 ' D1' < 1' <-A' ^?<-' ' G
-A' D<' -&-1' &=' D1' 0<'A' ==' B1 0@' -&' D1' ' @1 a0@'
<a1' <-' ! 110' -&' F <.10@' `- ' & D1 ' &=' @W P' &=' <' '
&@@1B & 0' &=' '' 0>10' & ' ^?'-0'-'10@ . <- 1A' & ' D1 1<= 1 '
&' #1' . <- 1A' &' &? ' &+1 1'.-' & A' D1' , '-.G -A'
D<' 0?BD' ==' B1 0' '-' D1' 0<'A' LBD1H?1@ KD'BD' D<+1'
&K1 ' &' K ' 1'# ' 1<0&-' &=' D1' ' ==' B10@' '' 0 10010' 0P'
<.<'-0' D1', '-./0' ?0 'B10' &=' 1<B1@' &'<-' & D1 ' &>j
>'00'&-1 0@' &' # '-.'-' D1' ' 0 1< 0@` D1 'WP' -&' -&-1'
&=' ` D1' ' P' @1 a0@<= 1 ' D<' D<' D1' 0<'A' ?0 'B10' &'
&>>'00'&-1 0' `0D<@@' ><a1' 0P' A?1' LB?01@' <0' #1=&' 1' '0'
1D1< 01A9@' &' `# '-.N P' '-' &' D1' &? ' D1' ' 0 1< 09

' <0' >?BDR' &=' h<-A
W <=' D1' 1 ? 1' &=' D1' &-<00'&-'
9d8- D11A 0' <-A' '-=' -'
'= -1' K' D' D'>' <' D'0' F '@@;
V)-' 0' D<' D1' <-A' 1 '&D1' &=' D1'>' & '
[K !&''! ' !' 2 1! A 3
&''!'. &#!Z')'
-.'' -.-' . !'' 1 ' . ' ' &+!'
0' /&2 '' &*-!' 2' ' !' 0' H &2'
Q' '!' 1 /!' :' '!';''.0*

-/0!' &2 ''!22!2' 0 .-' .1k 1&22&.-!''Z %' /! ''!''B!+.+&2' .'''! 0''-'. ' 2 ''! 2

.' B!!Z @%&1' !' .++!# .''Z . ' &2& !Z

.' 2O# ' 0-/0!' &2k ''!22!Z 2 +' &220!

$ -% -

3! - + @ Z -
&#!"Z .“
! -#!Z
* &-2 '
&Z ^

0& ' -ƒ
3".#!22

'&-*ˢ .“
&#!"Z
&-' B! !'ˢ -ƒ
.“ 1 E&-*ˢ
! "# !Z -ƒ
. &!Z . '
6!#."/2

&Z ' .'
#.- &-0!' .“
B&' !' A! "Z #
0-+!22 !'
.0-#&ˢ E!'
"/!" !"!&-

.'30;+&#
4"!7!"' & '
M! - '2 +ˢ
1 E!' .','!'
' 0-/"! /'
90 " !"Z . '
+' --0 +@
.' &Z .7-'
2!

.- &-0 -#!'
.

.'7".0*
&+E' 6&;L
;.-2' #!2'
C#' 2 +ˢ;!'
;".0* '&- .'
&Z 6! +1'
;@'7 @ . ' '
!"# -/&2!

0D<@ƒ ><a1' -& -1K' "'0 100' -& ' & D1 ' &B100' <.<'-0 '
D1' 0<'Aˢ ?0 'B10' & ' &>>'00'&-1 0ƒ KD'BD' 0&' D<+1' 1Lj
B?01Aˢ D1>ƒ & ' # &?.D ' '-' D1' ' 0 1< 0 ' -A' '=' <- '
&=' D1'0<'Aˢ ==‘B1 0ƒ & ' <- ' &=' D1' ' @1 a0ƒ A&' B&- < '
&' <- '&=' D1' 'B@10' <=& 1' 1D1< 01Aƒ D<' D1-' D1 '<-A'
1+1 '&=' D1>' 0D<@ƒ @&01' LL'@' ' <0' &= 1-' <0' D1 ' 0D='@ƒ #1'
=&?-Aˢ D1 1'-' A1=1=@'+1ƒ <-Aˢ &?' 0<'Aˢ &+1 1'. -' & A'
D1' , '-.' 0D<@ƒ D<+1' D1' &-1' <@=' &=' D1' 0<'Aˢ LL'@' ' 0&
=& =1' ƒ <-Aˢ 0?BD' 1 0&-' & ' 1 0&-0' D<' K'@ƒ C? 0?1ƒ D1'
& D1 ' <@=¢ -Aˢ D1' 0<>1' ?' ' 0D<@ƒ #1' <a1-ƒ #&@A==@ƒ
<-Aˢ A1 1 >'-1Aˢ # ' =@'&'@' &=' " 1# ' #1=& 1' D1' < &-0'
&=' D1'0<'Aˢ LBD1H?1 ƒ & ' 1@01' #1=& 1' D1' ?0 'B10' &=' D1'
&>>&-' 1-BDƒ <.<'-0 ' <- ' ==‘B1 0' & ' @1 a0' &=' D1'
0<'Aˢ LBD1H?1 ƒ D<' A& D' & ' <a1 D' B&- < ' &' D1'0<'Aˢ
A'-<-B1ƒ <- ' '+'@1.1' & ' ?0 &>' &=' D1'0<'Aˢ LBD1j
H?1 ' -& K' D0 <-A'-.¢ <-Aˢ D<' D1' 0<>1' &B100' #1'
D<Aˢ '-' ` D'0/P' A '&-'#1=& 1' D1' 0<'Aˢ ?0 'B10ƒ <0' =1' D<Aˢ
'-'<-' '&-' &=' " 1# ' /)' ?C&-' <-' #@'.< '&-' < ' D1'
B&>>&-' <K¢ LB1C ' /)' D<' -&-1' ==‘B1 ƒ KD'BD'
D< D' <- ' ==‘B1' '-' -D1 ' <-B1ƒ '-' ! 11ƒ `#1' 1LB@?A1Aˢ '-'
D1' 0<'Aˢ LBD1H?1 P' &' <a1' D1' 110ƒ KD'BD' &=' &@A'
'>10' K1 1' @<K=?@@ ' A?1' <-Aˢ C1 <'-'-.' &' D'0' ==‘B1ƒ
<-Aˢ -&' >& 1 ' <+'-.'<@K< 0 ' D< ' D1ƒ 0<'Aˢ ==‘B1 0' &='
&? ' &+1 1'.-' & Aˢ D1' , '-.ƒ <-Aˢ D1' ' @1 a0ƒ >< '
<a1'< 1<0&-<#@1' 1K< Aˢ =& ' D1' ' 1< BD10' <-Aˢ &C'10'
><A1' # ' D1>' '-' D1'0<'Aˢ LBD1H?1 ƒ &=' <- ' 1B& Aƒ
<' D1' ?' ' &=' <- ' &=' D1' , '-./0' @'1.1' 1&C@1ƒ -& K' Dj
0 <-A'-.' D1' 0<'Aˢ A'-<-B1 ' 1+1 D1@100' D1' , '-.'
KC?@Aƒ D<' # ' A+'B1' &=' D'0' &?-B'ƒ 0?BD' "' 1B '&-' #1'
<a1-' '-' D'0' 1D<@=ƒ #1 K'L ' D'0' '>1' <-Aˢ D1' !1<0 '
&=' 'BD<1ƒ -1L ' 1-0?'-.ƒ <0' 0D<=' 011>' 1<0&-<##1¢
<-Aˢ & D1 K'01' D1' 0<'Aˢ A'-<-B1' 0D<=' 0 <-Aˢ '-' D'0'
1-. D' =& ' 1 >' &=' !'+1' 1< 0

ƒ ? '0<'Aˢ &+1 1'.-' & Aˢ D1 , '-.ƒ# ' D1 A+'B1'
&=' D1'0<'Aˢ & A0' C' ' ?<@ƒ <-Aˢ 1>C& <@ƒ <-Aˢ<' D1' 1j
H?10 '&=' D1' <'Aˢ &>>&-0ƒ <-Aˢ <@0&' # ' ? D& ' '&=' D'0
< @'<>1- ƒ D< D' & A<'-1Aˢ<-Aˢ10 <# , 0D1Aƒ D<' -&' 1 0&-'
D<' '-' D1' &?- '&=' , 1 - '0D<='B& >>&-@ ' # 1K'<- ' @1'
& ' 11 ' ;&801@@ƒ D<@ƒ ><a1' -& ' A&' &' #1' ><A1'< ' <@ ƒ
-' D'0' &?01'& 'D"<- ' H D1 ' @<B1ƒ &' D'0' &K-' 01' <' D'0'
&0 0' <-Aˢ LC1-B10ƒ <#&+1' <-' ' ^?< 1 0' '-' D1' 1< ¢
?C&-' <'-' &' =& =1' ' L@' ' 1+1 ' 1< ' '-' F D'BD' D1' 0&
><a1 D' ' A& D' &' #1' ><A1' <#&+1' D1' 0<'Aˢ ?-A 1Aˢ
^?< 1 0ƒ D1' & '1' <@=' &' &? ' &+1 1'.-' & A' D1' , '-.'
<-Aˢ D1' & D1 ' <@=' &' D'-' & ' D1>' KD'BDƒ '-' D'0' 1D<@=
K'@@ C? 0?1' ; -Aˢ D<' D1' 0<'Aˢ A'-<-B1' <a1' ==1B '
D1' ! ' 0 ' " < ' &=' ?-1' -1L ' B&>'-.ƒ <-Aˢ 0D<@@ 1-A? 1'
=& ' ! '+1' 1< 0' D1-' -1L ' 1-0?'-.

ƒ F D1 1<0' ' '0' 0D1K1A' &' &? ' &+1 1'.-' & A'
D1' , '-.' '-' D'0' 0<'Aˢ < @'<>1-ƒ # ' D1' . '1+&?0' &>j
C@<'-' &=' D1' '@a' F&>1-' <-Aˢ ` C'--1 0 P' &=' D1'
0 1 ' <-Aˢ BB?C< '&-' &=' '@a8K& a'-.ƒ K' D'-' D1'
' '&=' =&-A&-ƒ D&K' D<' A'+1 0' &>#< A0' <-Aˢ & D1 '
<-.1 0ƒ '><.'-'-.' &' A10 & ' D1' 0<'Aˢ 0 1 ƒ <-Aˢ
<@@ 0?BD' +' ?&?0' BB?C< '&-0' `#=N P' F&>1-''-' D1'0<'Aˢ
1<@>ƒ &' 1- 'BD' D1>01@+10ƒ <-Aˢ ` &' '-B 1<01' D1>' <-Aˢ
0?BD' BB?C< '&-0'-' & D1 '0 <-.1' <-A0@' P' D<+1'# &?.D '
<-Aˢ A<'@ ' .&' <#&?' &' # '= .' '- &' =&1' 0<'Aˢ 1<@>ƒ
`0?BD' '@a' 0&' ><A1ƒ K &?.D ƒ K'-1A8@P' '##<-A0ƒ <-Aˢ
` D<'-0/P' =<@01@ ' <-Aˢ A1B1a=? 'K &?.D ƒ `<@@ ><--1 '
E' A@10' <-A'3P' & D1 ' D'-.0' B&-B1 -'-.' D1' <'Aˢ 0j
1 ' <-Aˢ BB?C< '&-' 3 ')ƒ '-' -&' <--1 ' K'01'# '-.'-.'
<- '.&&A' '@a' ?-K &?.D ƒ <0' D1 ' K1 1' K&-' &' # '-.

K !' 2 1 !' <' !0!/' <' +7 !@' 'N$ '
U)&-' !' 2 &/' 2# !SO&!"' ;!' <!+0/!/' ' "' J

)' ".7!2 "!2' ' .'" ')¢
' .' 0 ' 2O# ' .##0 &.-2' .' . !"+ -/!Z' N$ '
) 7".0* '2&+E' ".7!-' '+ #!Z' H' '77I
."2!Z . '2&+E!' -/' +ˢ @"! /@' 7".0*&

-?@@<>' -&+<>' A'0=' -1Hƒ <@'?' CB100->' ,0?0' A 0'
?0 ' ' 0'+1' #>'00'&-< '&0ƒ H?" 01' 0'B' 1LB?0< ?-' <-'
1L' <B <0' 0?<0' A1 ?@1 ?-ƒ =<B'1 ' -1Hƒ =1B'1 ' ' 0"
<@'H?'0A =& ' ==‘A< '& '<? '<@' ?'0' B@'B& " 0?& " '-B&- '?'
<@'B? ?0' < 'B?@& " 0?C'?0' 1B' < & " I Bƒ HA' ?-B' C" I'
1& " = &@ ' CA1-' I ' CA1 '+'.'- " @'# < ƒ &B'1-0' H?&A1-0'
C" '-+1-Aˢ ==1' ' '-A1' A1=1B '+'ƒ I '=D< ?0' " - ' 1L' ?-<>'
>1A'1 < 1>' AB< ' +'.'- " @'# < 0' 0'B' =& '0=B< @ ''1#' ƒ 1'
D? ?0 -&A" C0&-<ˢ +1@ C0&-1' H?1' C01H?" +1@>' +1@' +1@' '
<@R<>' >1A'1 < 1>';' B' 01B <' '@'<ˢ B<C'<' -1< ' I' A1ƒ
R-@'-1C' C' <BQ(1>' A1#' " B& <>' < &-'#4' AB" B'='' <?'
<@'R' B& <-' ?0 'D' A1' B&" 'B&ƒ 0?0' <@ H?C0' ='B'< '&0'
0=+1' B''B&0' A(" B ="H?" =<A= < ' +1@ CAC'?-' '-B&- '='
& A'-<#I '0' A11ƒ <@'H?&' C +'@ .'&' 0'+1' &-0 1 ?A'-1' AB"
B1= " -&-'&#0 <- 1¢ 1' HA' 'A1>' CB100?0' D1< ' '-' 1<A1>'
<1=&1' B& <>' AA0' ?0AB' C? ' @@1 ' '-' <B1#1' A1#'A' 0?C'
&#@'.<=&1' <A' = 1>' @1.1>' C01B? ¢ 1L 1C &' 01>C' HA'
-?@@?0' ==‘A< '?0ƒ H>' D1 ' <@'H?#A' &==‘A?' '-' D1 1A' < 1'
'-' =1&A&' '-' B1= &8' A &ƒ CB@?A< ' <A' CAC'1-A' =1&A<'
H?1' <# ?-AH?&' =?1 ?-B' a.'A>1' &==‘AA' 0?&' A1#' <' I'
C '-1-A<' I ' -&-' C@?0¢ <@+&' 01>C' HA' AA' ==‘B'< '" A-"
1.'0' I' J& ' 1='A' &-<#'@1' 1.< A?>' CB'C1' C&00?-' C'
0B ?A-''0' I' B&C''0' C' 'C&0' =1'0' '-' AB&' B 0'&' A1' <@'H?&'
1B& A&' <A' 01B <>' <@'B? ?0' @'.1" A-" 1.'0ƒ & A'-<B#1'
C@AB<' -&-'&#0 <- 1;' &@?' ' <>1-' =< ?0' A-0' 1L' HA'
A1' <+'0<>1-&' B&-0'@'" 0?" <'@0' A''G1BA&' B<C'< ' '-' D<B'
C< 1ƒ '-R' '0 ?A' 1>C?0' I ' =1 ?>' 1" a '0' CL' =? ? ƒ
H?<@'0' +'A1#' ' -<#'@'0¢ I ' <@'R' & ='-<A&' AJ<' 0 1 ' '-'
0?&' &#& 1' C' R>'-&' H?'-Hƒ <--C

1>' C=< ?0' A''0' 1L' A1' +'0<>1-&' A&& ' A-&d0' @
0C <@'?' I ' 1>C& <@'?' <B' <A' 1H?'0'B 1>' &' <A0' CA11'
-1B-&-' <?B & ' < 1' C< @'<>1-" CAA' & A'-<+' ' I ' 0 <#'8'
@'+' ƒ HA' -?@@<' C0&-<' H?1' '-' & -' ,<-1' M+'0'<>' <?'
B1@1<>' +1-A1-A' B&'R' C<-A&L< ƒ <@'H?&A' # <01?>' '-'
AC <&-?<' <?' <@'H?&' <@'&' @&B&' <A' ?0?>' 0??' <A' B?0 ?0'
I' 1LC1- <0' ?& ' ?@ [' 1- ?>' H?< R'<' '-' <--&' ='@(' -1B'
='1 " =<B¢ 0?# C1-<' =& '0=<A1-=&' 0>-<>' A1B1 -' @'# < '
H?&' ' <--&' H?&' 'C<' 0'B' =1B' ' <?' ' A1 " =1B' ƒ ?@ ' A#<'
1- ?>'H?< R'<ƒ ?-<' >1A'1 1 1' =1 &' A-&' 1." I'<@R<'
>1A'1 < # 'C" 1@' 'C0' H?" '-' D<B' C< 1' C01H?1 ' +1@
C01H?1- ¢ 1' HA' & A'-<A&' CA1<' B<C'1' 1=1?' C '>&'
A'1' ?-'" CL' =? ?=' I ' CA? <#@' C' H?'-H?1' <--&0' ?-B'
CL' 01H?1-

1>' B?>' C=1 &' A''&' 1." '-' C< @'<>1-&' CA1&' C'
./+1>'H?1 '>&-'<>' 1 'B< 'B?>' I ' !'@< 'B?>' >'0 1'
I ' &BB?C<BA0' &C'0' 01 'B" '-= <' '+' < 1>' &-A&-' &0 1-0'
=5aƒ H?<@'R' A'+00" ?>#< A" I ' <@'" @'1-'.'-1' A I >'
>'0 1 <>' I ' &'-10' D? ?0 -&A" +' ?&0<0' 1BB?C<A#10'
>? '1 ' '-' 1.-&' A1&' A10 ?1 1ƒ 01' 'C) ' Aa< 1' I ' D? ?08'
>&A" &BB?C<##10' '-' <@''0' R e0' <?.1 1' '><.'-<- 10ƒ 01 '8'
B?>' C< ?>' ='@< >' '#<-<0' I ' & H?10' =<@0&' I ' = <?8'
A?@1-R' &C< <ƒ B'-B & '<' &=-'<H@ <@'<' 1<0A1>' >'0 1 <>' I '
&BB?C<B#1>' B&- I '1-A<' '-' 1.-?' CA1>' <AA?L1 ?- ƒ <B'
'-A'10' <AA? 1' B&-<#<- ƒ <@'H?&A' 1 'B? <' #&-?>' '-&8'
C< ?>ƒ C? ' <@'<0' <- 1' 1<' 1>C& <' <AA?B1' B&-0?1+1 ?-

-?@@< 1-?0ʻ A1=1 1- 10ϑ '-ˈ AB< 0ʻ >'0 1=< ' I ' &BB?C<A&-'" A10 ?BB&1>' ='-<@1>ϑ -'0ʷ Cˈ 1.'<>' <.10 < 1-ʷ ?#'?0ʻ I ' B1 , ?0ʻ 1=& >< 1 Gˈ Yˈ B? ?0ʻ 1=& ><B I 1ˈ 'A1>' A-0ʻ 1Rˈ <? & ' < 1ˈ 0?C A <ˈ +&@?' ' & A'-<+' ' I ' 0 <#'@'+' ϑ HAˈ 0ʷ <@'H?'0ʻ - >#< A?0ʻ <? ' <@'H?<ˈ <@'<ˈ C0&-<ˈ 1L=-1<ˈ 0'+1ˈ '-A'.1-<ˈ <AA?B< ' 0'+1ˈ <AA?B" B<?01 ' Cˈ +'<>' , B<-8ʻ A'01ˈ <@'H?&Aˈ 01 'B?>' &C< ?>' ='@< ?>' '#<<<0ʻ & H?10ʻ B'-^& '<ˈ A1ˈ 01 'B&' <? ' < 'H?<>' <@'< ' 1>' <-.1- 1>' 0'+1ˈ B&-I '1- 1>' >'0 1 <>' 1 'B< 'B?ϑ A-A& ' 0ʻ H?1ˈ 1-K- ' A1ˈ <-?<ˈ -'>&A&ˈ 1LB1C '0@ '-'<@'H?1>' & ?>' 0'+1ˈ @&B?>' 1.-ʷ CAB'ˈ A1ˈ ?@ 0ʻ >< 1@ HAˈ 1<A1>'ˈ &C< ?>' 01 'B?>' ='@< ?'Cˈ '#<-1ˈ & H?10ʻ B'-<& '<ˈ I ' <@'1ˈ 10ʻ 0'Bˈ <AA?A<ˈ I ' &C<ˈ <ˈ 1<0A1>' >'0 1 <0ʻ B&- -1-A<ˈ 0'- ' =& '0=1<Gˈ Bˈ 1B'<>' HAˈ H?'@ ' ?>#< A?0ʻ I ' H?1@ ' <@'<ˈ C0&#<ϑ 1L 0-1<ˈ 0'+1ˈ '-A'.1-<ˈ H?ʷ '-B&- '?' '0 '?0ʻ & A'8 -<A '0ʻ =1 I ' &B'1-0ʻ H?&B'1<0ʻ 'C1ˈ 0'Bˈ =1 ' ' +'.'-A' @'# <0ʻ =& '0=1Bϑ ?-<ˈ >1A@1 < 1ˈ '-A1ˈ @1+<-A<ˈ I ' ='1-A<ˈ <Aˈ ?0?>' 1LC1-0< ' &0C'B'ʷ ABʷ A-ʷ 1.'0ϑ I ' D1<' 'C1ˈ <@R<>' >1A 1 < 1>' H?ʷ Cˈ '-A1ˈ C01H?ʷ +1@ ' Gˈ 1 ' HAˈ @'B1< ' B?'' ' C0&-1ˈ @'.1& ' A ʷ A-ʷ 1.'0ʻ D1 1ˈ I ' -'<-? 1-1 1ˈ <B1&1>' 0'+1ˈ <BB&10ʻ A1ˈ A1#' &ˈ H?C@ ' 1>C& 1ϑ <>' Cˈ 1<A1>' =& '0= ? <ˈ +'.'- ʷ @'# <=ˈ H\>' Cˈ 1ˈ '@'<ˈ <Bˈ =& '0=A<Gˈ <Bˈ CB1 0?>' '-A1ˈ A1ˈ ?@@<.<=ˈ -1B-&-' &J'1>' <@'?ˈ C1100?>' C? ' '-' <BA&1ˈ A1ˈ A1#' &ˈ <Aˈ ='I1>' @1.1>ϑ 1 ' HAˈ '-A1ˈ -?@@<ˈ C 1BA&' -1H ' 100C-' 0' ' <@@&B<#'@'0G 1 ' HAˈ >< & ' A U '+'8 < '0ʻ Cˈ 1>C& 1ˈ 1L'0 1-0ʻ #1< ' <?= & ' < 1>' <0<.'@<-Aʷ A?&0ʻ 10ʻ +1@ H?< ?& ' D&@10ʻ 1 ?0A1>' '+' < '0ϑ 0?==B'1- 10ʻ I ' B 1A'#'@10ʻ C0 -<0ʻ ?L <ˈ A'0B 1B&1'Dˈ ?<>' 0?Cˈ @'# ?>' ? < Aˈ <Aˈ A1#' ?>' 0B ? '- ' '-= <ˈ AR<>' '+' < H>' I ' @'# < 1>' 1 ?0A1>' =&B'1-Aϑ &B'1-0ʻ H?&B'1-0ʻ 1LC1A'1-0ʻ +'A1#' ϑ A1ˈ &''?#:' 1#:'@'' '0ʻ 0'+1ˈ ='0ʻ '- &-W '?ʻ R>'00& ϑ <Bˈ '-A1ˈ=<B'1-Aˈ A1#' <>' 1@<=&1>' < & ʷ I ' A1 ><--'0ʻ A11ʻ '+' < '0ʻ Cˈ 1>C& 1ˈ 1L'0 1-ϑ Cˈ C@1-'& ʷ '-=& ><B&1ˈ C=1 &ˈ A-&ˈ 1.'' <Bˈ 'C'0ʻ H?ʷ C'-A1ˈ C01H?ʷ +1@'- ' 1 ' HAˈ & A'-<B'&ˈ C ABˈ<'-B'C'<' 1-1 1ˈ 0??ʻ &#?' I ' 1== 1-ˈ <Aˈ =10 ?>' <0BD1ˈ CLˈ =? ?=ˈ I ' CA? <#' ' Cˈ H?'-Hϑ <--'0ʻ 1L ?-Bˈ CLˈ 01H?1-

ʻB?>' '-'A &ˈC< @'<>1- &ˈC' 1>' I ' &-+1- ?' & <OR'ʷ #1ˈ < '1ˈ A1ˈ !&?- 1 -0ʻ '-ˈ &-'ʷ #& ' @<>1-8ʻ <#'@'Rˈ 1L 'R' ' '- '><?ϑ A1ˈ 1& HAˈ B?>' 'Cʷ I ' 1& ' CA18ʻ B100& 10ʻ A1ˈ 1>C& 1ˈ -&-ˈ >&A'B& B&- 0ʻ B&-0B@<'B'<>' <#0Hϑ B<?0<ˈ Cˈ <BA&10ʻ ='=@<0ˈ .0+' ' '' <C@'ˈ <ʷ I ' +1L<ʷ =I - ϑ I '<Aˈ ?-Bˈ '-A'10ʻ 1L'0 1- ϑ '-' A', 0'0ʻ ?=ˈ F<C1-8ʻ <B@''& ' Iϑ <@''0ʻ ?=ˈ < &-='ϑ <Aˈ - - ' +'.'- ʷ I ' ?@ Jϑ '-= <ˈ A1>' &>'Q#& ' I ' &'-ˈ ?>#' <Bˈ '-ˈ &-ʷ '+'j < '0ʻ #& ϑ '-= <ˈ H?&0ʻ &>' 0?#0 <-B'<ˈ C&00100'&-?ʻ ABʷ &-<0R'ʷ ` <B1-'\4ˈ 1L'0 ' ϑ <>' Cˈ CB? <='''1>' I ' ULB' <8ʻ A I1>' <@@'+& ' 1 '10B<@@& ' I ' ='B'< '& 0ʻ `AB< ' ?=ˈ) ' -1B-&-ˈ !' >< '& ' ?=ˈ F<C1- <BD'& ' I ' ?=ˈ < &-?ʻ CA'B'ˈ C' 1& ' 0'-.?@< ʷ@<B &' I ' C='B?&ϑ HW>' Cˈ <@'<0ʻ ><@@ʷ B'&0<0ʻ I ' >< 1ˈ A'0C&0' <0ʻ C0&-<0ʻ H?1 1@<0ʻ 0?0ʻ ' 0' F 1>' I ' &-+1- ?>' ='-.1- 10ϑ I ' '-ˈ A'+00'0ʻ A'1 ' ?=ˈ F<C1- <BD'& ' I ' ?=ˈ < &-?ʻ <==' ><-@10ϑ <Aˈ H?<-A<>' ?-<>' ?=ˈ 10B1- <0ʻ H?1 1@<0ʻ 01C< <@10ʻ <?' C@? 10G

-=@'-1Aˈ&-ˈ D1 &@

D1 1 &=& 1ϑ &ˈ D1ˈ='-<@ʷ 10 ?= '&-ˈ&=ˈ D1ˈ0<'Aˈ 0 1 '10ʻ <-Aˈ BB?C< '&-0ϑ ?-@100ʻ ' ' #1ˈ D1ˈ>& 1ˈ ')' D<0 '@ ' 1j >1A'1Aˈ# ' D1ˈ, '-./0ʻ < 10 G !& ' 1=& >< '&-'KD1 1&=ˈ D1ˈ 0<>1ˈ &? ' &+1 A.-ˈ & Aˈ D1ˈ, '-.ϑ# ' D1ˈ ? D&j ' '<=& 10<'Aϑ K'@@ <-Aˈ D< Dˈ & A<'-1Aˈ <-Aˈ 10 <#@'0D1Aϑ D<' '=ˈ <-' &>#< Aϑ & ' <-' & D1 ' 1 0&-ϑ <-.1 ' & ' ʷ 1-'\1-ϑ # '-.' & ' B<?01ˈ &ˈ #1ˈ # &?.D ' # ' K< ' &=ˈ 1 BD<-A'01ˈ <-' K &?.D ' '@aˈ ` K'-1A ' '##<-A0ʻ `` D<'-0ϑ E' A@10 ' [=ˈ '@aϑ & ' <-' & D1 ' D'-.' )' &?BD'-.' & ' B&-B1 -'-.' D1ˈ 0 1 ' &=ˈ '@aˈ F&>1-ϑ ``E' A@10 ' KD'BDˈ B&>1ˈ = &>' E1-&<ˈ &-@ ' 1LB1C ϑ '- & <-' & '& ' @<B1ˈ &=ˈ D1ˈ 0<'Aˈ 1<@>' = &>'#1 &-Aˈ D1ˈ 1<ϑ D<' D1ˈ 0<>1ˈ K &?.D ' '@aˈ `` K'-1A ' '##<-A0ϑ ` D<'-0ϑ E' A@10 ( ' <-Aˈ & D1 ' D'-.0ʻ 0& # &?.D ' <-Aˈ K &?.D ' B&-B1 -'-.' D1ˈ 0<>1ˈ 0 1 '10ϑ 0D<@@ #1ˈ=& =1' ¦ -Aˈ <@0&ϑ D<' 1+1 ' &>#< Aϑ <-Aˈ `& D1 'ˈ'4ˈ <-.1 ' & ' ʷ 1-'\1-ϑ KD'BDˈ A& Dˈ B&- < ' &ˈ D'0ʻ Aˈ-<-B1ϑ <0ʻ V&= 1-'ˈ <0ʻ #H'0&ˈ A& Dϑ 0D<@@ =& =1' ' K1- ' &?-A0ϑ D1ˈ & 1ˈ <@=ˈ D1 1&=ˈ &ˈ #1ˈ @1+'1Aˈ <-Aˈ#<Aˈ &ˈ D1ˈ `<-Aˈ(' LC1-B10ʻ 3Kˈ D1ˈ, '-./0ʻ &?01ϑ <-Aˈ D1ˈ & D1 ' <@=ˈ & D<' 1 0&-' D<' K'@@ 0?1ˈ =& ' D1ˈ 0<>1G <-Aˈ D<' ' ' 0D<@@ #1ˈ@<K=?@ &ˈ 1+1 ' &=ˈ D1ˈ, '-./0ʻ@'1.1ˈ 1&C@1ϑ & D<+1ˈ <-Aˈ ><'- <'-ˈ <=' ^'&-ˈ &' = '&-0ʻ &=ˈ "1#' <' 1+1 ' '>1ϑ <0ʻ K1@@ =& ' D1ˈ 0<>1ˈ !& =1' ? 1ˈ &=ˈ K1- ' &?-A0ϑ <0ʻ =& ' D1ˈ D'-.' 0&ˈ =& =1' G <-Aˈ ` D1ˈ 0<>1ˈ C &B100ʻ &ˈ @'1ˈ D1 1'-ˈ) ' <0ʻ'-ˈ<-ˈ ==' &-'&=ˈ "1#' <' D1ˈ & > &-ˈ <K G '-'KD'BDˈ ?'' - ' & 1=@'&-'-&' 00&'-' 0D<@@ #1ˈ <@@&K1Aˈ;' -Aˈ D<' D1ˈ < & '&=ˈ D1ˈ0<'Aˈ ' ' =& ' D1ˈ ''-1'#<-.ϑ 0D<@@ D<+1ˈ ? D& ' ' &ˈ<00'.-'' ''ϑ & ''+' 1-'&=ˈ D1ˈ0<>1ˈ ' '0?=='B'1-'<-Aˈ B 1A'#@1ˈ 1 j 0&-0ϑ # ' ` D< (' "'0 1 '&-' ` &ˈ0K1<'(@ ' ?C&-'<ˈ &&aϑ &ˈ ><a1ˈ A?1ˈ 1< BDˈ K' D'-ˈ D1ˈ 0<>1ˈ ' ' <-Aˈ D1ˈ 'j #1 ' &=ˈ D1ˈ 0<>1ϑ <0ʻ = 1-'ˈ <0ʻ 0D<@@ 011>' 1LC1A'1- ϑ &=ˈ <@@ˈ D'-.0ʻ D<Aˈ & ' A&-1ˈ B&- < ' &ˈ D1ˈ 1>'010ϑ <-Aˈ D1 1&=ˈ &ˈ -<a1ˈ A?1ˈ ' 1@< '&-' &ˈ D1ˈ < & ' <-Aˈ @A1 j >1-'&=ˈ D1ˈ <'Aˈ ' '=& ' D1ˈ '>1ˈ#1>.ϑ =& ' <'>& 1ˈ=?@@ -=& >< 'E &ˈ D1ˈ, '-. <-Aˈ D'>' D<' K' ê `C? 0?1G [' -Aˈ D<' D1ˈ 0<'Aˈ A'-<-B1ˈ#1.'-ˈ &ˈ <a1ˈ D'0ʻ 1-. Dˈ <-Aˈ ==1B ' < ' D1ˈ ! 1<0 ' &=ˈ <0 1 ' -1L ' 1-0?'-.ϑ <-Aˈ 0D<@@ 1-A? 1ˈ=& ' ! '+1ˈ 1< 0ʻ D1-ˈ -1L ' =&@@&K'-.

ϑ F D1 1<0ʻ '-ˈ D180<'Aˈ <D='<>1-' ' ' F<0@<>1-j <#@ '0D1K1Aˈ # ' D1ˈ ##& '<-Aˈ &-+1-'&=ˈ D1ˈ &-<0j 1 '&='&? ' <A '&=ˈ !&-<'-0ʻ'-ˈ D1ˈ &?- '&=ˈ & aϑ &=ˈ D<' D<' F D1 1<0ʻ D1 '<-Aˈ D1' ' 1A1B100& 0ʻ &=ˈ -&ˈ @' @1ˈ '>1ˈ <.<'-0 ' &-0B'1-B1ˈ D<+1ˈ #11-ˈ . '1+&?0@ ' `A'0 ? /" 1A(' <-Aˈ +1L1Aˈ K' D&?' <?01ˈ # ' =1'.-1Aˈ Bj '&-0ϑ <-Aˈ A1'@ ' #1ˈ '-ˈ A'+1 0ʻ &? 0ʻ k'J'}' F<C1- <a10ʻ <-Aˈ & D1 ' &? ' < &-0ϑ &ˈ D1ˈ ?>#1 ' &=ˈ LL ' <-Aˈ <#&+1ϑ K' D'-ˈ D1ˈ 0<'Aˈ &?- '&=ˈ C aϑ <-Aˈ D1ˈ &?- ' &=ˈ ?>#1 @<-Aϑ <-Aˈ '-ˈ D1ˈ &?- '&=ˈ D1ˈ ' ' ' & aϑ K' D'-ˈ KD'BDˈ &?- '10ʻ D1ˈ ?#0 <-B1ˈ&=ˈ D1ˈ &00100'&-0ʻ &=ˈ D1ˈ0<'Aˈ &-<0 1 '@'1 Dϑ <0ʻ K1@@ # '` D1ˈ & <B ' 04ʻ <-Aˈ LB' < '&-'&=ˈ D1ˈ <'@'==0ϑ &K< A0ϑ <-Aˈ ==' B1 0ʻ &=ˈ D1ˈ 0<'Aˈ &? 0ϑ <-Aˈ '<@0&ˈ D1ˈ !< >1 0ʻ &=ˈ D1ˈ 0<'Aˈ &? 0ʻ R)' F<C1- <a10ϑ <-Aˈ &? ' < &-0@ '=& ' D1ˈ ' 0'-.?@< ' ?=ˈ 1ˈ <-Aˈ &=' ϑ <0ʻ # ' & D1 ' ><@'B'&?0ʻ <-Aˈ 1+'@ A'0C&01Aˈ 1 0&-0ϑ `B&>C@<'-'-.'<.<'-0 ' D1ˈ 0<>1ˈ ##& '<-Aˈ &-+1- ϑ =1'. -'-.'J' '<-Aˈ <==' >'-.'-'A'+1 0ʻ &=ˈ ` D1aˈ 04ˈ &? 0ʻ J)' F<C1 <a10 <-A &? ' < &-0ϑ <' 0&>1ˈ &-1ˈ &? ' ' 01+1 <@ @<'- 0ʻ & ' > & 1G

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!% &.-Z &1 .2!/'0 .-' !' ; ; . ' . ' B.0- !@-Z &-' !' .0- @' ' 'A."E' ;@ !&*-!/' 0& Z &-' /&'!"Z .0" 2' -/' ;2 #+!Z * &-2' &Z 7 *&-*' &Z 7

’?@= ?0’<? & ’ < 1’CAB<’ & A’-<+’ ’ HA’ 0’’<@’H?’0’ <@@’+?0’ 1-10B<@@ 0’0’+1’ =’B’< ’?0’ AB< ’ ? ’ <? ’ F<C1- <BD’&0’ AA<>’ @1.1>’ ’ -’ =& ><’ CAQ<’ =’1 ’’ <A>’ R1’ -&@’ ’ <? ’ <@’ ’ <@’H?&’ >&A&’ A’0&#1A’<’ +1@’ -&-’ &#01 +1 ’ ’- 1-B&1>’ >’00& ’ 1L’ C< 1’ 0?<’ 0?C’?0’ 1B’ < &d ’ =’1-A@’ <? ’ &>’ < ’ +1@’ 1L’ C< 1’ 0?<’ =<B’ B&?= ’?’ <A’ <@’H?&A’ ’0 & ’ C >’00& @ ?-B’ ’A1>’ <@@’+?0’ 1-10B<@@?0’ +1@’ =’B’< ’?0’ 0’B’ &==1-8’ A1-0’ C’ H?&’ ’ 1>C& 1’ H?&’ ’C>’ B&- 8’?’ =<R1’ 0’+1’ ’ -’ <@’j H?&’C>’00& ’ 0?C’?0’ 1B’ < & ’ 1L’ C< 1’ 0?<’ =’1-A’&==1-A1 1’ 1&- ’d’ ’ +’.’- ’’ @’# <0’ =& ’0=<A’ ’ -?0H?’0H@’ ’-’ D&B’ B<0?C01H?’’ +&@1-0’ C&00’ ’ D1 1’ #=1’ A1’ A1#’ &’ I ’ A1B@< < 1’ 0?C’ & A’-<B&1’ CAB<@’ 1 ’ D1< ’ ’C1’ C’ @<#& 1’ 0?&’ ?-<>’ >1A’1 < >’ I ’ C=’’ ?0’ A-0’ 1L’ <@R<>’ >1A’1 < 1>’ 1<0@’ A1>’ +’.’- ’’ @’# <

+’ ’ 1>’ B?>’ A1’ 1>C& 1’ <’ A’?’ -&-’ 1@<C0&’ ’-= <’ ’+’ <8 1>’ & K’B’’ I ’ &’-’ & =<’ I ’ ?=<’ -’0’’ 01L’ +1@’ & &’ B&10’ & -< ’’ <A’ ? ’ A-’’ 1.’0’ A’ 1- 10’ <A’ <<L’>?’ 1L ’ ’001- @’ H?&’ 1>C& 1’ ><.-<’ <-H?’@@’ <0’ ’-’ AB’0’ ’+’ < 1’ I ’ &>’ 1.-<# ’ C< +<H@’ ’#?@<B’&’ 01?’ +1L< =’&’ C’ 01=@<0’ >’-?0’ +1 <0’ +1@’ =& ’-01B<0’ D1#<’ G <>H@’ ’ < 10’ HA’ ’-’ AB’0’ ’+’ < 1’ I ’ &>’ H?<A’ +’.’- ’’ & -< ’’ +1@’ C@? 10’ 1L’0 ?’@’ @ >< & 1’ C< 1’ ’C& ’ &-’ D1- 1’ <@’H? A’ <@’?A’ +’+1 1’ 01 ’ 0&@?>&A&’ @?B ?’ 0?=’’ C’ AB<>’ &BB?C<8’ A&1>’ < & -<R@’ B’ 1B’<>’ >< & 1’ C< 1’ ’C& ’ -&-’ 1]8’ ’0 1- 1’ J1’ 0?=’B’1D ’’ 0B’1-B’<’ 1001@@A’’ & -< & @’ H?’’ <A’ ?-<>H/>H@=1 ’<>’ ’ B< ?>’ I ’ <@’<@’ @&B< ?=’’ CC@’’ B&-. 18’ .<B’&’ 1L’0 ’ ’ A1’@’-<- @’ CC@>’ 1L& <- 10’ CB? <- 10’ >&+1- 10’ I ’ 1LB’ ’ <- ’ <A’ 01=@<0’ >’-?0’ +1 <0@’ 01= <0’ =& ’-01B<0@’ 01 @<0’ C’ C< +’0’ 3-0. 1 0’&?’#4’ C< +’0’ &==1?0’0’ I ’ C< +’0’ 0?>’0’ A1’ @1#’ &’ B<C’1-A@’ H?& ’ <BB&10’ 0?-’ ’<#’@10’ I ’ A1R>’-<#’@10’ ’-’ ? ’’0’ < & -?G ?-A1’ HW>8’ C@? 10’ 01= 1’ C&1>0’ 1L’ ><@<’ +&@?- < 1’ I ’ ><@’B’<’ H0>’ 1L’ <’ , ’ < 1’ CB1A?- @’ ’-’ AB& ’ ’-=’’ <-B’?’ ’+’ < ’0’ 5’ &, ’’ CA1& ’ +1L<B I 1>’ ’ >’@ ’C@’B1>’ A<>C-<H’ -&-’ ’-&A’A<@’ -1B-&-’ B<>’ ?=’ < &-?’ ’-’ AB’0’ &>’ A’>’-? 1>’ CC1 ?<>@’ -’0’’ A1’ 1>1A’&’-’ D<B’ C< 1’ B&-. ?&C+’A1<A;’ 1=< ?0’ AD0’ 1L’ C <’00<’ B&-0’A1 <-0’ A1’ <+’0<>1- &’ <>1-0?’ I ’ <?B & ’ < 1’ CAA’0’ & A’-<+’ ’ I ’ 0 <#’@’+’ @’ HA’ &=’0’ 1>C& ’#’ =? ? ’0’ 0’- ’ -’0’’ 01L’ &10’ & -< ’’ ’-’ AB&’ &-’’ & ==’ I ’ 01L’ B&10’ < C -< ’’ ’-’ A &’ &>’ ?==@’ I ’ A?&’ B&10’ & -< ’’ ’-’ AB<’ ’+’ < 1’ & K’B’@’=& 1’< & 8’ -<=’ ’-’ ?=’ A1’ 11& A&G’ I ’ HA’ & 10’ = AA’’ H?< ?& A1B’>’ < & -< ’’ 0’- ’ 1’B’’ I ’ <A>’00’’ C’ A?&0’ B<C’ <@10’ =?0 ’B’ A>’ 1.’0’ C’ 1>CC 1’ 1L’0 1-’ A1’ >< .’0’ 0?=’B’1C ’#’ I ’ &C ’>1’ ’-0 ?B ’0@’ ?L <’ A’0B 1B&10’ 0?<0’ ’ HA’ 1@1BB’&’ I ’ <A@’ >’00’&’ &’>’ & -< & =’ H?’’ 1 ?-’ 1@B’’ I ’ <A>’00’’ C’ AA&0’ ?0 ’1’ C’ 1>C& 1’ 1 A0 1-’ ?@ W A1>’ -? ?’ ’-’ &>’ ’ AB’0’ 0’- ’ +<B?1’ I ’ A1’ -?@@<’ <?B & ’ < 1’ -1H’ 11& A&G 1 ’ 0’’ 0’ ’ <@’H?<’ C0&-<’ +1@’ C0&-1’ H?1’ ?>’ ’ +1@’ C0?@ >?- ’ <?’ ’?0? C<- ’ +1@’ ?0? C< ’ 0?C’ ’C<0’ =& 1’ &>< C0’ ’-’ ? ’ A1’ 11& A&’ ’-’ A1@0’ &>’ +1@’ ’+’ < 1’ <@’R’ HW>’ 0?C’?0’ 0C1B’=’B< @ I ’ D&B’ 0’B’ ’-+1- &’ C’ -H?’0’B&1>’ B<C@’ <>’ B& <>’ ?0 ’1’ C<A0’ ’-’ A’1 ’ ’+’ < 1’ 0’+1’ &-’’ H?’’ +’ ? 1’ ’0 ’?0’ & A’-<A ’0’ C& 10 < 1>’ ’-H?’ 1-A’’ ’-A1’ ’-’ 0100’&-’#:’ 0?’0’ = 1#?- @’ <?’ ’<@’H?&’ <@’&’ >&A&’ @1.’ ’>1’ C#< &@’ HA’ ?-B’ ’C<’ +1@’ ’C1’ H?1’ 0’B’ C0?>’ ’ +1@’ C0?>?- @’ 0’’ ’C<’ ’-A1’ @1.’ ’>1’ 0’ ’ B&-=’1=@ =& 0=<’ +’.’- ’’ @’# <0’ &B’1-0’ H?&A1-0’ ’C<’ +1@’ ’C1’ 0’ ’ +1@’ 0’-’ 0’B’ B&-+’B’G

-A’ >& 1&+1 ’ # ’ ? D& ’ ’ <=& 10<’A’ D< D’ & A<’-1A’ D< ’ ’=’<-’ ’ <’@’==@’ 1K< A@’& ’ ==’B1 ’&=’ D1’0<’A’ &? 0’ & ’ F<C1- <a10@’ K’’@’ -& ’ <A>’ ’ 0?BD’ <K’ &’ #1’ A&-1’ ’-’ D1’ !& >’ <=& 10<’A@’& ’ 1@01’ ’-’<- ’ K’01’ A&’ A’0&#1 ’ & ’ A&’ -& ’&#01 +1’ D1’ - 1- ’ &=’ D1’ 1>’010’ &-’ D’0’ 1D<@=’#1j =& 1’ 1D1< 01A’ &’ #1’ A&-1@’ & ’ &>’ ’ & ’ &-’ D’0’ 1D<@=’A&’ B&- < ’ &’<- ’ &=’ D1’ 1>’010@’ D1-’ D1’ 0<>1’ <’@’==@’ 1K< A@’ & ’ ==’B1 ’ 0&’ &==1-A’ -.@’ =& ’ 1+1 ’ ’>1’ D< ’ D1’ 0D<@@’ D<CC1-’ &’ A&’ B&- < @’ ⅈ)’ T’- ’ &=’ D1’ 1j >’010’ #1=& 1’ 1D1< 01A’ &-’ D’0’ CD<@=’ &’ #1’ A&-1@’ 0D<@@’ =& =1’ ’]] ’@’ ’ -A’ 1+1 ’ C 0&-’ ’-’ D’0’ <01’ K’@@’ -.’ &’ C? 0?1@’ >< ’ D<+1’ <’ F ’ ’ &=’ ’’ 1# @’ <-A’ A1B@< 1’ ?C&-’ D1’ 0<’A’ A’-<-B1@’ <-A’ D1’ 0D<@@’ D<+1’ =& ’ D’0’ <#&? ’ D1’ -1’ <@=’ &=’ D1’ 0<>1’ LL ’@’ ’ <-A’ D1’ , ’-.’ D1’ & D1 ’ <@=

3!- +@’ .-’ -@’ &#!’’ . ’ !’ .0’’)’ . !-/&-*’ * &-2’ &Z’ Q G’ #

@’ F D1 1<0’ &=’ ’>1’ -& ’ @&C.’ C<0’ K’ D’-’ D1’ ’ ’ &=’ & K’BD@’ <-A’ D1’ &?- ’10’ &=’ & =&@a’ < ’A’ ?==&@a@’ D1 1’ K1 18’ -&’ >& 1’ #? ’ 0’L’ & ’ 1’.D ’ /)’ 8’ &>’ 0’ <’ D1’ >&0 @’ `B& >’-.’0P’ &’ D1’ , ’-./0’ &? 0@’ ’-’ KD’BD’ ’>1’ . 1< ’ <-H?’@@’ ’ 1’.-1A’ ’-’ D1’0<’A’ ’ ’ <-A’ &?- ’10@’ <-A’ @’ @1’ &?#@1’ & ’ 1L< ’&-’ K<0’ ><A1’ # ’ ?- ?1’& ’ =& 1’.-’ ?’ 0G -A’ -&K’ i& ’ ’ ’0@’ D<’ ’-’ D1’0<’A’ ’ ’<-A’ &?- ’10’ D1 1’#1’ !&? 0B& 1’ & - 10@’ ’ >& 1@’ D1’ >& 1’ < ’&=’ D1>’ D<+’-.’ &’ & D1 ’ D’-.’ &’ @’ 1’ ?C&-@’ #? ’ &-@ ’ D’0’ E<’-’ # ’ ` D1’ < ’B1’ &=0’P’ & -1 0D’C@’<-A’<@ &’ D1’ >& 1’ < ’ ’ D1>’ -& ’#1’-.’ C=’ 0?=’B’1-’ , -&K@1A.1’ &’ #1’ <-’ & -1 @’ KD’BD’ `B& >1’/’P’ &’ 1+1 ’ !<’ @’ < a1 @’<-A’& D1 ’ @<B10@’KD1 1’ ’0’ <- ’ 001>#@’ &=’ 1&C@1@’ 1LD& ’-.@’ C &B? ’-.@’ >&+’-.@’<-A’-B’ .’ D1’ 1&C@1’ &’< 1>C ’?- ?1’ `<-AO@’ =& 1’.-’ ?’ 0@’ /)’ =& ’ 0><@@’ 10C<0010@’@’ @1’ ==1-B10@’ <-A’ 0><@@’ ?>0’ &=’ ’’1# @’ KD&01’ = ’1-0’ #1’ ’<#@1’ <-A’ A1 1 >’-<#@1’ ’-’ &? ’ < &-0’ ’ KD1 1 ’ ’ C &B11A’ ><- ’ ?’ 0@’ >& 1’ &=’ 1+’@’ F ’@@’ <-A’ <@’B1@’ D<-’ &=’ D1’ ? D’ &=’ D1’ D’-.@’ &’ TD1’ ><-’=&@A’ 1L< ’&-’ <-A’ -&’@’ @1’ ’’<>< .1’ &=’ D1’ -D<#’ <- 0’&=’ D1’0<’A’ ’ ’<-A’ &?D ’10@’<-A’ <@0&’ &’ D1’ C1 C1 ?<@’ `’’ ’>’-? ’&-’0’ &=’ <@@’ D1’ &? ’ < &-0’ ’-’ D1’ 0<’ ’ &?- ’10@’ ?-@100’ &-+1-’1-’ 1>1A ’ #1’ C &+’A1A’ ’-’ D’0’ 1D<@=;’ D1’ =& 1i<’A’ & A’ D1’ , ’-.’ B&-0’A1 ’-.’ D1’ 1>’010@’ # ’ D1’ A+’B1’ 001-’ <-A’ ? D& ’ ’ <=& 10<’A@’ D< D’ & j A<’-1A’ <-A’ 10 <#@’0D1A@’ D<’ <’ <@@’ ’>10’ = &>’ D1-B1j =& D’ D1 1’ 0D<@@’ #1’ #? ’ ’L’ B&>>&-’ &= ’’10’ ’-’ D1’ 0<’A’ &?- ’ &=’ & =&@a@’ <-A’ ’L’ B&>>&-’ & -’10’ ’-’ D1’ 0<’A’ &?- ’ &=’ ?==&@a@’ <-A’ K&’ B&>>&-’ & -’10’ ’-’ D1’0<’A’ ’ ’&=’ & K’BD@’ &’#1’ & -’10’ ’-’ D1’ &? 0’ &=’ 1B& A@’ <-A’ D<’ <@@’ D1’ 0<’A’ !&? 11-’ & -’10’ 0D<@@’#1’ 1@1 I 1A’<-A’<A>’ 1A’# ’ D1’ K&’ D’1=’ ?0 ’B1@’ &=’&? ’ & A’ D1’ , ’-.’ =& ’ D1’ ’>1’#1’-.@’ &=’ D1’ >&0’ 0?=’B’1-’ ’<-A’ #10’ ’-0 ?=@1A@’# ’ D1’ ’ ’’0B 1 ’&-0’ -A’ D<’ D1’ @1= ’&-’<-A’ A>’00’&-’ &=’<@@’ & C’10@’ KD’BD’ D<@@’ #1’ 1@1= 1A’ <-A’<A>’ 1A@’# ’ D1’ <’A’ ?0 ’B10’ =& ’ D1 ’ ’>1’ #1’-.@’ <#&+1’ D1’ 0<’A’ ?>#1 ’ ’-’ D1’ 0<’A’ &?- ’10@’0D<@@’#1’+&’A@’<-A’&=’-&’ ? D& ’ ’-&’ 1B& A’ ’ <-A’ ’=’<- ’ 1 0&-’&’ 1 =&-0’?0? C’&=’C 10?>1’ &’ #1’ j & -1 ’ ’-’ &? 0’&=’ 1B& A’ ’-’ D1’ 0<’A’ &?- ’10’ ’ ’ @’ & D1 K’01’ D<-’ #1=& 1’ ’0’ C1B’=’1A@’<-A’ D<’ 0’)’ =&?-A’ # ’ -H 0D’&-’ <a1-’ #1=& 1’ D1’ ?0 ’B10’&= 1<B1’ ’-’ =&1’ 0<’A’ ’ ’&’ &?- ’10@’KD’BD’0D<@@’D<+1’ &K1 @’ ’+’ ?1’&=’ D’0’ A’-<-B1@’ &’ ’-H?’ 1’ D1 1&=’ ’-’ D1’ ’ 100’&-0@’& ’ ’-’ <- ’ & D1 ’ <--1 ’@<K=?@@’ ’C &+1A@’ D<’ D1-’D1’ & ’ D1 ’ D<’ &’ C 10?>1@’ ’=’ D1 ’ #1’ @<K=?@@’B&-+’=&@’0D<@@’ =& =1’ ’ K1- ’ &?-A0’ <0’ &= 1-’ <0’ D1’ & ’ D1 ’ #1’ 0&’ B&-+’ ’G

3" <+&#!’ . ’ #.-!-&.0Z’ .’’-&!2’&-’ .’’ .+E’ 0 .+E’ -/’ .’’7&# ’ .’ 2 &’’ 0 ’ &H&)’ .’’ !&’’ ’&’ !’ 3’’. & .

!’’!’2+&$&’’ Q ;!’;0’ &%’ #.1’’ .-’ .’’-&!2’&-’ .’’ .+E’ &%’ &-’ 0 .+E’ -/’ 7.’&-’ .’’7&#

02 &#!2’ . ’ 3! #!’2 +’ ’!’ 0 .k ’’& @’ .’&-SO&’’!’ . ’ !-/!’’2

3!- +@’ -’ !-/!’’Z 5 ’3.0-/2

) . ’’ . !-/’ N$ ’ ’ ’’ JZJ
’ !/1.-’ ’ ’’!2.’’!/
’ !&’’ 2!&/’)*.. N ’
] !7 !Z’ (’’&/ !7 !2
’ /&2 ’’0^&&.-’ ’2. D1 &=

D1' -1' <@=' D1 1&=' &' #1' <a1-' &' D1' , '- ./0' 01 ' <-A' D1' & D1 ' <@=' &' D'0' 01' K F BD' =& ' D1' 0 >1' K'@@ 0?1G <-A' D1' D< ' D1 1=& 1' K '@@ 0?1@ 0D<@@ D<+1' <-' =@'& -' &=' " 1# ' <.<' -0 ' <- ' 0?BD' 1 0&-' KD'BD' 0& C 10? > 1 D' &' #1' & -1 @ <-A' 0?BD' C &B100' `=& ' 1B&+1 ' &=' D1' 0<>1@' P' <0' @'1 D' '-' <-' = '&D' &=' " 1# ' < ' D1' &> >&-@ <K' ?C&-' <-' #@'.< '&- ' &+'A1A' <@K< 0@ D< ' D1' 0<'A' A'-<-B1' #1. '-@ <-A' =' 0 ' <a1' =1A@;@ < ' D1' ! 1<0 ' &=' <0 1 ' -1L ' B& > '- .@ <-A' -& ' #1=& 1G '=' D1' 0<>1' A'-<-B1' 011 >' 1<0&-<#@1' &' D1' ?0 'B10

- --< >1A'1 < 1' '-A1' B<C'1 'A'= A' ?0? >' A-" 1 . '0@ I ' <=1' >1A'1 < ' <A' ?0?'-' 'C'?0' H?" C' - A1' C01H?" +1@' G `1 ' HA' 'C1' H?" C' - A1' C01H?" +1@' ' C < '= 1 1<B=&1 >' A1' A1#' ' 0?0' <@'H?<- ' <@1>' C0&D<>' H?1' 0'B' d220?>'' =& 1' & 8' -<=@ <B' <@10' CB100? >' I ' 1B C<A 1>' `'-' 1<A1- / ' H?<@10' <B1- ' '-' <BA (1' A1' A1#' &' <A' B&1 >' @1.1 >' 0?C' &##@'.<B<1 ' &+'0&' 01 ?C' HA' & A' -<B'&' CAB<' '-AC'< ' I ' C ' -&' 0? >< ' 1==1B ? >' <A' =10 ? >' <0BD1' CL' =& ?=' 0 -&-' <- 1' ' 0'' & A' -<B'&' @'<' ?0 ' ' +'A1< ' &-<#'@'0

)) ' ! 2' 0 ' -/>,

' 4 ' 4 ." ' 5

- ' &-&? ' &=' @>'.D ' E&A@ <-A' D ' 18@ ' ' +1 1-B1' &=' =&@ ' D? BD@ =& ' &' -&? =BD' 1<B1' -' ' <-A' &-B& A' '-' <@@ < 0' K' D' -' D'0' 1<@>' &=' -.@<-A@ <-A' =& ' D1' 1@'1=' <-A' ?0 1- < '& ' &=' &? ' & A' D1' , '- .@ <-A' &=' D'0' D'0' 1<@>@ D1' 0<>1' &? ' &+1 1'. -' & A@ , '- .' 1- ' D1' 'L D' <= 1 ' D1' &-j H?10 @ < ' D'0' '.D' &? ' &=' < @'<>1- ' D&@A1-' < ' F 10 j >'-0 1 ' C&-' D1' 1+1- D' " ' ' &=' D1' &- D' &=' B &#1 @ D1' '-18<-A8 D' '1 D' 1< ' &=' '0' -&#@1' <-A' . <B'&?0' 1'. -@ # ' D1' A+'B1' <-A' 001- ' &=' '0' & A0' C' ' ?<@ <-A' 1> C& <@@ <-A' < ' D1' 0C1B'<@ 1H?10 ' &=' D1' &>j >&-0' &=' '0' 0<'A' 1<@>@ <001>#@1A' '-' D1' 0<>1' < @'<j >1- @ <-A' # ' D1' ? D& ' ' &=' D1' 0<>1' < @'<>1- @ D< D' & A<'-1A' D101' D'-.0' ?-A1 K ' 1-'

`! @ F D1 1<0' ' D< D' #11-' 0D1K1A' &' D1' , '-.' &? ' &+1 1'. -' & A' # ' D'0' @'1.1' <-A' =<' D=&@ &>>&-0' '-' D'0' C 101- ' < @'<>1- @ D<'/' P' A'+1 0' 1A' '&?0' <-A' 1+'@ A'0C&01A' C1 0&-0@ D<+'-.' -&' 1.< A' &' D1' A 1<A' &=' E&A@ -&' &' D1' " <>< .1' &=' D1' C &0C1 &?0' 0 < 1' &=' &? ' 0<'A' &+1 1'. -' & A' D1' , '-.@'& ' '0' 1<@>@ 0' -'0 1 @ ' <-A' '>C& ?-1@ ' `A'A' @<#&? ' &/P' D1' 0<'A' , '-.' &' 0?>>&-'< < @'<>1- @ &' #1' D&@A1-' < ' '0' ' ' &=' &+1- @ D1' LL ' " < ' = D1' &- D' &=' &+1>#1 @ D1' LLL+'' ' 1< ' &=' '0' ` &#@1P' 1'. -@ &-@ ' 1' A10 & ' 1 <'-' &=' D1' . 1< ' -&#@1' `'=<' D=?@ <-A' @<K=?@3P' & A0' <-A' 0 < 10' &=' D1' , '-./0' @&&A@ <-A' & D1 ' &=' D1' =<' D=?@ @'1.1' 1&C@1' &=' D1' 0<'A' 1<@>' ` &=' C - .@<-A@/P' =& ' D1' . 1< ' ` ? > &? 9OP' < 1A@ <-A' <@'B1@ KD'BD' D1' 0<'A' 01A' '&?0' 1 0&-0' &=' &@-.' ' > 1@ `'D<+1' D<A'/P' <.<'-0 ' D1 >;' <-A'&=' D1' ' `. 11A ' <@'A'/P' '-0< '<#@1' &+1 &?0-100' &' D<+1' D1' <-A0@ 1 1A' <j >1- 0@ &00100'&-0@ ='B10@ <-A' E&&A0' &=' D1' 0<'A

3".#!!/&-*Z' /'&-' ' 3 "% 1!-' ' . '!- "@' ' !-' ' ' *' N$*#' $ ' '! '

' &Z' - ". / &. -' .##0"?' &-' !'! "+&!2 ' -/'&-' -&' 20;2!SO!- ' -*+%2 ' /&&. -2=' ;0 '&' &Z' - . ' H02&&!/' ;@' !' 6!#."/' - .'" ;@' !' +/' . &!2 '!& !'" "&- !/'.'" -02#"& '. ' !' 0 !'&-'B" -"

) 6*' ' * ' $'% ' 'C4 ' 2 ' $ 'SP ' ' ! ' '$ ' ' 1 ' $ 'E 1' ; ' ' ' ' ' ' .$ T" GH C ' " ' 0 %' M ' ' .$ $ ' ' ' ' * ' M' %' ! ' O

' + ;.0"!/ @ -/' & 0' "0!' '*" -#.0'" ' / = ';? ' #

ME' < ' & ' ' G '6 #('%

< - - &' > -' H "*&.!' 6. 0+&

' < @1>1- ' 1-?\' <' F 10 ='" @1' 01C '0>1' &? ' A1' B &#' <-' A?' 1'. -1' A?' &" 1- ' C?'0' @1' B&-H?10 ' 0'0 >1' LLL 'L @' >&-0 1' =&'0 ' C' @10' &10' 1-' 'B1'@ C< @1>1- ' <001>#@B\' H' B&>1' A' 0B\3' 01A'B'&?01\' I ' ><+<'@L' A'0C&01\' C &-10@ -?@@ 1.< A1' 1'<- \' < C<&? ' A1?' -1' <@ A<><.1' A1@ C0C1 &?0' 10 < 1' A?' A' ' &" -1' $ 0&-' 1<>1@ 01-10 1>1- ' I ' 1-C& ?-1>1- ' @<#C &'1- ' 1' A@ ' &" A1' 0&>&-1 ' ?-1' C< @1>1- ' < 1-'1 ' < 0< ' 11' A1' &+1- 11@ @1' +'- '0>1' &? ' A1' &+1>#' <-' A1' 0&-' 1' .-1' `3 1- ' 01C '0>1@' P' <- 0&?@1>1- ' '< A10@ &'1 ' R 1'-0' A10' . ?-A10' -&#@1\' =&'<@L' I ' @&'<@L' 5 !' I ' 10 < 10' A?' 0<-.' & @' I ' <? 10' A1@ =&'<= ' @'1.1' C1&C@1' A?' A' ' &'<@>1@ C ' @10' . @>A10' <-B&? ' D<' 1' I ' >< @'B1' H' @1\' A' \' 01A'B'&?01\' C0&-10' A1' @&-.1' 1>C0' <+&'1- ' B1- 1' B1?L@ 1 ' A1' @1? ' '-0<B'<#@1' B&+1 01' A<+&' ' @10' 10' 1-D1 ' <>1- 1\' C&00100'&-0' &='B10' I ' #'1-0' A10' A' \

! ' I ' =&'<@L' @'1.10G C' H?1@ @<#&? ' 1'-0 B 10
< ? 10 I ' 1-0-B10 B1- 1' &? ' #&-1=& ' I ' B&-j
0B'1-B1' 1-' @1' A' ' C< @1>1- ' =? 1- ' =<' \' <' A10 &'1 '
='-<@>1- ' @1\' A' \' @&'<@L' 5%% 10 < 10 I ' @'1.1' C1&C@1'
I ' @&? ' '10?1\9 0'#'1-' --&B1- 1\' B&>1' <? 10 I ' @&? '
D1' 0 C ' &? \' &? 0 G H?1@ C< @1>1- ' =?'0 ' &-A?1>1- '
0&>&-1\9 I ' . ?-A1' C< ' A1' @1\' D'+<@1 0 C ' A' 010
&?- 11\' B10 ' &'<@>1' I ' C@?0&? 0 ' 1\1'-0 I ' ? 8
.1' 1\' C ' A' 01\' ' 110 I ' ? .D0 1-' 'B1_' <CC< <- R9
=& 1- ' -&>1\' 1 &? -1\' I ' <BB1C 1\' <0B?-0 A1?L' 03?-\'
A?1' I ' = <-a' 1@1BB'&-' <0B?-0 A1?L' 0<?-\' -?@@ 1@1BB'&-9
1- &?- 1' @1' B&? 0 A10 @&'10 A?' &'' I ' @10 @'# '10 A10
&10 A?' A' ' &'<@>19 C' @10 >& -0 I ' @<#&? 0 @10 A' \'
B1A'B'&?01\' C0&' 10G C&- ' C@?0&? 0 .J?-A10 1&C< A'10
I ' 1-B&-+1-'1-B1\' #'1-' C 10 -@ ? -1' I ' ?-' 0<=@;' 0?#8
, 0'&-' @1' &'<@>1'<+ - A' ' &?C ' 1-0?1\;' =1' A' ' ' @1'
&'' @10 >'0010 B&-0'A1 <- 9 I ' H' @1\' A' \' _ 0 10 < 10
I '<? 10 01\' ,1.109 1- 0 H1?]' @10 A' \'<1=1\' 10 ? 1\
I ' & A1'.-1>1- \' ='' 1- ' I ' \9 &- - ' &? \' &? 0 1?1\
.0?-A1' I ' =& F ' <>&' <?' C=1 1>1- ' I ' 01? 1' @1' #'1-'
<@&' ' A1' 0<' C0C-1' &'<@ ' @1? ' A?1 1' <BB& A<- 9 1 ' H'
C&'1'A10 B 10 &?' =A1-0-B10 1-' @1' A' ' C< @1>1- ' 1-?\'
<' &+1- =9 10 &'1- ' =<' \' C ' @1' #'1-' A?' &'' -1' A?' A' '
&'<@''@19 >10 @<' . 1'-A 1' C< ' AC @10 B 10 < ? 10 I '
A1 =-11\' 1-' ' 1 ' =<' 1\' =?'0 ' @<#& 11' C' @1' B&-0C' 1==' '
CB? 1-'1- ' I ' 1LB' 1>1- 8 @1\' A' \' ><+<'@L' A'0C&010
C0&-109 C/' @1- &A?BB' -' I ' <BB&>C@'00D>1- ' A1' @&? '
<-B&? ' 1-& A -< 1' &+1 19 <A' C' @<A+'0 I '<001- '
A10 _ 0 10 ?1'L' I ' 1>C& 1@L' 1-' @1' A' ' C< @1>1- ' <001>8
#@1\9 <@ 1H?10 ' A10 A' \' &10 I ' C' @<?B & ' 1' >10'-1' @1'
C< @1>1- 9 & A1'.-1' I ' 10 <#@'19 H' @1' A' ' C< @1>1- '
1-?\' <?' A' ' ' 11' A1' &+1- 1' 0&' '+&'A1' I ' 1-?\' C '
-?@@ C< @1>1- ' ' H' &? \' I ' < ? 10 I ' A18
-W-B1\' C' @<?B & ' 1' A1@ >10>1' =<' \9 0&'1- ' 1,01\'
<A-?@@1\' B<001\' ' ' 1\' 1C1@@1\' 1+&H10 +&'A1\' I ' A1'
-?@@ =& B1' -1==1B 1

1>' A1' <+'0<>1- &' <001-0?8 ' <?1 C ' < 1' CAB'0' C A'8
-< ' ' 10 ' I ' 0 <#'@' >' HA' >?@'1 10 1L'0 1- 10 1 < '0
H?< ?& A1A>' <--&C9 1>C& 1' >& '0' - 1B100& ' 0?&C9
<#0T' 'H?10A&-1' 01?' A'= B?@ < 1' = 1<- ' @'#<B#1>' R < '' I '
1-' 0? ' 0'#'' A10B1-0& G H?'<' 0'B' @1L' '0 '?0 R 1' +?@ '
HA' ?-B' 'C1' D1 1-

& A0 <-A' =<' D=?@ @'1.1' 1&C@1G # ' KD'BD' `'0'-'0 1 ' ' '
<#&? ' 1 <'-' = 0' < ? 10 <-A' A'-<-B109 <.<'-0 '
<@@ .&&A' <' D' <-A' &-0B'1-B19 '-' D1' 0<'A' < @'<>1- '
K1 1' ><A19 ='-<@@ ' &' A10 & ' D1' 0<'A' `'@<K=?@/'P & A09
0 < 109 <-A' @'1.1' 1&C@1' <-A' D1' ' 00?109 <0 K1@@ -j
-&B1- 0 <0 & D1 ' <-A' D1' ' 1' 0 =& ' 1+1 G F D'BD'
< @'<>1- ' K<0 ?-A?@ ' 0?> >&-1A9 <-A' < . 1< ' < ' &='
D1' , -'.D 0 =& ' A'+1 0 &?- '10 &=' D'0 1<@>' <-A' ><- '
? .1001 0 <-A' ' '\1-0 =& ' A'+1 0 & &?.D0 <-A' ' '10
'-' D1' 0<>1' <CC1< '-.9 K1 1' -<>1A9 1 ? -1A9 <-A' <Bj
B1C 1A9 0&>1' &=' D1>' K' D&?' A?1' <-A' = 11' @1 '&-9
0&-@1' &=' D1>' K' D&?' <- ' @1^'&-9 <.<'-0' D1' &? 01'
&=' D1' , '-./0 <K0 <-A' D1' '#1 '10 &=' D1' &>>&-0
&=' D'0 1<@>9 # ' D1' 1<-0 <-A' <#&? 0 &=' D1'
0<'A' 01A' '&?0 1 0&-0G KD1 1# ' ><- ' . 1<' 1&C< A'109
`' -&=>'-109 ' <-A' -B&-+1-'1-B109 K1@@ -'.D' &' D1'
?'-9 `' "1B< 9/' ' <-A'8?-'+1 0<@ ?#+1 0'&-' &=' D1' 0<'A'
1<@>9 D<+1' 1-0?1A;' ? ' 0<'A' &+1 1'.-' & A' D1'
, '-.9 B&-0'A1 '-.' D1' 1>'010 <-A' D<' D1' 0<'A' & A0
0 < 109 <-A' D1 ' '0 @'1.1' 1&C@1 <.<'-0 ' KD&>' D1'
0<'A' < ? 10 <-A' A'-<-B10 F1 1' ><A19 D<+1'
<@K< 0 D<A' . 1<' <-A' =<' D=?@ &+1' &' D1' 1=1 >1-'
<-A' ? 1 ' 0)' &=' D1' '-./0 C1 0&-9 <BB& A'-.' &'
=D<' "? 9 <-A' D<' =1K' &=' D1' I 0' `>< A1U ' '-' D1'
0<'A' < @'<>1-9 D&@A1-' <' &+1- 9 F1 1' ><A1' =&'
D1' F 1<@ &=' D1' , '-.' -& ' &=' D1' 0<A' 1<@>9 #? ' A'1'
. 1< 1 ' < ' &=' D1' = 0' < ? 10 <-A' A'-<-B10
D1 1'-' ><A19 K1 1' @<#&? 1A' # ' D1' &-0C' <B ' C &j
B? 1>1- ' <-A' LB' < '&-' &=' D1' 0<'A' 1+'@ A'0C&01A'
1 0&-09 =& ' D1' - =&A?=A&-' <-A' BBB<-C@'0D>1- ' &='
D1' ' <-B&? ' <-A' '-& A'-< 1' &+1 '019 # ' D1' A+'B1'
<-A' 001-' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@9 Q<-A'
< ' D1' 1H?10 ' &=' D1' <'A' &>>&-09 >' D1' 0<'A' < '
@'<>1-' <001>#@1A9 <-A' # ' D1' 0<>1' ? D& ' 9/'P' D< D'
& A<'-1A' <-A' 10 <#@'0D1A9 D<' D1' 0<'A' < @'<>1-'
D&@A1-' < ' D1' 0<'A' ' ' &=' &+1- '#1' +&'A9 <-A' D&@A1-'
=& ' -&' < @'<>1- ' -A' D<' <@@ = 0' < ? 10' <-A'
A'-<-B109 # ' D1' ? D& ' ' &=' D1' 0<>1' ><A1@ #1'
1+1 01A9 <A-?@@ 1A9 P?-A&-19OX' 1C1<@1A9 1+&a1A9
+&'A1A9 <-A' &=' -&' !& B1' '& ' ==1B

' # ' D1' A+'B19 001-9 <-A' ? D& ' '<=& 18'
?A' '0' & A<'-1A' <-A' 10 <#@'0D1A9 D<' F &>1-'#1'-.'
&=' D1' <.1' &='L'''@' 1< 09 < ' D1' '>1' &=' D1' "1< D' &='
D1' ' -B10 & 09 K' D&?' ^?10A&-' &' " '==' B?@ ' 0D<@@
D<+1' '+1 ' &=' D1' ' <-A0' <-A' 1-1>1- 0' A10B1-A1A'
&' D1>G !& ' 0&' D1' <K' &=' D'0' <-A' K'@@ D<' /)'
D1 ' 0D&?@A' D<+1

' 0 @$ % $ ' '
0 &=' D18K1@=< 1' [" '
h& ' A -<?-B1' hB<001AZ' ' 19
I' ' ' %' * ' M* %' ' 'N T" '$' ' %'.$ $ ''
'6" $ '$ ' ' ' * +
h D1-' ' '

!' 2 &/'
3 "+& 1!#
/!#+ "!/'.&/>'
-/' ' 2'
1 /!'& !&"/-'
"! ! +!/

D` '
'
;!&-*' B.0"k
!!-' A! "]'
9+/'2 +# '!'
&)&'!"@' .'
<!&"' -/2

- ' . ' !' < !2B' .'&C !*' !' &H!

& 9 . ,ʻ

ʻ ʻ 3 $ʻ C ʻ ʻ

)) ʻ ' ʻ C #ʻ 0 ʻ -/>-

+ . (< ."(&K= --.ʻ "%1.ʻ / ʻ --)ʻ .# 01)

6 ʻ B' B' ʻ B6 ' ' B 6 ʻ ' ' b ʻA 6

Ƀ V 6 ʻ H%

ʻ 4 ' 6 ' 5

ME' < ' ' 'G ' 6 # 'B ' ' ' '9' @&9' 7

< - ƒ =

-' < .'-1'
& ?@ ,

? ' # ' D1' E <B1' C=' E&A' , '- .' &=' - .@<-A'
<-A' &=' ! <-B1ʻ <-A' & A' &=' 1@'-Aʻ D1' !&? D'
<= 1 ' D1' C-H-10 ʻ &' D1' &-&? '&=' E&A' <-A' &=' &@ '
D? BDʻ &'-&? '0D' 1<B1ʻ -' ʻ<-A' &-B& A'K' D'-' '0'
1<@>' &=' -.@<-Aʻ KD'BD' D1' `>?BD' A10' 1 Dʻ K D&@@ P'
' D1' A 'B1' <-A' 001- '&=' D1' & A0' C' ' ?<@ <-A'
1>C& <@ &=' D1' <<h' 1<@>ʻ <-A' <' D1' 0C1B'<@ 1j
H?10 '&=' D1' &> >&-0' &=' D'0' 0<'A' 1<@>' 0)' <001>#@1A'
<' D'0' ! ' 0 ' < @'<>1- ' D&@A1-' <' F 10 >'-0 1 ' ?C&-' D1'
!&? D' "< ' H=' &+1>#1 ʻ '-' D1' !' 0 ' 1<' &=' '<'V
1'. -ʻ <-A'# ' ? D& ' '&=' D1' 0<>1' < @'<>1- ʻ D< D'
/)' & A<'-1A' <-A' 10 <#@'0D1A' B1 <'-' < ? 10ʻ "1B@< <j
'&-0ʻ <-A' A'-<-B10ʻ'-' <--1 '<-A' ! & >' =&@@&K'- .

V ' &+2'
H0 / &#& ≠ C#'
/ . -!' &-'
&1 !Z . '
!' M&-*Z'
!- ' ' '
-/' '2 +'
; !' ' +&/)

! 9 3)' -' 10BD1K'- .' &=' '>#'.?'-10ʻ "&?# 0ʻ
<-A' "'+1 0' '10' &=' C'-'&-0ʻ KD'BD' >< ' '01ʻ 1-0?1ʻ &'
#1' <a1-' &=' <-A' ?C&-' ` ?A'B'<@ B 0ʻ0' ')FZ L1>C@'j
='B< '&-0' &=' D1'0<>1ʻ -'<A1' & 'D<A' '-' D1'3 >1'& ' '>10'
&=' 1- ' D1' !&? Dʻ 1- ' D1' !'= D' '0' &-ʻ <= A'
1- ' D1' #= D' '0' &-ʻ`& '<-' &=' D1>9'0 P'@< 1' , '- .0'
&=' -.@<-A' 0?BB100'+1@ ʻ '-' "11A' <-A' -& ' &=' '. D ʻ
? ' <'A' & A' D1' , '- .ʻ # ' D1' A+'B1' <-A' 001- '&='
D1' & A0' C' ' ?<@ <='A' 1>C& <@ <-A' < ' D1' 1H/210'
&=' D1' 0<'A' & > >&-0' '-' D1' 0<'A' < @'<>1- ' <001>#@1Aʻ
<-A' # ' ? D& ' '&=' D1' 0<>1ʻ D< D' A1B@< 1Aʻ 10 <#@'0D1Aʻ
<-A' 1-<B 1A' '-' D1' 0<'A' < @'<>1- ʻ D< ' <@@ ! '-10ʻ <-A'
8='-<@ &-B& A0ʻ @1+'1A' & ' ><A1' &=' <- ' <-A0ʻ 1-1j
>1- 0ʻ &00100'&-0ʻ 1- 0ʻ '="1 ' <-110ʻ & '& D1 ' D'- .0ʻ
<-A' <@@ ` ?A'B'<@ B 0ʻ0 ' 1B&+1 '10ʻ <-A' &B10010ʻ A1j
1 >'-1A' & ' B&> >1-B1Aʻ -& ' =1+&a1A' 1+1 01A' -& '
<A-?@@1Aʻ ><A1' & ' D<A' '-' <- ' &? ' & ' &? 0' &=
1B&=Aʻ & ' <- ' &? ' '" &? 0' /)' = 0' <- ' T= D1'
'>10' &=' D1' C 1 1-01A' 1'. -0' &=' <- ' &=' D1' 0<'A' @< 1'
!'-10' I

. !'" -'
&-'3 "+& 1!-

, '- .0ʻ '-' "11A' <-A' -& ' '-' '. D ʻ & D1 ' D<-'# ' ? D&j
' '&=' <- ' < @'<>1- ' D&@A1-' '-' <- ' &=' D1' ' '>10ʻ <-A'
L1>C@'='B< '&-0' =' D1' 0<'A' ! >10ʻ B 0' ?A'B'<@ <-A'
1B&+1 '10ʻ ?' &=' <- ' &=' D1' 0<'A' < @'<>1- 0ʻ <CA'
1+1 ' &=' D1>ʻ 0D<@@ #1' &=' `'@'a1' 0 ' ! & B1ʻ ' ?1ʻ <-A'
==1B ʻ <0' '=' D1' 0<'A' !'-10ʻ ='-<@ &-B& A0ʻ B 0ʻ 1j
B&+1 '10ʻ &B10010ʻ 8<-A' & D1 ' D1' 1>'010ʻ D<A' &'
><A1' ?' &=' <- ' &=' D1' 0<'A' < @'<>1- 0ʻ <-A' L1>C@'j
='B< '&-0' &=' D1' 0<>1ʻ `K 1 10P' B&> >1-B1Aʻ 0?1Aʻ D<A'
& ' A1 1 >'-1A' '-' DD' '>1' &=' <- ' , '- .' @<K=?@@ ' 1' . -j
'-.' '-' D'0' 1<@>ʻ <-A' &# <'-'-.' D1' &K-' =' D1' 0<>1'
' ?0 ' ' @1

@ ' ; * ℅ ' @ $ %' ' "" %' $' '
Ó D<' ℕ' T<'0' ?A'B'<@@ ' g' C' 9
: .+/ ! -
ℕ <@@ 0?%' 7D<A' #11-' '

" F C' C' @<' . B1' A1' "'1?' &" "1- .@1R1' I ' A1'
! <?-B1' I ' 1' .-1&? ' "' @<-A' C?'0' @1' &-H?10 '
H?< ʻ @' D&-&? ' A1' "'1?' I ' A1' 1'C ' 0.@'B1ʻ C '
-? 1 ' C1<0' ?-' 1' I ' &-B& A1' A1'C0' 0&-' &'<@>1' "1-8'
.@1R 1ʻ @1' H?1@@ '@' A10' 1' >&?@ ' 1-='1 >1- ʻ A @ <A+'0' I '
<001- ' A10' ! ' 10 ?1'L' I ' 1>C& 1@L' A1' >10>1' @1'
&'<@>1ʻ I ' ?' @10C1B'<@1' 1H?10 ' A1R' &1\' A1' 0&-' A' '
&'<@>1ʻ <'0&-' C '=" C< @H>1- ' 1-?\' < F 10 >' @1' H?< '
&? ' A1' &+1>#' <-' A1' 0&-' 1'. -1' C '>1 ' +1-?\' I '
<001>#@1Rʻ I ' C'@<?=@& @ 1' A1' >10>1' @1' C< @1>1- ' <A' =<' '
& A1'. -A ' I ' 10 <#@'1 ' R 1'-0' 0 < ? 1\' A1B@< <B'&-0' I '
& A1-3-B10' 1'@ @<' =&? >1' H1-0?' ' 9

'=='0>1- ' Hʻ 1-' 10BD?1 ' A10' <>#'.?' 110' A&? 10' I '
A@ 0' 11\' A10' &CC'-'& 0ʻ H?1@0' C &'1C ' 0? A 1' 1-0?1 ' &?'
1 1' C '01\' A1'8 I ' 0? ' <= 10' ?A'B'1@L' I ' 1L1>C '=' <B'&-0'
A'B1@L' =<' \' &?' 1?1\' 1-' @1' 1>C0' A1' 1- ' @1' H?< ʻ
=@1- ' @1' H?'- ' 0&-' =' \ʻ I ' 1-=' @1' 0'0>1' 0&-' =' \ʻ -<A8
.<' 0' 1-' = A ' I ' -'1 ' -' A &' ' 0?BB100'+1>1- ' &'10'
"1-.@1 1' &?' A<0B?-' A1' B1?L@ =1' A' ' ' @1' &" A1@
<A+'0' I ' <001- ' A10' _ 0' 10C?1@L' I ' 1>C& 1@L' I ' <' @<'
1H?10 ' A10' A' \' &10' 1-' @1' A' ' C< @1>1- ' <001>#@1\' I '
C' <? & ' 1' A'B1==ʻ <A' A1B@< 1' 10 <#@'1' I ' 1-<B 1' 1-' @1' A' '
C@1>1- ʻ H' &? R' ='=@1\' I ' ='C<@@0' B&-B& A1\' @1 1\' &?'
=<' \' A<0B?-0' 10' 1\' C&00100'&-0' 1- 10' 1-D1 ' 18'
>1- 1\' &?' <? 10' BD&010ʻ 1 ' &? \' <B 10' ?A'B'1@L' 1B&C1\'
I ' CB1001\' A1 >'-1R' C?' B&>1-B1\ʻ -'1- ' 1 &H-10'
1 01\' &?' <A-?@@1\ʻ =<' R' &?' 1?1\' 1-' <0B?-' &? 1' &?'
&? \' A1' 1B& A1ʻ &?' <0B? ' &? ' &?' &? 10' 1-?\'
<-' <0B?-' A10' 1>C0' A1' @1R' C 1-01\' 1'. -1\' A<0B?-' A1'
@1\' A' \' -<A.<' 0' &@10' 1-' =1' ' I ' -'1- ' A1' A &' ʻ <? 10'
Hʻ C' <?B C ' 1' A<0B?-' C< @1>1- ' 1-?\' 1-' <0B?-' A1' @1? '
1>C0ʻ 1 ' 1L >C@'='B<B'&-0' A1' @1\' A' \' ='-1\' <B 1\' ?A'j
B'1@L' I ' 1B& 10ʻ D& 0' A<0B?-' A1' @10' A' \' C@1>1- 10ʻ I '
D?-' A1?L' 0&'1- ' AC' &? ' <? '1@ =& B1' , ?1' I ' 1==1= '
0'B&==@1' @10' A' \' ='-1\' ='-<@L' &-B& A10' <B 10' 1B&A10'
CB1001\' I ' <? 10' C0>'001\' 1?1\' &?' =<' \' D1- 0' A<0B?-'
A1' @1\' A' \' C< @1>1- \' 1 ' 1L1>C@'='B<B'&-0' A'B1?L@ =1?0 '
1- ' B&>1-B1\' 0 1\' 1?1R' &?' >'-1\' 1-' 1>C0' A<0B?-'
C&'' @&'<@>1- ' 1' . -<- ' 1 -' B10 ' &'<@>1ʻ @ I ' C' ?0 ' ' @1'
@<' & &-1' A1@ >10>1' &C 1' . -<-

ℕ' -A& 01A' 8<' D1' & &>'&=' 1>#<-1' ' '&=' D'0' &@@ʻ '-' <' D<-A8K ' '-.' &=' D1' '>1' &=' , ' D< @10' Y -' <' D<-A8K ' '-.' &=' D1' '>1' &=' , ' AK< A' '0' K ' 1-' W' & ?@?0' < @'<>1- '' AK< Aℓ' H?< "<--&' 1. -" 0?"H?< &' '? J ' ''' W J' <-A' '-' <' D<-A8K ' '-.' &=' 0& >1KD< ' @< 1 'A< 1' '0' <AA1A' ('1 B ' ?0H' <A' & <+? J

ʻ <?L" Hʻ &? \ʻ 1Ơ C< 1- 1\ʻ =1' \ʻ Cʻ <0B?-ʻ A1ʻ @1Ơ 1-01Ơ &'1Ơ <ǧ <0B?-ʻ C0&-1ʻ &?ʻ C0&-10ǧ A1ǧ B 1<B'&-ʻ 1-0'.-'B'&-ʻ &?ʻ 1 1BA&-ʻ A '0B -ʻ A B1?L' <?ʻ <0B?-ʻ 10 < 1ʻ Aʻ.-ʻ 1ʻ &?ʻ C1> '-1-B1ǧ 0&'1-ʻ <ʻ ǧ<ʻ Aʻ 1ʻ C0&-1ʻ &?ʻ C0&-1Rʻ Iʻ <Ơ A1ǧL' A1ʻ @&? ʻ D1ʻ 1 ʻ H?1?L'0&-ʻ B&- 1'.-?\ʻ 1-ʻ @1\ʻ Aʻ \ʻ 1Ơ C< 1- 0ǧ A<? '1ǧ =& B1ʻ +<ǧ?1ʻ Iʻ 1==1B ʻ B&>1ʻ &?BD<- \ʻ '1ǧ B 1<B'&-ʻ 1-0'.-'B'&-ʻ &?ʻ 1 1 B'&-ǧ 0" B&>1ʻ -'10>10Ơ @1Ơ = 1Ơ C< 1- 1Ơ =1?001-ʻ =<ʻ \ʻ &?ʻ .W?- 1\ʻ <" <0B?-ʻ A1?L' Cʻ <0B?-ʻ &" @& <ǧ>1-ʻ 1'.-<-ʻ 1-ʻ B10ʻ &'<ǧ>1ʻ Iʻ Cʻ ?0ʻ ʻ @1ʻ &C 1'.-=ʻ ʻ ǧ<ʻ & &-1ʻ A1ǧ >10>1Ć 1ʻ H'ǧ0Ơ '00'-ʻ B 11\ʻ 1-01'.-1\ʻ &?ʻ 1 1B 1\ʻ <'1-ʻ -&+1@L' .?-10Ơ A?ʻ &" A1ʻ @1?ʻ <--?'1\ʻ Cʻ ǧ<ʻ 0? 1-<B'&-ʻ A1ʻ @&?ʻ 10 < 10ǧ B&>1ʻ 'ǧ <A' 10 1ʻ A<?-B' -ʻ 1>CƠ <BB?0 ?>1Ć =ʻ C '01\ʻ '10Ơ C0&-10Ơ Iʻ B='?-ʻ A1?L' H?1@@10Ơ -=1ʻ A'ʻ ʻ @1ʻ & ʻ 1C? 1ʻ Iʻ '1-ʻ CƠ 01\ʻ 1#1@@10Ơ &?ʻ 1-1-''1\9

ʻ&? 1ʻ B1&ǧ @10Ơ 1>C& <#@1\ʻ BD< .10Ơ Iʻ B&0 10Ơ H 1?L' @10Ơ ʻ 110Ơ ? .DƠ ʻ'@@10Ơ @10Ơ +ʻ C& 10Ơ A1ʻ 110ʻ &'<ǧ>1ʻ Iʻ ǧ<ʻ +'@@1ʻ A1ʻ <ǧ1'0Ơ &+1 @10Ơ < BD10Ơ @@1&H10Ơ &?-ʻ 0?08 1-?\ǧ Iʻ ǧ<ʻ \\?-A1ʻ C&C 11ʻ 1- 1ʻ @10Ơ .1- \ʻ A'B1?L'B&-ǧ 0'A1 1\ǧ Cʻ 1<01ʻ Iʻ 1@1=1ʻ A10Ơ >10>10ǧ <Aʻ & A1ʻ.-1ʻ.D@- 1ʻ 10 <#@'1ʻ Iʻ 1-<B 1ʻ Cʻ <001-ʻ Iʻ <?B & ʻ 1ʻ 0?'0A' \ǧ Hʻ &? \ʻ -@< Ơ @'# 11\ʻ C '+'@1.10Ơ = <-BD'010Ơ C&'< Ơ ? '0A'BB'&-Ơ C=ʻ \ʻ '>>?-ʻ 11Ơ B& C& <B'&-Ơ >?-'B' -Ơ 1-@< .1>1- 1Ơ <--1L'&-Ơ ?-'&-Ơ 01,<?-B1\ʻ <ʻ &?- 11\ʻ Iʻ =1'0< - 1\ʻ &?- 11\ʻ Cʻ 0& ʻ >10>1\ǧ 1ʻ &? \ʻ >< Ơ .?- 10Ơ @101\ʻ @'B1-01\ʻ CA&-Ơ A'0BD< .10Ơ 1L1>C '&-Ơ 1@1010Ơ =1ʻ 1ʻ Iʻ 1D1110ǧ -'1-ʻ 1+&H?1\ʻ 1C1@@ \ʻ&?ʻ <A-?@@1\ʻ Cʻ<?B & ʻ 1ʻ A1ʻ C@1>1-ʻ &?ʻ <? 1>1-ʻ Cʻ CB1001ʻ A1ʻ @1 ǧ ./?- 1\ʻ 10Ơ &? 0Ơ A1ǧ 1-=ʻ @1ʻ H?< ʻ 1-=ʻ @1ʻ H '-ʻ ? 1-=ʻ A1ʻ 0'0>1ʻ -<A.<ʻ Ơ 1-ʻ=<ʻ ʻ Iʻ -'1-ʻ A1ʻ A &'ʻ &'10Ơ "1-.@1R 1ǧ <ǧ <0B?-ʻ <a1ǧ <'@@'=ʻ &?ʻ <'@@'=0ǧ '0B&?-ʻ &?ʻ '0Cʻ B&?-10ǧ <'1ʻ Iʻ '0B&?-ǧ '0B&?-ʻ Iʻ <'@@'=0ǧ <ʻ 1ʻ Iʻ <'@@'=1ǧ &'<@ ǧ ʻ1\1'-0ǧ <ʻ 1ʻ &'<@ 1ǧ <ʻ 1ʻ &'<@ 1ʻ Iʻ ʻ1\1'-0ǧ <ʻ 1ʻ Iʻ ʻ1\1'-ǧ <a1ʻ Iʻ @A1 >1-ʻ Iʻ @&?ʻ 0?BB100&? 0ʻ <a1ʻ Iʻ ʻ1\1'-Ơ @&?ʻ D1ʻ 1Ơ Iʻ 0?BB100&? 0ǧ <ʻ 1ʻ Iʻ <@ 11ʻ @&?ʻ D1ʻ 1ʻ Iʻ 0?BB100&? 0ǧ ʻ1\1'-Ơ Iʻ @ ?ʻ D1ʻ 0ǧ ʻ1j \1'-Ơ @&?ʻ D1ʻ 1Ơ Iʻ 0?B 100&? 0ǧ <'@@'=0Ơ Iʻ ʻ1\1'-0ʻ @&?ʻ D1ʻ 1Ơ Iʻ 0?BB100&? 0ǧ <ʻ 1ʻ Iʻ @A1 >1-ǧ <ʻ 1ʻ @A1 >1-ʻ Iʻ ? .1'01\ǧ <a1ʻ Iʻ ? .1'010ǧ <ʻ 1ʻ @A1 >1-ʻ Iʻ '0B&?-ʻ &?ʻ '0B&?-0ǧ <ʻ 1ʻ ? .1'01\ʻ Iʻ @&?ʻ 0?BB100&? 0ǧ <ʻ 1ʻ ? .1'01\ʻ @&?ʻ D1a0Ơ Iʻ 0?18ǧ B100&? 0ʻ <a1ʻ '0B&?-10Ơ Iʻ ? .1'01\ǧ <ʻ 1ʻ <'@@'=0Ơ Iʻ &'<@ 1ǧ @A1 ><-ʻ Iʻ &'<@ 1ǧ @A1 ><-ʻ <'@@'=0ʻ Iʻ &'<@ 1ǧ @A1 >1-ʻ Iʻ <'@@'=0Ơ @&?ʻ D1ʻ 10Ơ Iʻ 0?BB100&? 0ǧ <'@@'=ʻ Iʻ &'<@ 1ǧ <'@@'=0Ơ Iʻ ? .1'010ǧ ʻ1\1'-0Ơ ? j .1'010Ơ Iʻ A@<@ 1ǧ <ʻ 1ʻ <'@@'=0Ơ Iʻ ? .1'010Ơ @&?ʻ D1ʻ 10Ơ Iʻ 0?BB100&? 0ǧ C &?A10Ơ D&>10Ơ @&?ʻ D1ʻ 10Ơ Iʻ 0?BB100&? 0ǧ & 1+10Ơ <'@@'=0Ơ Iʻ &1\ǧ 1-10BD<@@10ǧ ? .A01\ʻ Iʻ C &?A10Ơ &>10ǧ & 1+10Ơ <1>0Ơ Iʻ &>10ǧ <ʻ 1ʻ <&-0Ơ Iʻ &'<@ 1ǧ <ʻ 1ʻ ʻ <&-0ǧ <&-0Ơ ʻ &'<@ 1ǧ

-Aʻ <@0& D<ʻ <@@ 1 1 0Ơ <1-0Ơ><A1ʻ# ʻ<-ʻ &=ʻ D1ʻ `0<'APʻC 1 1D01Aʻ,'-.0Ơ &ʻ <-ʻ 1 0&-ʻ & ʻ 1 0&-0ǧ &=ʻ 1<'&-ǧ ` --&#@'-.ǧ <-Aʻ Pʻ 1= '&-ʻ&=ʻ<-ʻ &=ʻ D1>ǧ &ʻ <-ʻ 0<1ʻ "ʻ.-ʻ ʻ& ʻ 11>'-1-B1ǧ 0D<@@ #1ʻ &ʻ D1ʻ 0<'Aʻ 1 0&-ʻ & ʻ 1 0&-0ǧ <-Aʻ &ʻ 0?BDʻ &=ʻ D1ʻ ʻ 1ʻ 0Ơ KD'BDʻ #1ʻ B&- <'-1Aʻ'-ʻ D1ʻ 0<>1ʻ 1 1 0Ơ <1-0ǧ &=ʻ `@'a1 Pʻ !& B1ǧ ` <@?19/Pʻ <-Aʻ ==1==ǧ <Ơ &?BD'-.'0?BDʻ 1< '&-ʻ ` --&#@'-.'& Pʻ 1= '&-ǧ <Ơ '=ʻ D1ʻ 0<>1ʻ 1 1 0Ơ <1-0Ơ `ʻK1 13Pʻ><A1ʻ&ʻ. <-1Aʻ &ʻ /ʼ) D1>ʻ# ʻ<-ʻ ,'-.'@<K=?@@ ʻ 1'.-'-.'ʻ'-ʻ D'0Ơ 1<@>ʻ`&=ʻ -.@<-A9Pʻ<-Aʻ &# <'-'-.'D1ʻ &K-ʻ &=ʻ D1ʻ 0<>1ʻ# ʻ ?0ʻ ʻ @1Ć <-Aʻ D< ʻ D1ʻ#1'-.'0&ʻ B 1< 1Aʻ `ʻ1--&#@1Aʻ <-Aʻ 'Pʻ 1 1=@1Aǧ 0D<@@ D<+1ʻ -1Kʻ E <-0Ơ &=ʻ D1ʻ,'-.'&=ʻ D1ʻ'--?'1'0Ơ =& ʻ D1ʻ <'-1-<-B1ʻ &=ʻ D1ʻ'0<10ǧ <Ơ D< Dʻ #11-'&=ʻ &@Aʻ ʻ>1ʻ<BB?0&>1Aʻ Ć LB1C ʻ0?BDʻ 1 0&-ǧ <-Aʻ 1+1 ʻ &=ʻ D1>ǧ KD&>'&?ʻ &+1 A.-ʻ & Aʻ D1ʻ,'-.'1C? 1 Dʻ <-Aʻ D&@A1 Dʻ=& ʻ D'0Ơ 1#1@0ʻ & ʻ -1>'10

-Aʻ & 1&+1 ǧ D1ʻ 1LB100'+1ʻ D< .10Ơ <DAʻ &0 0ǧ KD'BDʻ D1ʻ 'A10ǧ & &?.D0ǧ &K-0ǧ D1ʻ E>H?1ʻ & Ơ &=ʻ `ʻ -.@<-A9ǧPʻ <-Aʻ <@0&ʻ D1ʻ &K-ʻ &=ʻ <@<'0ǧ K'Dʻ D1ʻ < BD10Ơ &=ʻ D1ʻ 0<>1ǧ D<+1ʻ 1-A?1Aʻ `<-Aʻ 0?==1 1A9Pʻ <-Aʻ D1ʻ.1<ʻ #+1 ʻ<>&-.0ʻ D1ʻ 1&C@1ʻ &=ʻ D1ʻ 0<>1ʻ B&-0'A1 1Aǧ=&ʻ D1ʻ <01ʻ <-Aʻ 1@'1=ʻ &=ʻ D1ʻ 0<>1 `D1ʻ ,'-.'hʼ D<Dʻ & A<'-1Aǧ 10 <#@'0D1Aǧ. <-1Aǧ <-Aʻ 1-<=1Aʻ # ʻ D1ʻ 001-ʻ 'C'Aʻ ? D& ʻ ʻ`&=ʻ D1ʻ 0<'Aʻ & A0Ơ C'j ʻ ?<ǧ <-Aʻ 1>C& <@ǧ <-Aʻ <ʻ D1ʻ 1H?10ʻ &=ʻ D1ʻ 0<'Aʻ &>>&-09/Pʻ D<ʻ <@@ ><--1ʻ &=ʻ '#1 '10ǧ '+'@1. ǧ ! <-BD'010ǧ &K1 0ǧ ? '0A'' '&-0ǧ &=' 0ǧ >>?-'10ǧ & C& <'&-0ǧ ?-'ʻ'&-0ǧ -@< .1>1-0ǧ --1L'&-0ǧ -'&-0ǧ 1+1 '-.0Ơ =&>ʻ &?-A10ǧ <-Aʻ ><a'-.'&=ʻ &?-'10Ơ # ʻ D1>01@+10ǧ <-Aʻ <@@ <--1ʻ &=ʻ E <-0ǧ 1<010ǧ 'B1-B10ǧ <A&-0ǧ "'0BD< .10ǧ L1>C '&-0ǧ 1@1<010ǧ !<' 0ǧ <-Aʻ <a1 0ǧ -&ʻ 1+&a1Aʻ 1C1<@1Aʻ -&ʻ <A-? 1Aʻ # ʻ ? D& ʻ ʻ =ʻ <@'<>1-ʻ&ʻ& D1 K'01/ # ʻ &B100Ơ &=ʻ D1ʻ CKǧ. <-1Aʻ'-ʻ D1ʻ '>10Ơ &=ʻ 1-ʻ D1ʻ!&? Dǧ 1-ʻ D1ʻ!'=Dǧ &ʻ 1-ʻ D1ʻ 'L Dǧ @<1ʻ ,'-.0Ơ &=ʻ -.@<-Aʻ'-ʻ "11Aʻ <-Aʻ-&ʻ&=ʻ '.D ǧ &ʻ <-ʻ < & ǧ <'@'==ʻ& ʻ <'@'=0ǧ D1 '==ʻ& ʻ D1 '=0ǧ < & ʻ <-Aʻ D1 '==ǧ D1 '==3 <-Aʻ <'@'=0ǧ < & ʻ <-Aʻ <'@'=0ǧ &>>&-<@ ǧ ʻ'\1-0ǧ < & ʻ <-Aʻ >&-<@ ǧ < & ʻ &>>&-<@ ʻ <-Aʻ ʻ'\1-0ǧ < & Ơ <-Aʻ ʻ'j \1-0ǧ < & ʻ <-Aʻ @A1 >1-ʻ <-Aʻ D1ʻ ʻ ?BB100& 0ǧ < & ʻ <-Aʻ ʻ'\1-0Ơ D1ʻ ʻ 1ʻ Ơ <-Aʻ ?BB100& 0ǧ ` <''''Ơ <-Aʻ ʻ'\1-0Ơ D1ʻ ʻ 1ʻ Ơ <-Aʻ ?BB100& 0ǧ < & ʻ <-Aʻ &>>&-<@ ʻ D1ʻ ʻ 1ʻ Ơ <-Aʻ ?BB100& 0ǧ ʻ'\1-0Ơ <-Aʻ D1ʻ ʻ 1ʻ 0ǧ ʻ'\1-0Ơ D1ʻ ʻ 1ʻ Ơ <-Aʻ ?BB100& 0ǧ 3Pʻ < & ʻ <-Aʻ @A1 >1-ǧ < & ʻ @A1 j >1-ʻ <-Aʻ ? .10010ǧ < & ʻ <-Aʻ ? .10010ǧ < & ʻ @A1 >1-ʻ <-Aʻ D1 '==0ǧ < & ʻ ? .1001Ơ <-Aʻ D1ʻ ʻ ?BB100& 0ǧ < & ʻ ? .1001Ơ D1ʻ ʻ 1ʻ Ơ <-Aʻ ?BB100& 0ǧ < & ʻ D1 '==0Ơ <-Aʻ ? .10010ǧ < & ʻ <'@'==0Ơ <-Aʻ &>>&-<@ ǧ 1 ><-ʻ <-Aʻ &>>&-<@ ǧ @A1 ><-ʻ <'@'==0Ơ <-Aʻ &>>&-<@ ǧ @A1 >1-ʻ <-Aʻ <'@'=0Ơ D1ʻ ʻ 1ʻ Ơ <-Aʻ ?BB100& 0ǧ <'@'==0Ơ <-Aʻ &>j >&-<@ ǧ <'@'==0Ơ `ʻ ? .1001Ơ <-A'3Pʻ ʻ'\1-0Ơ ? .1001Ơ <-Aʻ &>>&-<@ ǧ < & ʻ <'@'=ʻ <-Aʻ ? .1001Ơ D1ʻ ʻ 1ʻ Ơ <-Aʻ ?BB100& 0ǧ `ʻ<-Aʻ D1ʻ A'0B 11ʻ 1-ʻ J'Pʻ D1ʻ ʻ 1aƠ <-Aʻ ?BB100& 0ǧ & 1+10Ơ <'@'==0Ơ <-Aʻ &>>&-0ǧ 1K< AƠ ? .10010Ơ <-Aʻ ` D1ʻ A'0B 11ʻ 1-93Pʻ & j 1+10Ơ < &-0Ơ <-Aʻ 1-ǧ < & ʻ < &CƠ <-Aʻ &>j >&-<@ ǧ < & ʻ<-Aʻ < &-0ǧ < &-0Ơ<-Aʻ &>>&-<@ 9

ʻ -2&'-&/.-'.'" ʻ2O#Eʻ (ʻ @+!
N) / !!& ʻ) -@ʻ. ʻ `&-2&*-!/ "
: &2ʻ6! +1ʻ ʼj .'!2!&/'
@!'" Cʻ & !ʻ !&'" !&"!2ʻ -/ʻ 2O# !2Lʻ 6 ʻ ʻ 2.O"2ʻ &&j!&-2ʻ Cʻ !-ʻ !&"!2ʻ &&j!&-2ʻ " !&'" ĥ !&"!2ʻ Cʻ 2O##!22.0"2ʻ 4 &+& 2ʻ -/ʻ &&j!&-2ʻ !&'" !E!2ʻ -/ʻ 2O #!22.0"2 [ʻ -/ʻ 4O"*!@2ʻ Ĺ &!" @ʻ 1!-

%#! ʻ $ʻ 6!;!+2

8 &;!" &!2 ʻ &ʻ &2&.-2ʻ. ʻ .0- &!2ʻ b" -2ʻ. ʻ "#." .Lʻ &.-ʻC#ʻ .ʻ <-ʻ &A'10ʻ ." ." !

< &-0 ? < 10 < &-0 <-A ? < 10 1-D<#' <- 0 < & ' &-0 <#1 0 <-A &>C<- ' &= D1 1 BD<- 0 &= D1 <C1 < ' <1<'0 <-A &' 1+1 ' &= D1>' <CA D1' ' 1' 0 <-A ?BB100& 0 &= 1+1 ' &= D1>1 <-A &' D1' <0 1 0 1 D 1-' <-A' '0 1 0 &= E?'1A0 <-A' ! < 1 -'j '10 <0 1 0 <-A &>>&-<1 ' D1' ' 1' 0 <-A ?BB10j 0& 0 <-A' F< A1-0 <-A <0 1 0 &= <= 0 F < A1-0 &= D1 &>>&-<1 ' &= D1 0 1 ' &= 1 B1 ' `K' D'-' D1 ' ' &= &-A&-1 & ' &' <- ' &= D1>' #1=& 1' -<>1A <-A' &' D1' ?BB100& 0 &= 1+1 ' &= D1>1 D<+'-.' & C& ' < '&-1 # ' KD< 0&1+1 ' <>1' & ' <>10 D1 ' & ' <- ' &= D1>' #1' B<1A' & ' -<>1A' '-' <- ' &= D1' 0<'A' E <- 0 D1 ' 0D< #1' '-' 1' a1 1-. D' <-A' ' ?1 <0' '= D1 ' `K1 1'0P . <- 1A' # '<- ' ,'-.' & ' , '-.0 <K=?1 1'.-8 >.''-' D'0 1<1>' `&= -.<-A9P' <-A' '-' 1' a1 <--1 '<-A' !& >' &' D<+1 &-=' >< '&-0 `'<-A' E <- 0 ><A1 <0 '= D1 ' D<A' #11-' . <- 1A P' '-' D1 '>10 &= ` D1-&#1' , '-.P' AK< A' D1' D' A <-A' , '-.' 'BD< A' D1' 1B&-A' <= 1 ' D1' &-H?10 <1 '-A & 1&+1 ' ` ' '0/P' & A<'-1A ` . <- 1A P' 10 <j #1 0D1A <-A' 1-<= 1A # ' D1' A 'B1' 001- ' <-A' ?j D& ' ' <=& 10<'A D< ' <1 <--1 ' &= 1 'B1-B10 `E'= 0 <-A E <- 0 ><A1'/P' # '< ' &= D1'<=& 10<'A 1'C 1 1-01A' , '-.0 `&= -.<-AP' &' <- ' 1 0&-' & ' 1 0&-0 &' .'+12 . <- <1'1-1 C? BD<01 & ' 1B1'+1' <- ' <-A0 1-1>1- 0 1- 0 C&00100'&D0 & ' & D1 ' 1 1A' <>1- 0 D&1A1-' &= <D ' &= D1' 0<'A' < 1' C 1 1-01A' , '-.0' '-' <- ' <--1 & &' &' 1- 1 ' '- &' <- ' <-A0 & ' 1-1>1- 0 1- 0 &00100'&-0 & ' & D1 ' 1 1A' <>1- 0 <= 1 ' D1' "1< D' &= <- ' &= D1' ' -B10 & 0 K' D&? A?1' '+1 ' D1 1&=0?1A # ' A?1' &B100' <BB& A'-.' &' D1' &? 01' &= D1' &>>&-' <K' &= D'0 1<>' `&= -.<-A' P' ' < A&-0 ><A1' # ' <- ' &= D1' 0<'A' < 1' C 1 1-01A' , '-.0 &' <- ' 1 0&-' & ' 1 0&-0 =& ' <- ' @'1-< '&-0 ><A1' &= <- ' <-A0 1-1>1- 0 1- 0 &00100'&-0 & ' &A'1 ' 1=1A' 0>1- 0 D&A1-' &=' <D ' &= D1' 0<'A' < 1' C 1 1 01A' , '-.0 `&= -.<-A' :P ' < A&-' & ' < A&-0 `. <- 1A P' # ' - ' &= D1>' &' <- ' 1 0&-' & ' 1 0&-0 =& ' <- ' - ' & ' - '10 ><A1' '-' <- ' <-A0 1-1>1- 0 1- 0 &00100'&-0 & ' & D1 ' 1 1A' <>1- 0 KD'BD' `0D&?A' A10B1-A 1+1 1>< '-' & ' '-' <- ' & D1 ' <--1 '0D&?A' B& >1 P' &' D1>' & ' <- ' &= D1>' <= 1 ' & ' # ' D1' "1< D' &=' <- ' &= D1' ' -B10 & 0 =' <- ' & D1 ' 1 0&-' & ' 1 j 0&-0 K' D&? ' A?1' '+1 ' D1 1&=0?1A' <BB& A'-.' &' D1' &? 01' &= D1 D<-B1 <-A' <K' <-A' ?0 &>' &=' D'0 <-A' ' ' 'B> B1' ><A1' # ' <- ' &= D1' 0<'A' < 1' C 1j 1-01A' , '-.0 `&= - .' A P' &' <- ' 1 0&-' & ' 1 0&-0 &' =&?-A' 1 1= ' & ' 10 <##'0D' <- ' ##1 '& &?01' &= 1' .'&- &&1.1 D<- 1 &0C' <' & ' & D1 ' &?01' & ' ` C' ' ?<' <B1 P' & ' &= > 0 ' 'B1-B1' ><A1' # ' <- ' &= D1' 0<'A' < 1' C 1-01A' , '-.0' &' <- ' 1 j 0&-' & ' 1 0&-0 &' =&?-A' & ' 1 1= ;' <- ' ! < 1 - ' E?'A &>C<- ' & ' ! 1&&K0D'C' & ' & D1 ' &A ' & C& < 1 & ' &' .'+1' <-A' . <- ' < ' <-A0 1-1>1- 0 1- 0 &00100'&- & ' & D1 ' 1 1A' <>1- 0 &' <- ' 1 0&-' & ' 1 0&-0 & C& < 1 & ' D<+'-.' C1 C1 ?<' ?BB100'&-' 'B1-B1' ><A1' # ' <- ' &= D1' 0<'A' < 1' C 1-01A' , '-.0' &' <- ' &= ` D101' <=& 1-<>1A ' P' =& ' D1' BB1C <-B1' <-A' 1B1'C ' &= <- ' D'-.' # ' <- '0?BD' E'= & 'E <- ' 'B1-B1' ><A1' # ' <- ' &= D1' 0<'A' < 1' C 1 1-01A' , '- ' &' <- ' 1 0&-' & ' 1 0&-0 &' D&A' & ' 1 <'-' <- ' A+&K0&-' & ' D? BD' '-' C &C1 ' 01 # ' K< ' &= 'B1-B1' ` F [P' CC &C '< '&-

. ' /' ; ! ! -' [(&-' !' 0-#&!' . ' !' 2 &/' ; ! ! 2' "&'&+! * 2' " & &# &2 ! 2' ." 0 &.-2' -/' . !'" !' - &22 ! 2 ' 2' !@' <-+/' '!'. ' *) - !2' 1 /!' N $ ' U @! '!"' -/' *FO- !/' ' 1 /!' Y : : ' R 8 /' /!2#!-/!/' !2 !/' "! 1 @-./' & '&-' -@' . !"' 7&2!' # 1!' ' + #!' 2 !+ 2' +&!@1' ." ! 2 ! &/' . ' * '' &

< &-0 ? < 10 ' & &-0 =1 < < 0 D& -1 1-D' <?- \ > 1' &-0 <#1\' I ' &>C >'1' A10 < BD<- - 0' A1@' <C1' <?' < 1'0 I ' 4' BD >' A1?L' I ' < @&? ' D1' 0' I ' 0?BB100&- 0' A1' BD? ' A1' B1?L 1 ' < @1\' <'0 1\' = 1 1\' I ' 0&1 0' A'10 E'@A1 ' I ' = <R-' 11\ <'0 1\' 5 &'<@ 18 @&? ' D1' 10' I ' 0?BB1 0&? 0 I ' E< A1'-0' I ' <'0 1\' A1\' < 1\ E< A1'-0' A1' @< &'<@ 1' A1 >10 '1 ' A10 1 j B1 0' A1' @<' ' 1' A1' &-A 1\ &-' <?' <0B?-' A1?L' <+ ' -&>1\' ' < @1 ' 0?1B100&? 0' A1' B= ?-' A1' B1 L' <'<- \' B& C& <B'&-0 C' H1B&-H1' -&?-1' &?' -&?-1\' B1?L' &?' <0B ' ' A1?L' 0&'1- ' &?' 0&'@ <CC 1\' &?' -&>1\' 1-' <0B?-' A1' @10 A' \' ./?- 1\ 10 &'01C ' 1-' 01>#@<#@1' =& B1' I ' , ?1' 0 B&>1' @10 `=1 001- 'O .3?- 1\' C' &'' &?' &'0 @&'<@>1- ' 1' .-<- ' &?' 1' .-<- \' 1-' B10 ' &'<@>1 1 ' 1-' 01>#@<#@1' =&? >1' A<+&' ' B&-=' ><B'&-0 1-' @< D<?- '1' A1' @10 A' R' @'# 110 C '+'@1.10 ==<?-BD'010 & C& <B'&-0 I ' <? 10 @10 CD-@001\ 0@B&>1' '@0 < &'1- ' A10 ./?- 10 =1' \' 10 &? 0 AK< A' @1' '1 B1' I ' 'BD< A' @1' 01B&-A1' -<A.<' 0 @&'<@L' &'10 " 1-.@1R 1

' 1-' &? 1' <A' & A1'. -1' 10 <#@'1' $' 1-<B 1' C' @<A+'0 <001- ' I ' <?B & ' 1' 0?'0A' \ 'H' &? \' > < '0 @'B1-B10 A&-1\' I ' . ?- 1\' C' < B?-' A1' @1\' A' \' -<.<' 0 C 1-010 &'10 <@ <0B?-1' C0&-1' &?' C0&-1 0 <' A&-1 ' .W?- 1 ' <@'1-1 ' C BD<01 ' &?' 1 B1'+&' ' <0B?-\' 10 1- 1\' 1- 10 C&0j 0100'&-0 &?' <? 10 1-D1 ' 1>1- \ 1-?\' A<0B?-' A1' @10 A' \' -<A.<' 0 C 1-01\' &'10 1-' <0B?-' > < 1 &?' A1- 1 ' 1-' <0B?-0 10 &?' 1- 10 1- 10 '&00100'&-0 &?' <? 10 1-D1 ' <>1- 10 <C 10 @<' >& ' A<0B -' A1' @&? ' ?-B10 10 03' >\' A?1' @'+ 1 ?1\' 1- ' C' A?1' C110 0&@&-B' @1' B&? 0 A1' @1' &1' @1 ' A1' B10 ' &'<@>1 ?' CA&-0 =<' \' C' <0B?-' A1' @10 A' \' -<A.<' 0 1-010 &' ' <@ <0B?-1' C &-1' &?' C0&-10 C' <0B?-10 <@'1-<B'&-0 =<' \' A10 <0B?-10 10 1 1\' 1- 10 C&0010>&-0 & ' <? 10 1-D1 ' 1 <1- 1\' 1-?\' A<0B?-' A1' @1\' A' \' -<.<' 0 CD1-01]' &'10 ' C< A&-' &?' C< A&-0 ='? \' C' <0B?-' A1?L' <-' <0B?-' C0&-1' &?' C0&-10 C' <0B?-' 1- 1' &?' 1- 1\' =<' \' 1-' <0B?-0 10 1- 1\' 1- 10 C&00100'&-0 &?' <? 10 1-D1 ' 1 <1- 1\ H?1?L' A10B1-A1 1-' 1 1 1-' 1><'-1 1-' &?' 1-' <0B?-' <? 1' 'C< 1' A1+'1 A 1-' < B1?L' &?' <0B?-' A1?L' <C 10 &?' C' > & ' A<01 >' A1' @&? ' ?-B10 1\' &?' <0B?-' <? 1' C0&-1' &?' C0&-10 ?-\' A?1' + 1 1-' ?1\' &&& B' @1' 0 A1' @<' D< - '1' I ' 1'1' I ' B?0 ? <1' A1' B10 ' 1 ?' @'B1-B1' =<' ' C' <0B?-' A1' @1\' A' \' -<A.<' 0 C 1-01\' &'10 <?' <0B?-1' C0&-1' &?' C0&-10 A1' =&?-A1 ' 1 1= 1 ' &?' 10 <#D1 ' <0B?-' ##< D'1' '& '1' 1<0&-' A1' 1 .'&-' &@@1.1' D<?- '1' &0C' < ' &?' <? 1' 1<0&-' &?' @'1?' 10C?1@@ &?' A<@>&'.-1 ?' @'B1-B1' = ?' C' <0B?-' A1' @1\' A' \' -<A.<' 0 1-010 &'0 <@ <0B?-1' C0&-1' &?' C0&-10 A1' =&?-A1 ' &?' 1 1= 1 ' <0B?-1' ! < I 1' E@'A1' `B&>C<'. -'1' O &?' ! 1@10D1CC1' ?' <? 1' B& C0' B& C& < ' &?' <' A& 1 ' I ' .0?- ' <0B?-0 10 1D 10 1- 10 C&00100'&-0 &?' <? 10 1-D1 ' 1>C>1\' <?' <0B?-' C0&-1' &?' C0&-10 B& C& 1\' &?' <'<- 1m 0?BB100'&-' CC1 ?<@'1 ?' @'B1-B1' =1' ' C' <0B?-' A1' @1\' A' \' -<A.<' 0 C0 1-010 &'0 <?' <0B?- ' A 1.?L' / <+3- A' \' C' @<BB1C <B'&-' I ' 1B1'C >1- ' A<0B?-1' BD&01' C' <0B?-' A1@ A&&-' &?' .W?- 1 ?' @'B1-B1' =1' ' C' <0B?-' A1' @1\' A' \' -<A.<' 0' C 1-010 &'0' <@ <0B?-1' C0&-1' &?' C0&-10' < 1-1 ' &?' 1 1'. -1 ' <0B?-' <A+&?0&-' &?' 0.@'B1' 1-' CC 1' 1C0 C' +&'1' A1' @'B1-B1' A<CC &C '<B'&-

I- - !"+&0!/' .-' !' 6.++

&?' A1' =<' 0' <0B?-0' 1@1BB'&-0@ '00' - ' H' <0B?-' A1@ <A+&?0&-' -<CC1 1'.-1' >'1' <@< & &-1G ?' CAA-' (?' CA&-0' =<' R' C' <0B?-' A1' @10' A' \' -<A.<' 0' &'0' <@ <0B?-' B& C0' &?' C0&-1\' B& C& 1\' &?' < <- \' 0?BB100'&-' CC1 ?1@@ C ' C BD<0 ' CH?'0'B'&-' &?' 1B1'C 1>1- ' A<0B?-' A1' @10' C2>'001\' ' '@ @'C1\' &?' 10 ' ?B'&-0' A10' 1>C<@ 110' ='? \' C' <0B?-' A1' \' A' \' -<A.<' 0' C 1-010' &'0' <@ <0B?-' BD1+10H1@ +10H1@ ##1@ '&? @ " 1<-@ D<C' 1' &')' <? 1' C0&-1' &?' C0&-10' 10C?1@L G 0&'1- ' I ' 0&a' A<? '1@ =& B1' +0 ?1' I ' 1==1=@;@ 0" B& >1' @10' A' \' @'B1-B10' CA&-0' I ' @'@R1\' =1?001- ' .3?-@G\' C' <0B?-' &" 1-' B10 ' &'<@>1' @&'<@'C1- ' 1' .-J- ' I ' C' ?0 1' ' @1' @<' & &-1' A'B1=' &C 1' .- - G 1-0" H' @10' >10>10' @'B1-B1R' 10 ' ?B'&-0' I ' @= 1\' =? 1- ' 1L1B? 1R' 1-' 1>C0' A<0B?-' A1' @10' A' \' -'A.<' 0' C 1-010' &'0G `1 ' 0" <0B''-1' '1@ @'B1-B1@ ./?- 1R' 1-' 1>C0' A1@ Ca1-01' 1'.-1' A<0B?-' A1' @10' A' \' '<'A.<' 10' C 1-010' &'0' ' A1' =<' ' I ' -'1- ' A1' A &' @ =1 0 ' 1L1B? 1@ A1'-0' B1@@ 1>C0' 1-' C< ' I ' -'1- ' 1-' &? @ H' >10>10' @10' @'B1-B10' H?0?- ' < B1@@ C< ' '00'- ' 1L1B? 1@ 0&'1- ' A<?A1@ =& B1' , ?1' I ' 1==1B @ 0'B&>1' @10' A' \' @'B1-B10' =1?001- ' ./?- 1\' C' <0B?-' >' @&'<@'-1- ' 1-' B10 ' &'<@>1' <.- - ' I ' C' ?0 ' ' @1' @<' & &-1' A'B1=' &C 1'.-/- @ ' 0" <0B?-' A1' @10' A' \' -<.<' 0' C0 1-010' &'0' 1-' =<' ' I ' -'1- ' A1' A &' ' <A' C' @1? 0' C< 1- R' &?' < B & a1' A1' @1? 0' C@1 '1- \' =&?-A?' &?' 10 <#@'1' <0B?-' ##< D'1' '& '1' 1<0&-' A1' 1@'.'&-' &@@1.1' D<?-R'1' &0C'=<=' &?' <? 1' 1<0&-' &?' @'1?' 10C?1@@ &?' A<@>&'.-1@ H' &? \' '1@L' =?-A<B'&-0@ H/?- ' < @1\' B& C& <B'&-0' B @1\' 0' 10' A'B1?L@ 0&'1- ' A<? '1@ =& B1' , ?H' 1==1B 1@ 0" B&>1' 1@R' =?-A<B'&-0' =1?001- ' =<' R' C' <0B?-' &" @&'<@'D1- ' 1-' B10 ' &'<@>1' 1'.-/- ' I ' C' ?0 ' ' @1' @<' & &-1' A'B1=' &C 1'.-/- ;' 00'- ' H' B10 ' 01- ' < 'B@1@ B&-,-<- ' @10' =?-A<B'&-0' &?' 0 <#@'00D>1- 10' <+/- A' \' &?' <0B?-' A1?L@ -1L 1-A1' C<0' -1' 0&' ' C ?A'A<@@ 1-' <0B?-' >< 1' <?' &'@ &?' <' <0B?-1' <? 1'C0&-1' &?' C0&-10@ C' <0B?-0' R 10' 1- 10' 1- 10' C&0j 0100'&-0' 1-D1 ' 1>1- 1R' &?' <0B?-0' >< 0' <A+&?0&-0@ <?' &" &?' <?' <0B?-1' <? 1' C &-1' &' C0&-10' <0B?-1'01- ' <CC1-A/?- @<? 1R' H' <? '1@L' H?1 L' 0C?- ' I ' =&?- ' @1' 0' 1' &?' 0' 10' A<0B?-' <? '1 ' ##< D=&' 'C '1' 1<0&-' A1' 1@'.'&-' &@@1.1' D<?-R'1' &0C' <@e' &?' <? 1' 1<0&-' &?' @'1?' <+/- A' \

' H' &? \' .W?- 10' I ' <00'.-<B'&-0' A1' " &?<' @ =<' \' C' <0B?-' A1' @1\' A' \' -<A.<' 0' C 1-01\' &'0' <?' <0B?-1' =1>1' <C 10' @<' >& ' A1' &-' #< &-@ < 1C1 ' C ' @ >1' A1' 0< +'1' C' <0B?-0' 10' C< 1- =' A10C1B'<= ' ./R1' ='' \' C' <0B?-' A1' @1\' A' \' -<A.<' 0' C 1-010' &'0@ &?' <00'.-<B'&- ' A1' A&?<' ' =<' \' <?' <0 ?-1'< ' '1@ =&-'1' @<' >& ' A1' 0&-' #< &-' 1-' @<' D<?-B1@@< '1' 0&@&-BH1' @1' &? 0' A'B1=@ 1-' 1>C0' A1@ C0 1-01' 1'.-1' A<0B?-' A1' @1\' A' \' -<A.<' 0' =a1-010' &'0@ 0B<1-' A<? '1@ =& B1' , ?1' I ' 1==1B @ 'B&>1' @10' A' \' ./?- 1\' I ' <00'.-<B'&-0' =1?001- ' =<' \' C' <0B?-' &" @&'<@>1- ' 1'.-/- ' 1-' B10 ' &'<@>1' ' C' ?0 1' ' @1' &C 1'.-/- ' @<' & &-1' A1@ >10>1' ? +1?' &? \' =&' \' H' B10 ' 1- ' < 'B@1' -1L 1-A1' C<0' -1' 1-' <0B?-' ><51' 0&' ' ?A'A<@@ <?' &'@ C' <0B?-0' , 10' 1- 10' 1- 10' C&00100'&-0' &?' 1-D1 ' 1>1- 1\' <?' &" 1.< A/?-=1R' 1-' A &' ' A1' 0< & &-1' @1' C '=" &? ' A1' &+1>#' A< 1'-' C<001' ? +1?' <?L" &? \'=&' \' H' C' B10 ' C0< ' <B ' -?= 0' C ?A'B1' 0&' ' ='''' ' <' " ?BD10' A1' 1A=& A' H/?- ' <?' I ' C ' 0<' A&?<'

(- !"+&-!/' .-' !' 6 .++=' 1& !/'&-' !' .+/' 3"&- !/' . &!2

&=' &' ><a1' <- ' @1=@'&-0@ 0&' D<' <- ' 0?BD' A+&K0&-' C1 <'-' -&' &' D1' &K-' G ' < A&-' & ' < A&-0' ><A1' #' <- ' &=' D1' 0<'A' @< 1' \)' , '-.0@ &' <- ' &A ' & ' 1 0&-0' & C& < 1@ & ' D<+'-.' C1 C1 ?<@ ?Bj B100'&-@ `# ' ? BD<01@ -H?'0' '&-@O' & ' 1B1'C ' &=' <- ' &=' D1' 1>'0100 ' '+1 '10@ & ' 10 ' ? '&-0' &=' 1>C& <@ '10@ >RA1' # ' <- ' &=' D1' 0<'A' @< 1' C 1 1-01A' , '-.0' &' <- ' = BD#'0D&C@ '0D&C@ ###& @ '& @ " 1<-@ D<C 1 @ & ' & D1 ' 1 0&-' & ' 1 0&-0'0C' ' ?<@G 0D<@@ #1' &=' `'@'a1'0P' ! & B1@ ' ?1' <-A' ==1B @ <0' '=' D1' 0<'A' 'B1-B10' < A&-0' <-A' '+1 '10' `K 1 1/P' . <- 1A' # ' <- ' , '-.' '-' D'0' 1<@>' `&=' &' D1' 0<>1' # ' ?0 ' @1G &' D<' D1' 0<>1' 'B1-B10@ 10 a? '&-0G <-A' '+1 '10@ F1 1' 1L1B? 1A' '-' D1' '>1' &=' <- ' &=' D1' 0<'A' @< 1' C 1 1-01A' , '-.0@ `'-' " 11A' <-A' C& ' &=' '.D @ & ' '=' D1 /P' K1 1' 1L1B? 1A' K' D'-' D1' <>1' '>1' '-' < '<-A' -& ' '-' D1' F D&@1@ D<' D1' 0<>1' 'B1-B10@ <0' &' D<' < '0& 1L1B? 1A@ 0D<@@ #1' &=' `'@'a1'/P' C& B1' ' ?1' <-A' ==1B @ <0' '=' D1' 0<'A' 'B1-B10' `K1 1/P' . <- 1A' # ' <- ' , '-.' @<K=?@@ ' 1'.-'-.' '-' D'0' 1<@>' `&=' -.@<-A9P' <-A' &# <'-'-.' D1' &K-' &=' D1' 0<C 1' # ' ?0 ' ' @1 ' -A' '=' <- ' &=' D1' 0<'A' @< 1' C 1 1-01A' , '-.0@ '-' 11A' <-A' -& ' &=' '.D @ `'D<'## 'D'0/'P' 1 1 0' < 1- 0@ & ' # ' ? D& ' '&=' D1' ' < @'<>1- 0@ =&?-A1A' & '10 <#@'0D1A' <- ' D#1 @ '& @ A?01'&=' 1@'.'&-@ &@@1.1@ = <-@ 1 ' &0C' <@@ & ' <- ' & D1 ' &?01' & ' ` C' ' ?<@ @<B1 P' & '&=' #?0@ D<' <@@ 0?BD' !&?-A< '&-0@ <R' &' D1' & C&j < '&-0' <-A' B' 10' &=' D1' 0<>1@ 0D<@@ #1' &=' `'@'a1'/P' ! & B1@ ?1@ <-A ==1B @ <0' '=' 0?BD' !&?-A< '&-0' `K1 1'0P' ><A1' # ' <- ' , '-.' @<K=?@@ ' 1'.-'-.' >' D'0' 1 @>@ <-A' &# <'-j '-.' D1' &K-' &=' D1' 0<>1' # ' ?0 ' @1;' 2' D<' D'0' C 101-' 'B@1@ B&-B1 -'-.' D1' &?-A< '& 0' & ' 0 <#@'0Dj >1-0' <=& 10<'A@ & ' <- ' &=' D1>@ 0D<@@ -& ' 1L 1-A' -& ' #1' C 1 ?A'B'<@ '-' <- ' <--1 ' &' D1' , '-.@ H ' &' <- ' & D1 ' 1 0&-' & ' 1 0&-0@ =& ' <- ' <-A0@ 1-1>1- 0@ 1- 0@ &00100'&-0@ & ' 1 1A' <>1- 0@ & ' < ' ' ><--1 ' A+&K0&-0@ '-' <- K'01'C1 <'-'-.' &' D1' , '-.' & ' &' <- ' & D1 ' 1 0&-' & ' 1 0&-0@ & D1 ' D<C' 0?BD' KD'BD' #1' <-A' ><a1' D1' 1a1' & ' B' 10' &=' <- ' ?BD' ##1 @ '& @ &?01' &=' 1@'.'&-@ &@@1.1@ D<- 1 @ &0C' <@@ & ' & D1 ' &?01' & ' @<B1' <=& 10<'A -A' D<' <@@ <- ' <-A' 00'.->1- 0' &=' "&+ 1 @ - <A1' # ' <- ' &=' D1' 0<'A' @< 1' C 1a1-01A' , <-.0@ &' <- ' F & ><-' <= 1 ' D1' " 1< D' &=' D1 ' ?0#<-A@ &' D&@A' =& ' 1 >' &=' D1 ' '=1@ `' & ' # 'O P' <- ' @1 1 0' < 1- 0' ><A1@ &=' 0C1B'<@ E <B1' # ' <- ' &=' D1' 0<'A' @< 1' C 1 1-01A' , '-.0@ & ' 0 .->1- 0' &=' " &K1 ' ><A1' &' <- ' 0?BD' F '=1' <= 1 ' D1' " 1< D' &=' D1 ' ?0#<-A@ '-' D1' D<-B1 ' <= 1 ' D1' T@&? 01&=' D1' 0<>1@ '-' D1' '>1' &=' D1' C 1 1-01A' 1'.-' &=' <- ' &=' D1' 0<'A' @< 1' C 1 1-01A' , '-.0@ 0D<@@ #1' &=' `@'a1/P' ' ?1@ &K1 @ <-A' ==1B @ <0' '=' D1' 0<'A' E' <- 0' <-A' 0j 0'.->1- 0' `K1 1/P' ><A1' # ' <- ' , '-.' @< F =& 1'-'-.@ 2)' <-A' &# <'-'-.' A'1' &K-' &=' D1' 0<>1' # ' ?0 ' @1 ' &+'A1A' <@K< 0' D< ' D'0' C 101-' 'B@1' A<' -& ' 1Lj 1-A@ -& ' '-' <- ' K'01' #1' C 1 ?A'B'<@ &' D1' , '-.@ =& ' <- ' <-A0@ 1-1>1- 0@ 1- 0@ &00100'&-0@ A ' & D1 ' 1 1j A' <>1- 0@ C1 <'-'-.' &' D1' , '-.@ '-' D1' '.D ' &=' D'0' &K-@ D1' ! ' 0 ' " < ' = &+1>#1 '@<0 ' C<0 ' &+'A1A' <@0&@ D< ' # ' D'0' C 101-' B ' -&' C 1 ?A'B1' #1' A&-1' &' D1' " ?BD100&=' 1A=& A@ `' <0' B&-B1 -'-.' D1 ' " &K1

< !-/!/') .'" 0"! #!' SO&2& &.-'.'"'!L0 #!@'@-*' `2O# ' @ /' ;!!-) -/'@ ' -@'2O# ' &##!-/$!'*)0- !/'&-' @1!' . ' !' < !-2!/' "!&*-!' . ' -@' . ' !' 2!&/' + !' $ ' - !-/!/' M@"<!2' &-/!/!' R' -. ' &-'"&* ' '!';@' !&'" (' + #!' 2 0!++) ;@ &-' &Z' H< 1 ! 2' .' -/' ."

3 "/.-2' & & C&'< '&-) ."30"# 2!2=

&'!"&!2'$ ' 6!2&0&.-2' . ' !1 ." +))' &!2' .' &"&)' 0 +3!"2.-2

B.0-/&-*' . ' 6!M* .02' .02!2'H ' .' !' ." .' " &.-2' -/' #& !2' . ' !' 2 .&!

' 22&*-!-2' . ' .7!"

3". '&2.' ." !' M&-*' -/' !' 0# !22' . '4!/ ."/

k -/2' 220"!/' &-' .'' 1 &-' ;@' -@'. ' !' 2 &/' <-*2 ' 7 &# '7!"!' *&'!-' .' !1' . ' -!-

-A' `'F D1 1<0'P' <- ' <-A0ℊ 1-1>1- 0ℊ 0ℊ &00100'&-0ℊ 1 1A' <>1- 0ℊ & ' & D1 ' D'-.0' D<+1' #11-' .'+1-' &' <- ' C=' D1' 0<'A' C 1 1-01A' , '-.0'# ' <- ' 1 0&-' & ' 1 0&-0ℊ C' D1' - 1- ' D<' E'= 0' 0D&?@A' #1' D1 1C= ><A1' # ' D1' 0<'A' , '-.0ℊ & ' <- '&=' D1>ℊ # ' <- '&=' DA ' 1 1 0' <1-0' # ' F < ' &=' & ><'-'=&'1+1 ℊ D<' <@@ E <- 0' <-A' 1 1 0' <1-0' ><A1' # ' <- '&=' D1' 0<>1' @< 1' C 1 1-01A , '-.0ℊ ``=&' D1'<==@& '0'-./P' &= > '0?BD' <-A0ℊ 1-1>1- 0ℊ 1- 0ℊ &00100'&-0ℊ 1 1A' <>1- 0ℊ & ' & D1 ' D'-.0ℊ 0D<@@ #1' &='``@'a1'/P' ! & B1ℊ ' ?1ℊ<-A' ==1=ℊ<0' '=' D1' 0<>1' E <- 0' ``K1 13P' ><A1' # ' <- ' , '-.'@<K=?@@ ' 1'.-'-.''-' D'0' 1<@>ℊ <-A' &# <'-'-.' D1' &K-'&=' D1' 0<>1' # ' ?0 ' ' @1' G &' D<'<-'&=' D1'0<'A' @< 1' C 1 1-01A' , '-.0ℊ # ' KD&>' <- ' 0?BD' 1 1 0' <1-0' K1 =1' ><A1ℊ K1 1' -C+1 ' 01'01A' &='`<-A' ' -3P' D1' <'A' <-A0ℊ 1-1j >1-0ℊ 1-0ℊ &00100'&-0ℊ & ' 1 1A' <>1-0ℊ #? '&-@ '# ' +' ?1'&='0?BD' !1&==>1-0ℊ E <-0ℊ E'=0ℊ& ' & D1 ' 0 <10' ><A1' &' D1>ℊ & ' <-' &=' D1>';' `' &+'A1A3' <@K<0ℊ\'P'

%#! &.-' .'' -/2 <20"!/' .' !' M&-<' ;@' 7 @ . ' 6!#.1 !-Z=!

D<' D'0' =' 1L 1-A' -& ' &' <-' <-A0ℊ 1-1>1-0ℊ 1-0ℊ &00100'&-0ℊ A+&K0&-0ℊ 1 1A' <>1-0ℊ & ' & D1 ' D'-.0' D<' K1 1' .'+1-' &' <-' &=' D1' 0<'A' @< 1' C 1 1-01A' , '-.0ℊ # ' F < ' C=' 1BC>C1-B1' & ' LBD<-.1' =& ' <-' <-A0ℊ 1-1>1-0ℊ 1-0ℊ &00100'&-0ℊ A+&K0&-0ℊ 1 1A' <>1-0ℊ & ' & D1 ' D'-.0' KD'T D' '-' <-' K'01' C1 j <'-1A' &' D1' &K-'G' <@ D&?.D' -&' 1-'&-'K1 1' ><A1' '-'<-' 1 1 0' <1-0' & ' & D1 ' F ' '-.0' &='<-' 1B&>8' C1-B1' C ' LBD<-.1

' L .+ &.-2 b& 2' -/ "!2!- &.-2 .' 4!-! &#!2 A?C'-. DR -#01;!-2(&'!2

-A' D<' <@@ E <-0ℊ &@@< 'C-0ℊ E'=0ℊ <-A' 101- <j '&-0ℊ ><A1' # ' <-' &=' D1' 0<'A' @< 1' C 1 1-01A' , '-.0' &' <-' 1 0&-' & ' 1 0&-0ℊ -& ' B& C& < 1' C& ' D<+'-.' C1 j C1 ?<@ 0?BB100'&-ℊ &=' <-' 1-1='B1ℊ " '.-' ℊ D? BDℊ C 1#1-A' &0C' <@ & ' D<C1@ℊ 0D<='#1' &=' `@'a13P' ! & B1ℊ ' ?1'<-A' ==1 ;ℊ<0''=' D1' 0<>1' E <-0ℊ &@@< '&-0ℊ E'=0' <-A' 101- >1-0' `K1 13P' ><A1' # ' <-' , '-.'@<K=?@@ ' 1'.-'-.''-' D'0' 1<@>ℊ <CA' &# <'-'-.' D1' E &K-'&=' D1' 0<>1' # ' ?0 ' ' @1G A? '-.' D1' ` '=1' & `P' @'+10' &=' DC' 0<'A' 1 0&-' & ' 1 0&-0' #1'-.' -B?>#1-0ℊ &00100C 0ℊ & ' BB?C'1 0' &=' D1' 0<>1ℊ & ' <-' & =' D1>' C+'A1'" <@K< 0' D<' D&01' 1 0&-0' KD'BD' #1' < <'-1A' '-' D'0' C 101-' <@'<>1-ℊ <'A' 0?BD' D<' #1' &?' K' D' D1' , '-./0' -1>'10ℊ 0D<@@ <a1'-& 1-1='-' -& ' A+<-<.1' # ' D'0' '@

X5 b" -2'. ' V "/2' -/' ""& *!2

' -A' D<' <@@ E <-0' ><A1' # ' <-' &=' D1' <'A' @< 1' C 1 1-01A' , '-.0ℊ # ' <-' &=' D1' ' 1 1 0' < > ℊ &' <-' 1 0&-' & ' 1 0&-0' &=' <-' F < A0' & ' < '<.10ℊ 0D<@@ #1' &='``@'a13P' ! & B1ℊ ' ?1ℊ<-A' ==1, ℊ<0' '=' D1' 0<'A' E <-0' `K1 13P' ><A1' # ' <-' , '-.'@<K=?@@ ' 1'.-'-.''-' D'0' 1<@>ℊ <-A' &# <'-'-.' D1' &K-'&=' D1' 0<>1' # ' ?0 ' ' @1

,0 b" -2'. ' B &"2' -/' "E! 2

-A' k/)' <=' E <-0' <-A' 1 1 0' <1-0' ><A1' # ' <-' &=' D1' 0<'A' 0 1' C 1 1-01A' , '-.0ℊ &' <-' 1 0&-'& ' 1 0&-0ℊ &' D<+1' <-' ! <' ' & ' ! <' 0ℊ < a1 '& ' < a1 0ℊ' ' <-' &K-'& ' &K-0ℊ k 0)' @<B1' & ' @<B10ℊ /)' <@@ 0?BD' E <-0ℊ <-A' 1 1 0' <1-0ℊ 0' &'0?BD' ! <' 0' <-A' < a1 0ℊ <-A' 1+1 ' &=' D1>ℊ 0D<@@ #1' &='`@'a1'/P' & B1ℊ ' ?1ℊ<-A' ==1 '@@<0''=' D1' 0<>1' E <-0' <-A' 1 1 0' <1-0' `K1 13P' ><A1' # ' <-' , '-.'@<K=?@@ ' 1'.-'-.''-' D'0' 1<@>ℊ <-A' &# <'--@.' D1' E &K-'&=' D1' 0<>1' # ' ?0 ' 8' @1

□ ' b" -2'. ' &'!"&!2 . ' 0-A0

-A'<@0&''=<-' 1 0&-' & ' 1 0&-0' D< D' 0?1A9&# <'-1Aℊ <-A' D<A'<-' '+1 ℊ# ' D1' &? 01'&=' D1' &-'>&- <K'&=' D'0 1<@>'& '& D1 K'01ℊ &=' <-' <-A0ℊ 1-1>1-0ℊ 1-0ℊ &00100'&-0ℊ A+&K0&-0ℊ & ' & D1 ' 1 1A' <>1-0ℊ KD'BDℊ `0D&?@A' A10B1-A' 1+1 ℊ 1>'-9 3P' & ''-'<-' & D1 '><--1

M D<' KD1 1' 20# ' W &='<>& 0>1 [;!! T3 &< K1 ' ' <') %K '<@0&' D<' 0 & ' & D1 ' ℊ D<' A10B1-A1A' 1+ 1A' 1>< -1A')

' H C' @<' &-' <0 '?-0' R 10' 1-10' 1-10' C&00100'&-0' 1-D1 ' 1>1-10' &-' <? 10' BD&010' &?-' 10 1' A&-10' <@ <0B?-' A1' = \' A' \' C 1C01 ' &'0ℊ C' <0B?-' C0&C1' &?' C0&-10ℊ <'@1- 1-1' H' C' @10' A' \' &'0' &?' <0 ?C' A1?0' A&-1' 1-' M &'1' =1' ' C' <0B?-0' A1' @1?=0' #10' C< 1-11' ' +&'1' A<>& '01> ' C3 &? \' &? 0ℊ H' &? 0' .WC-10' I ' #10' C< 1-11' =<' \' C' <0B?-' A1' @1\' >10>10' == 1-010' &'0' A<>& '0>1-ℊ A<0BC-0' <? 'AL' R 10' 1-10' 1-10' C&00108' <&-0' 1-#1 ' 1>1-0' &?' <? 10' BD&010ℊ 0&'1-' A<? '1=' =& B1', ?1' I ' 1==1B ℊ 0" B&>1' >10>10' @10' .#> 10' =1?001-' =1' \' C' < B?-' & ' @&'<@>1-' 1'.-3-' 1-' B10' &'<@>1' I ' C' ?0 1' ' @1' &C 1'.-3-' @<' & &-1' A1@ >10>1;' 00'-' H' <0B?-' A1' @1\' A' \' -<. ? 0' C 1-010' &'0ℊ C' H" <0B?-0' <? @1@L' #10' C< 1-\'=? 1-' =<' \ℊ -1' =1?0' <>1\' 01=" A1' @1\' A' \' R 10' 1-10' 1-10' C&00100'&-0' &?' 1-D1 ' 1>1-=' =& Hℊ 0&?@1>1-' C' @<', C1' A<? '1@L' =1&==1>1-\'. ?-10' A&-0' &?' <? \' 10 < 1\' <' B1?L' &?' <0B -' A1?L' =1' \G C' 1-0' &? \'=&' mˈ H' B10' <B' -1L 1-A1' C<0' <0' <0B?-0' R 10' 1-10' 1-10' C&00100'&-0' <A+&?0&-0' 1-D1 1>1-\' &?' <? 10' BD&010' H&1?L' =? 1-' A&-1\' <?' <0B?-' A1' 1' A' \' Ca1-010' &'0' C' +&'1' A1' 1B&>C1-A1' &?' 10BD<?-.1' C' <0B?-0' 10' 1-10' 1-10' C&00100'&-0' <A+&?0&-0' 1-8ℊ D1 ' 1>1-1\' &?' <? 10' BD&010' H?1@@10' 1-' <0 ?-' >< 1' <CC1-A &'1D' <' @<' & &-1ℊ &?' 0&='H' -?@@ >1-A&-' =?' ' ' =<' ' 1-' <0B?-1\' #10' C< 1-1\' &?' <? 1\' 10B 'C 1\' A< B?-' 1B&C1-01' &?' 10BD<?-.10

' H' &? \' .?-1\' 1& <1@&='0' A&-0' I ' C@ 1-<B'&-0ℊ =<' \' C' <0B?-' A1' @1mˈ A' \' -<A.<' 0' 1-010' &'0' <@ <0B?C1' C0&-1' &?' C0&-10ℊ -'1-' B& C& 1\' -<'<-\' 0?BB10j 0'&-' CC1 ?1#ℊ A<0B?-' #1-1='B1' A'.-' 1' 10.@'B1' C 1#1-A1' D&0C' <='&?' D<C1 ℊ 0&'1C' A<?='1" =& B1', ?1' I ' 1==1B ℊ 0'B&>1' >10>10' @10' .?-10' B&@@<A&-0' A&-0' I ' C01-<@' B'TU0' =1 001-' =<' \' C' <0B?-' & ' @&'<@>1-' 1'.-/-' 1-' B10' &'<@>1' I ' C' ?0 1' ' @1' &C 1'.-W-' @<' E& &-1' A1@ >10>1X' A? <-\' @10' +'10' A10' A' \' C0&-1' ?' C0&-1\' 10 1<-\' 1 B?>#1-1\' C&00100&? 0' &?' BB?C'&? 0' 1C' @10' >10>10' &?' <0B?-' A1' B1?L' ? +1?' &? \' =&' \' H' B1?L' C0&-1\' H?1@0' 0 ?-' < 1'-\' 1-' B10' C01-' C< @1>1-' I ' '1@L' H?1@L' 0&?C' A1D& 0' &+1' @10' 1-1>'1\' A?' &" -? ' #1-1='B1' -1' <+/'@ <.1' C 1'.-1-' C' BU0' <B 1

' H' &? \' .0?-10ℊ =1' \' C' < B? ' A10' A' \' C<A.<' 0' C 1-010' &'0' C' <0B?-0' A1' @1? 0' #1 ' C< 1-1\ℊ <?' <0B?-1' C0&-1' ?' C0&-10' A<0B?-0' .< A10' &?' >< '<.10ℊ 0&'1-' A<? '1@=& B1', ?1' I ' 1==1B ' 0'B&>1' >10>10' @10' ./?-1\' =1?001-' ='? \' C' <0B?-' & ' =&'<@>1 ' ' 1'.-/-' 1-' B10' &'<@>1ℊ I ' C' ?0 1' ' @1' C 1'.-3-' @<' & &-1' A1@ >1 >1

' <?L" H' &? \' .0?-1\' I ' #1\' C< 1-1\ℊ =<' \' C' <0B?-' A10' A' \' -<A.<' 0' C 1-010' &'0' <?' <0B?-1' C0&-1' &?' C0&-10ℊ A<+&' ' 1-' <0B?-1' +'@@1' ?' +'@@10' &?' <? 1?L' <0B?-' =1' 1' &?' =1>10' ', BD1' &?' I D 1\ℊ H' &? \' '1@L' . ?-10' I ' #1\' C< 1-1\ℊ HW?-' <0' A' \' =1' 1\' I ' BD10' I ' B#?-' A' B1?Lℊ 0&'1-' A<? '1@=& B1', -1' I ' 1==1B ' 0' '&>1' >10>10' @10' .W?-10' I ' 10' C< 1-1\' =1?001-' =' ' \' C' <0B?-' & ' @&'<@>1-' 1'.--' 1-' B10' &'<@>1' I ' C' ?0 1' ' @1' &C 1'.--' @<' & &-1' A1@ >10>1

'<?L" 0" <0B?-' C0&-1' &?' C0&-10' &?-' 0?1\' &C 1'.-1\' 5' 1?1\' <0B?-' @' 1' C' E&? 0' A1@ B&1' @1 ' A1' B10' &'<@>1' &?' <? 1>1-ℊ A<0B?-0' R 10' 1'' 10' 1-10' C&00100'&-0' <+&?0&-0' &?' <? 0' 1-D1 ' 1>1-\' H?1?L' A10B1-A1 1-' 1 1 1-' 1><'-A 1-' &?' 1-' <0B?-' <? 1' >< 1

A1+'1-A 1- ' <0ʻ 1?L' &?ʻ <0B?-' A1?L9ʻ C' <0B?-'@'+01ʻ `C 0? 1'⅋4ʻ <C 10ʻ &?ʻ C' >& 'A<0B? ' A1' @&? ' ?-B10 10ʻ &?ʻ <0B?-' <? 1' C0&-1' &?ʻ C0&-10ʻ A1C?'0ʻ @1' H?< ' &? ' A1' < BD1' A< 1'<1' C<001 9ʻ H' &? \' '1@L' 1\' 0&'1- ' A<? '1@ =& B1' I ' 1'=1 I ' B&>1' @10ʻ =< 1- ' @1' 1>C0ʻ A1\' A' \' @'C1\' C 0?1L;' C1-0ʻ H' @10ʻ A' \' , 10ʻ 1'' B0ʻ 1- 10ʻ C&00100'&-0ʻ <A+&?8ʻ 0&-0ʻ &?ʻ <? 10ʻ 1-D1 ' 1>1- \' &?ʻ <0B?-' C< B1@ 1- ' -1' &'1- ' &?ʻ 0&'9ʻ 1.< A<- \' &?ʻ 1.< A<- ' <?ʻ &" 1-' A &' ' A1' 0 ' A' ' C& &-1' ? +1?ʻ &? \=&' \' H' B10 ' < 'B@1' -1L 1-A1' C<0ʻ <0ʻ <0B?-0ʻ 10ʻ 1D 10ʻ &?ʻ <? 1\' BD&010ʻ H?1?]' <CC1-A1- ' &?ʻ A?01- ' A1+'1-A 1' <0ʻ ><'-0ʻ A?ʻ &" Cʻ 1<0&-' A<0B?-1' < 1'-A 1' 1-' B10 ' C01- ' C< @1>1-

+' 5 ' 3' + +X' ' .' " +'%+' X' # ' -N %+' X' +X' "' % '' 4 +' '' &'' ' . %'' " . %'' ' " %'. ' 4 ' " .' '' 3 +' A ' 4 '' 6 '' 4 ' '' " . . ' ' 4 . %.' - 4 '.' ' % -' .' 4 %'' " . %'' ' " . %'.' '.+' %+X' 4 ' %.' - ' ' . '%+' 4 '' .' & 7 7 '' '' # ' ' +'' .' ' 5' #' %' 4 ' (5' +('' ' 5' '%+' '.' +' & " ' 4 '' 'X' - %+' X' # ' + 'X' " +' %+X' '%+' .' ' ?' ' . %' 4 ' 5' +X' < . %' Y '' ' 4 ' %6 '' ' %' '.+' ">.'%+' " '& '%+' ' +' '' % '%+' %+ '.+' %+') P' '+ +X +X' 3' '.+' + '' %' 5+' %4' " .' .' . %.' - 4 '.' ' & -' X' 4 . %'' " . %'' G ' " . %'.' 3 ' 5' " " ' %4 '%+' ' 4 ' P ' %4 '' 4 .' %+' .' %+ %.' 4 ' &" "' ' . %' 4 . %' ++' %4 '' ' %' '.+' " . ' %+' " ' & ' %+

' <?L" H' &? \' . ?- 1\' =<' \' C' -=1' A' ' &R0< -'@1' &" C' 01ʻ 10ʻ C< 1- 1\9ʻ A1C?'0ʻ @1' H?< ' &? ' A1' < BD1' A< 1' 1' C<001 9ʻ <@ <0B?-' A1' 01\' =&'<@L' @'1.10ʻ D&>10 9ʻ H" -1' =? 1- ' B&- 1' @1' &" 1-' <0B?-' BD<>Cʻ A1C?'0ʻ @1' C ' &? ' A1' 0&-' 1'.-1 9ʻ -1-B&- 1' @1' D<?@ ' I ' C?'000?-' '-B1' 11 ' A?ʻ A' ' & ' <@ BD<>Cʻ I ' ><@+<'0ʻ & -1 ' A1' F <a1='1@A9ʻ A<0B?-' &=='B1' &?ʻ &=='B1\9ʻ H?1@ C0&-1' &?ʻ C0&-1\' C' A'0B 1 1' B&-0'A1 <B'&-' A?ʻ &" <A' &?ʻ &?- ' A1j 01 +1' &?ʻ A101 +1\' @1==1 ' A'B1@" .3?- 1' &?ʻ .[?- \9ʻ 0&'1- ' A<? '1@ =& B1' , ?1' I ' 1='1=' B&>1' B1?L' &?ʻ <0B?-' A1?L' =? 1- ' &?ʻ =?'0 ' <@ 1>C0ʻ A1' @1\' . ?- 1\' >10 <10ʻ @10ʻ 10ʻ C< 1- \' I ' BD?-' A1?L' =<' \6ʻ <0B?-' < ? 1' I 1' &?ʻ A1-3-B1' 1 ' B10 ' C01- ' C@1>1- ' =<' ' &?ʻ <==<' 1' -'1- ' &#0 <- ' ? +1?ʻ &? \' =&' \' H' B10 ' <Q@1' -1' &' ' =C ?8ʻ A'B'<@@ &?ʻ A<><.1&?0ʻ <@ <0B?-1' C0&-1' &?ʻ C0&-10 9ʻ A<0B?-' .W?- 1' &?ʻ . ?- 1\' < B1@@?" &?ʻ B1?L' &?ʻ <0 ?-' A1?L' A<0B?-' <--?' 11ʻ =11' &?ʻ C1-0'&-9 &?ʻ A<0B?-1' "1<- '1' &0C' <@ &?ʻ 1-1='B1 9ʻ &?ʻ A<0B?-' &=='B1' &?ʻ &=='B10ʻ 10 1<- \' &=='B1' &?' &=='B10ʻ 1-' @1' 1>C0ʻ A10ʻ C.1 - ' &? 0ʻ A?ʻ & 9ʻ &?1'@10ʻ =110ʻ I ' .<.1\' < B1&' A?1\' I ' <BB?0 ?>1\9ʻ C' @1' &" C' 01\' 10ʻ C< 1- 1\' =<' \' A1C?'0ʻ @1' H?< ' &? ' A1' < BD1' A< 1'-' C<001\6ʻ 01m' =10ʻ C< 1- \' =<' \' A1' &? \'@1\' &=='B10ʻ A10ʻ 1 .1<?- \' A< >10 9ʻ I ' A10ʻ &=='B10ʻ A10ʻ ?0 'B10ʻ A1@ ?-1' <-a' &?ʻ A1' @<? 1' <-a9ʻ < &-0ʻ A1' 0&-' 0BD1H?1 9ʻ E< A1'-' A1\' &@@10ʻ A1' 0<' D<?- 1' " 1-8ʻ .@1R 19ʻ E< A1'-' A1\' &@@10ʻ A1' 0<' D<?- 1' A1' 0<' 1' " ' @&-A1 9ʻ @1 a' A1' 0&-' &?-01'@@ 1B''-A< '1' 1-' @&=='B1' A1' 0&-' C '+1' 01<@e ' @1 a' ?E< A1'-' A1' 0&-' <-<Cʻ A1' 0<' A' ' D<?- '1' " 1-.@1R 19ʻ E< A1'-' A1' 01\' < a0ʻ A1' 1@@10#? ' I ' <- 1.@&0ʻ 1-' @1' &?- 1' A1' & -1K<'@@9ʻ A1@ @1 a' A1@ '5BD1' A1' 0&-' &0 '1'e9ʻ &=='B1' A1' ' &. CD1 ' I ' E< A1'-' A1\' '1=0ʻ I ' 1 & A10ʻ A ' &" A1' 0&-' B&1' <-Q9ʻ A1' 0&-' ' '1 9ʻ 1 0<.'1 0ʻ A1' 0&-' 0BD1H?1 9ʻ &?A1 1 9ʻ @?>#1 9ʻ & -&? 9ʻ =1'0&? ' A10ʻ 011 \' A1'-0ʻ @<' &? 1' A1' &?-A 10 9ʻ BD'1=' < C1- 1 ' A1'-0ʻ @1' <@1'0ʻ A1' F 10 >9ʻ 10B1'+&? 0 9ʻ &? \' &=='B10ʻ <BB&>C <#@1\9

N . ' ' ' $ ' " ' ' ' $ ' = &

` B&>1' ' &' D1>' & ' <- ' &=' D1>9ʻ # ' <- ' '+1 ' C? 0?1A' <= 1 ' & ' # ' D1' " 1< Dʻ &=' <- ' &=' D1' ' -B10 & 09ʻ & ' <- ' & D1 ' 1 0&-' & ' 1 0&-09ʻ <= 1 ' D1' !&? Dʻ " < ' &=' < BDʻ @<0 ' C<0 9ʻ D<' <@@ 0?BDʻ '+1 '10ʻ 0D<@@ #1' &=' `@'a1' ! & B1 9ʻ ' ?1' <-A' ==1= 9/' ' <@ D1 ' K1 1' < ' D1' ' > 1' &=' D1' 0<'A' '+1 '10ʻ C? 0?1A' ;' &' D<' D1' 0<'A' <-A09ʻ 1-1>1- 09ʻ 1- 09ʻ &00100'&-09ʻ A+&K0&-09ʻ & ' & D1 ' 1 1A' <j >1- 09ʻ & ' <- ' < B1@ D1 1&=9ʻ K1 1' -& ' C1 <'-'-.' &' D1' , '-.' '-' D1' '.D ' &=' D'0ʻ &K- ' &+'A1A' <@K< 0 ' D< ' D'0ʻ 'B@1' 1L 1-A' -& ' &' <- ' <-A09ʻ 1-1>1- 09ʻ & ' & D1 ' D'-.0ʻ KD'BDʻ A&' C1 <'-' & ' &?.D ' &' B&>1' '- &' D1' , '- ./0ʻ <-A09ʻ # ' 1<0&-' &=' <- ' <'-A1 ' '-' D'0ʻ C 101- ' < @'<>1-

-A' <@0&' D< ' <@@ E <- 0ʻ <-A' 1 1 0ʻ < 1- 0ʻ ><A1' # ' &? ' 0<'A' & A' D1' , '-.' &' <- ' 1 0&-' & ' 1 0&-09ʻ <= 1 ' D1' !&? Dʻ " < ' &=' < BDʻ @<0 ' C<0 9ʻ &=' <- ' F < A0ʻ & ' < '<.10ʻ &=' <- ' 1 0&-' & ' 1 0&-0ʻ #1'-.' K' D'-' .1 9ʻ 0D<@@ #1' &=' @'a1' ! & B1' <-A' ==1= ' &' @'1>' <-A' 1+1 ' &=' D1>9ʻ <0ʻ D1 ' K1 1' < ' D1' '>10ʻ &=' D1' E <- 0ʻ <-A' #1 1 0ʻ < 1- 0ʻ D1 1&=' ><A1' &' D1>' & ' <- ' &=' D1>'6 <- ' ^' & ' A'-<-B1' '-' D'0ʻ C 101- ' < @'<>1- ' ><A1' & ' &' #1' ><A1' -& K' D0 <-A'-. ' ' &+'A1A' <@K< 09ʻ D< ' D'0ʻ 'B@1' 1L 1-A' -& ' &' <- ' F < A0ʻ & ' < '<.10ʻ &=' <- ' /)' 1 0&-0ʻ KD'BDʻ A&' C1 <'-' & ' &?.D ' &' &>1' &' D1' , '- ./0ʻ <-A09ʻ # ' 1<0&-' &=' <- ' <'-A1 ' '-' D'0ʻ C 101- ' < @'<>1-

-A' <@0&' D< ' <@@ E <- 0ʻ ><A1' # ' &? ' <'A' &+1 1' . -' & A' D1' , '-.' # ' D'0ʻ 1 1 0ʻ < 1- 09ʻ <= 1 ' D1' !&? Dʻ " < ' &=' < BDʻ @<0 ' C<0 9ʻ &' <- ' &=' D'0ʻ =<' D=?@ @'1.1' 1-' D< ' K1 1' -& ' <.<' -0 ' D' >' '-' <- ' ! '1@A' <= 1 ' D1' ! ' 0 ' " < ' &=' D'0ʻ 1' . -9ʻ -& ' <.<' -0 ' D1' D'.Dʻ <-A' >' .D ' '-B1 9ʻ !< D1 ' &' D1' 0<'A' , '-.9ʻ '-' D1' ! '1@A' <-A' 1+'@ &? -1 ' &=' F <a1='1@A9ʻ &=' <- ' ==' B1' & ' ==' B10ʻ `KD'BDʻ 0?BDʻ 1 j 0&-' & ' 1 0&-0ʻ # ' D1' , '- ./0ʻ A'0B 11 ' &-0'A1 < '&-' D< Dʻ A101 +1A9ʻ D1' ' z' &=' 0?BDʻ E <- ' & ' E <- 0'$Oʻ 0D<@@ '#1' &=' `'@'a1' 1- . Dʻ <-A' ! & B19J ' <0ʻ D1 ' & ' <- ' &=' D1>' K1 1' < ' D1' '>1' &=' `0?BDʻ E <- ' & ' E <- 09ʻ 1 1 0ʻ < 1- 0 U ' <-A' 1+1 ' &=' D1>' ><A1 6ʻ <- ' <? 1' =@ ' & ' A'-<-B1' ><A1' & ' &' #1' ><A1' '-' D'0ʻ C 101- ' < j @'<>1- ' -& K' D0 <-A'-. ' &+'A1A' <@K< 0 ' D< ' D'0ʻ =' #1' -& ' C 1 ?A'B'<@ -& ' D? =?@ &' <- ' 1 0&-' & ' 1 0&-09ʻ =& ' <- ' E <- ' & ' E <- 0ʻ ><A1' &' f ') D1D" (' <- ' &=' D1>' &=' <- ' --?' 9ʻ ! 119ʻ & ' 1-0'&-9ʻ & ' &=' <- ' " 1<-1 9ʻ &0C' <@@ & ' 1-1='B1 9ʻ & ' &=' <- ' ==' B1' & ' ==' B10 9ʻ W)' '-' D1' '>1' &=' D1' , '- ./0' &.1-' & 09ʻ K' Dʻ D1' ! 110ʻ <-A' F <.10ʻ D1 1 &' A?1' <-A' <BB?0 & >1A9ʻ ><A1' # ' D1' ', '-.' # ' '0ʻ 1 1 0ʻ < 1- 0ʻ 0' D1-B1' D1' !&? Dʻ " < ' &=' < BDʻ @<0 ' C<0 ' '0ʻ 1 1 0ʻ < 1- 0ʻ ><A1' &=' <@@ D1' ==' B10ʻ &=' 1 1<- 0ʻ < ' >09ʻ <-A' &=' D1' ==' B10ʻ &=' ?0 'B10ʻ &=' D1' &-1' 1-BDʻ & ' &=' D ' D1 9ʻ < &-0ʻ &=' '0ʻ LBD1H?1 9ʻ ` F < A1-( ' ' D1' &@@0ʻ &=' '0ʻ D<-j B1 ' &=' -.@<-A9ʻ ` F < A1-(' &=' D1' &@@0ʻ &=' '0ʻ D<-j B1 ' &=' '0ʻ <-A' &=' 1@<-A9ʻ @1 a' &=' '0ʻ &?-B'9ʻ 1B&-A< ' '-' D1' ==' B1' &=' '0ʻ '+ ' 1<@9ʻ @1 a' & ' ` F < A1-( ' &=' '0ʻ <>C1 ' &=' '0ʻ <'=' D<-B1 ' &=' -.@<-A9ʻ ' ' " ' ' &=' '0ʻ < a0ʻ &=' 1@@10#? ' <-A' <-8ʻ 1.@10ʻ '-' D1' &?- ' &=' & -K<@@9ʻ @1 a' &=' D1' < a1 ' &=' '0ʻ &?01 9ʻ [ )' D1' D' &. <CD1 ' <-A' ` F < A1-'(' &=' D1' , '-./0ʻ F ' 0ʻ <-A' 1B& A0ʻ &=' '0ʻ & > > &-' 1-BD9ʻ 1001-.1 0ʻ &=' '0ʻ LBD1H?1 9ʻ J)' E@<0'1 9ʻ @?>#1 9ʻ &'A1 1 9ʻ & -1 9ʻ `!@1 BD1 ) ' K' D'-' D1' &K1 ' &=' &-A&-9ʻ D'1=' < C1- 1 ' K' D'-' D1' <@<B1' &=' F 10 >'-0 1 9ʻ `' 1B1'+1 ' &=' J' ' ==' B10ʻ <BB&?- <#@19

F & '' H. 6' ' %4' ' ' 9ʻ ['". %'' O ['O 6 6' ". %'' ' ". %'.' 6 ;' $ 'R !' 4 . '+'' ! %. 4 ' %'6 P'9 4 ' ;' 4 ' P' 4' 4 '' ' D' 4+' '+6 '' ' . & '' -.(%+'' ' -. %+'.' ` U '' %') ['+6 '' - & %+'.' '+6 '' . & '' + '.' " +'%+'. C 6 ; & ' ' H7 ' ; %-' '' ' '.' .' '" " ' \ '' ' Z' ' ' O'.' '. ' P .')' $ '

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J !

I ' B @?- ' A1?L' 0&'1- ' 1-?\' A1' >10'= 10 @10 D'1=0 .5% ' > >1A'< ' &?' A1' @&? ' D1' 10 I ' C' >10>10 @10 M+'B10 B&>1' '@0=? 1- ' 1-?\' @1' 1>C0 A1' @10 A' \' =1&==1>1- \' A'8 B1?L' <@ <0B?-' A1' @10 A' \' -<A.<' 0 = 1-010 &'0' &?' <0B?-' A1' @&? ' A' \' ?-B10 &? 0 =<' \6 <0B?-1' C&0010 0'&-' A<0B?-' A1' @10 A' \' -<A.<' 0 C 1-010 &'0 &?' <0B?-' A1' @&? ' ?-B10 &? 0 A1C?'0 @<' A' ' A< 1'-1' & ' A1@ 1'. -1' A?' A' ' &" AK< A' @1' '1 B1' -'1- ' &#0 <- ' 1-0" H' -?@@1' C0&-1' < 1'-' 1-' B10 ' C01- ' C< @1C'1- ' C 1'. -1' <0B?-' <'A1' &?' <+W- <.1' C1-

' <?L'- ' H' ? \' 10 C< 1- 10 .W?- 1\' I ' A' 1 I 1\' C' -=1' A' '= ' @1' & 0 A1C?'0 @1' C '=" &? ' A1' 0&-' 1'. -1 <?' 0&-' D<?CB1@@1 ' &?' 10& 1 ' A1' B10 ' &'<@>1 ?0 'B10 <0 C@110 A1+0- ' @1' & ' <' 1-'1 0 ' ?0 'B10 A1 B 1' <-B ' &?' < &-0 A1' 0&-' 0BD1H?1 0 &A' <@ <0B?-' A1?L' C? ' @1LMB'01' A<? '1 BD&01' H?1@ <@ &=='B1' &?' &=='B1\' C&@< ' I ' <?B & ' 1' A1?L' &?' <0B?-' A1?L' <CC 1'. -&' 0 C' 1<0&-' A<0B?-' A1' @1\' A' \' ' 10 C< 1- 10 I ' .W?- 1\0 0&'1- ' A<? '1 =& B1' , ?1' I ' 1==1B 0 B&>1' B1?L' &?' <0B?-' A1?L' =? 1- ' &?' =1?0 ' @1' C '' ' &? ' A1' &+1>#' A< 1'-1' C<001' ' 0B?-' 0 < ? 1' <B 1' &?' C A1- -B1' 1-' B10 ' C@01- ' C@1>1- ' =<' ' -'1- ' &#0 <- ;' 00'- ' H' @10 < &-0 A10 BD1H?1 ' &BB?C'1- ' (?' 1L B1- ' @&? ' &=='B10 <?' C@1<0' ' A?' &" 0" B&>1' @10 ?0 'B1\' =&?-

' <?L" H' A ?-' &>'00'&-' =<' ' . ?- 1' I ' A' 1B 0 C' <0B?-' A1' @1\' A' \' -<A.<' 0 C0 1-010 &'0' 10 <0B?-0 A1' @&? ' 1>C0 <?' <0B?-1' C0&-1' &?' C0&-10 C ' @<' C1<'L' 1-BD10B?-' &?' <0B'>' &?- 11' A1' B10 ' &'<@>1' A10 1' B&-01 +1\' I ' .< A1\ I ' A&'1 I ' 0>'= 1 ' &? \' -< 0 =1@B>'1\' B0 C<001m' I ' <? 1\' 'C1==<' \' 1-' @10 >10> 0 &>'00'1-0 I ' B='?-' A'B1@@10 1 1B'='1\ 1-' < B?-' A1' @1\' A' \' & - 11\' = '' \' &?' CC1 1\ &?' A1' A1@'+1 ' <0B?-' .<&@1'&U' .<&@10 A1'-0 B10 ' &'<@>1 &?' 1-' <? 1' @'1?' &?' @'1?L' A10&?#\' @&#1'0 ?-B1' A1' @<' & &-1' A1 >10-'1 A1\' C '0&-0 1-'<0B?-' A1' @1\' A' \' .<&@10 1-' 1>C0 A<0B?-' A1' @1\' A' \' -<A.<' 0 C 1-010 &'10 10 1<- \' A10 1' A1@' 1\ <00'. -0 &?' <00'.8 - 1\6 &?' A&'1 ' I ' >'-1 ' &? \' >'<50 1<0&-0 =1 &-'1\' 10C<001\' I ' <? 1\' >1='<' \' CC1 1\' -' <0B?-' A1' @1\' A' \' &? 11\ ? 1-' <0B?-' <? 1' @'1?' &?' @'1?L' A 0&?#0 @&#1' -B1' A1' @<' & &-1' A?' A' ' 1<>1 1-' B#?-1' A1' @10 >10>10 &>'00'&-0 10C1B'='1\' <00'. -11\6 ?' C? ' 01K1 0 K<@@1\' A10 < 1 0D1\' =&001\' .? 1 1\' <?@B1\' I ' C&- \' I ' <? 10 A1=<? 1\' 1-' <0B?-' < 100D1' &C' <8 100D10 1-' <0B?-1' C< ' A1' B10 ' &'<@>1 1-' @10 >10-@10 B&>'00'&-0 10C1B'='1\ I ' D?-' A1?L' A1' 0? +1'1 ' I ' =<' 1' 10 1' 1C<' 1\' I ' 1>1CA1\ <00'. -1m6 I ' &? \' <? 10 &==@'00'&-0 =<' ' C' <0B?-' A1' @10 A' \' -<A.<' 0 C 1-010 &'0 <@ <0B?-1' C0&-1' &?' C0&-1\ A1+0- ' @1' H?< ' &? ' A1' < BD1' A< 1'-1' C<001 81 ' &? \' CB1001\' A1R>'-<B'&-\' 1L1B?B'&-0 1-B'A1- 1\' <A> -?B@1\' I ' <? 10 B' B?>8 0 <?-B1\' <0 'B1@@0 &>'00'&-0 I ' B@@?-' A1?L' <CC1-A<- \ -'1- ' +&'A1\' 1C1@@1\' &?' <A-?@@1\ 0&'1- ' A1' <1>#@<#@1' =& B1' I ' 1==1B 0 0'B&>1' >10>10 @10 B&>'00'&-0 I ' BD?-' A1?L' =1?001- ' =<' \' I ' . > 1\' C' <0B?-' &" @&'<@>1- ' 1'. - - ' 1-' B10 ' &'<@>1' I ' ?' ?0 1' ' @1' &C 1'. -W- ' @<' & &-1' A1@ >10>1;' 0 '- ' H?-1' 0C1B'<@@ <B 1' 0&' ' =<' ' C' <?@'1@L' C0&-1\' H?1@=0 =? 1- ' 1-A<-'<.1\' A1 '' ' B10 ' 1>C0 C' @1' &

<-A' 1+1 ' &=' D1>0 #1' D&@A1-' &=' D1' 0<>1' D'1=' & A0 ' > >1A'< 1 0 & ' &=' D1' ' 1' 0 <-A' # ' D1' 0<>1' 1 +'B10 <0 D1 ' K1 1' D&@A1-' <' D1' ' >1' &=' D1' 0<>1' ! 1&==>1- 0 ><A1' &' <- ' &=' D1' 0<'A' @< 1' C 1 1-01A' , '- .0 & ' &' <- ' &=' D1' ' -B10 & 0 <- ' &00100'&-' &=' D1' 0<'A' @< 1' C 1 1-01A' , '- .0 & ' <- ' &=' D1' ' -B10 & 0 <= 1 ' D1' @<0 " < ' &=' D1' 1' .-' &=' , '- .' AK< A' D1' D' A -& K' D0 <-A'- . ' &+'A1A' <@K< 0 ' D< ' -&' 1 0&-' < <'- 1A' '-' D'0 C 1j 01- ' < @'<>1- ' <a1' <- ' 1-1=' ' & ' A+<- <.1' D1 1#

-A' <@0&' D< ' <@@ 1 1 0 < 1- 0 . <- 1A' <-A' A' 1 1A' # ' &? ' 0<'A' & A' D1' , '- .0 <= 1 ' D1' ! ' 0 ' " < ' &=' D'0 1' .-0 &' D'0 D<-B1@@& ' & ' 1<0? 1 ' &=' D'0 1<@>0 ?0 'B10 &=' @1<0' &'#1' D&@A1-' #1=& 1' D1' , '- . ' ?0 'B10 &=' D1' &>>&-' 1-BD0 & ' < &-0 &=' D'0 LBD1H?1 0 & ' &' <- ' &=' D1>0 =& ' D1' L1 B'01' &='<- ' 0?BD' D'- .' <0 C1 8 <'-1 D' &' D1' ==' B1' & ' ==' B10 &K1 ' <-A' ? D& ' ' &=' D1>0 & ' <- ' &=' D1>0 # ' 1<0&-' &=' <- ' &=' D1' 0<'A' 1 1 0 C< 1- 0 <-A' E <- 0 0D<@@ #1' &=' `' @'a1 ' ! & B1 0 ' ?1' <-A' ==1 I 0 <0 D1 ' & ' <- ' &=' D1>' K1 1' D1' ! ' 0 ' " < ' &=' &+1>#1 ' @<0 ' C<0 6 <- ' < ? 1 0 = 0 & ' A' j -<-B1' ><A1' '-' D'0 C 101- ' < @'<>1- ' -& ' D0 <-A'- .6 &' D<' D1' < &-0 &=' D1' LBD1H?1 ' 0D<@@ &BB?C ' & ' 1L1 B'01' D1' ' ==' B10 <' D1' , '- . 0' @1<0? 1 0 <0 D1' ?0 'B10 A&

-A' <@0&' D< ' 1+1 ' &>>'00'&-' ><A1 0 . <- 1A <-A' A' 1B 1A' # ' <- ' &=' D1' 0<'A' @< 1' C 1 1-01A' , '- .0 '- ' <A ' &=' D1' ' >10 &' <- ' W1 0&-' & ' 1 0&-0 ` &' #1' <00'. -1A' < ' ==/0 1<B1' '-' 1+1 ' & ' <- ' &?- ' &=' D'0 1<@>' &' #1' Q'10 <#@'0D1A' ' 0-A' a1C 0 <-A' & D1< ' <-A' A1 1 >'-1' <@@ ><--1 ' &=' ! 1@&-'10 10C<0010 <-A' & D1 ' ==1 B1 ' 0C1B'='1A' '-' D1' 0<'A' &>>'00'&-0 <-A' 1+1 ' &=' D1>0 A&-1' & ' B&>>' 1A' 'C' <- ' &=' $ ' 0<'A' &?- '10 & ' &' A1@'+1 ' <- ' E<&@ & ' E<&@0' K' D>' D'0 1<@>0 & ' '-'<- ' & D1 ' @<B1' & ' @<B10 ?-A1 ' D1' #1'0<-B1' &=' D1' &K-' S 0 &=' D1' '0&-1 0 #1'-.' '-' <- ' &=' D1' 0<'A' E<&@0' '-' D1' '>1' &=' <- ' &=' D1' 0<'A' @< 1' C 1 1-01A' , '- .0 h & ' &' #1<' <-A' A1 1 >'-1' <@@ ><-8 -& ' 1<0&-0 ! 1@&-'10 10C<0010 <-A' & D1 ' ='1- 10 A&-1' '-' <- ' &=' D1' 0<'A' &?- '10 & ' '-' <- ' 3)' @<B1' & ' @<B10 ?-A1 ' D1' #1'0<-B1' &=' D1' &K-' &=' D1' 0<'A' 1<@>0 0C1B'='1A' '-' 1+1 ' &=' D1'0<'A' &>>'00'&-0 `& ' =& ' 1K1 0 #1'-.' <00'. -1A' &' 0? +1 ' <-A' &' B<?01' &' D1' 1C<' 1A' <-A' <>1-A1A F <@@0 < 0D10 (' " ' BD10 E? 1 0 <?01 0 <-A' 'A.10 <-A' & D1 ' "1=1?@ 0 '- <- ' < 0D' & ' < 0D10 '-' <- ' < ' &=' D'0 1<@>0 0C1B'='1A' '-' D1' 0<>1' &>>'00'&-0 <-A' 1 1 ' &=' D1>0 h <-A' <@@ D1 ' &>>'00'&-0 ><A1' # ' <C ' =' D1' 0<'A' @< 1' C 1 1-01A' , '- .0' &' <C ' 1 0&-' & ' 1 0&-0 #1=& 1' D1' ! &? D' " < ' &=' < BD' @<0 ' C<0 0 <-A' <@@ &B10010 " 1 1 >'-< '&-0 L1B? '&-0 -B'A1- 0 A>'-'B@10 <-A' & D1 ' ' B?>0 <-B10 C1 <'-'-.' &' D1' 0<>1' &>>'0j 0'&-0 <-A' 1+1 ' &=' D1>0 -& ' +&'A' 1C1<@1A' & ' <A-?@0 @1A 0D<@@ #1' &=' @'a1' ! & B1 ` ' ?1' <-A' 1-. D9/ P' <0 '=' D1' 0<>1' &>>'00'&-0 <-A' 1+1 ' &=' D1>' K1 1' ><A1' <-A' . <- 1A' # '<- ' , '- .'@<K=?@@ ' 1'. -'-.''-' D'0 1<@>0 <-A' &# <'-'-.' D1' &K-' &=' D1' 0<>1' # ' ?0 ' @ ;' `' &' D<' < 0C1B'<@ = ' #1' ><A1' =& ' 0?BD' 1 0&-0 D<' K1 1#1=& 1' D'0 '>1''-A<><.1A' =& ' D1' , '- . 3P

) 2O# ') $ % ' #.-e' ! / ' Z . ' ! ' 2 1 !) .' ;!' / !+&' !"! / ' 22&*-!/> N$ ') . !" '* %*) 22&*-!/' J " .' " ! 7 ! "2 ' V ++! 2' . ' !"2 !) ' .' .<2!! ' -/' / . .' .' ;!' "! &"! / ' -/' 1 ! - / ! / ' 22&*-!/') -/' ! B!^

.' !- !-#!' . ' &Z 1 ." ' ! "Z . -' D$"' L

M ' / 7 (2' ! !"<' 3 +!< 2' 1 / !' .' !' ."/' -#!++." ' ."/' "! k 20"!" ' 0 / * ! 2

. 1 1 &22&." Z' . ' !' 3! #!2' -/' . ' b .+' !+&' !"@ ' C # ' .'" . ' ! 7 !"] ' -/' +#' . !'" . 1 1 &22 . -)

=ʾ I8 / 2ʾ . ʾ 3 "+& 1!- "* !ʾ . 7 -ʾ . ʾ "! 7 2 ; 0 "@

-Aʾ <@0& ʾ D< ʾ <@@ʾ >< - - 1 ʾ &=ʾ A0ʾ <-Aʾ Aʾ-<-B10ʾ >< A1ʾ # ʾ ? D& ʾ ʾ &=ʾ <- ʾ < @ʾ<>1 - ʾ & ʾ < @ʾ<>1 - 0ʾ D&@A1 -ʾ ʾ-ʾ D1ʾ ʾ>1ʾ &=ʾ <- ʾ &=ʾ D1ʾ 0<ʾAʾ @< 1ʾ C 1 1-01Aʾ , ʾ- .0ʾ =& ʾ D1ʾ &-01 +< ʾ&-ʾ <-Aʾ a11C ʾ- .ʾ &=ʾ D1ʾ &K -ʾ ʾ D 1K0#? ʾ <-Aʾ &=ʾ D1ʾ .&&Aʾ C1<B1<#@1ʾ <-Aʾ H?ʾ1 ʾ ?@1ʾ<-Aʾ E&+1 - >1 - ʾ K ʾ D ʾ -ʾ D1ʾ 0<ʾAʾ &K -ʾ `#1 K ʾL Pʾ D1ʾ -D<#ʾ <- 0ʾ &=ʾ D1ʾ 0<> ʾ <-Aʾ 1+1 ʾ &=ʾ D1>ʾ 0D<@@ #1ʾ ʾ@ʾa1ʾ ! & B1ʾ Xʾ <-Aʾ ==1Aʾ <0ʾ =ʾ D1ʾ 0<>1ʾ A 0ʾ & ʾ A ʾ8 Aʾ-<-B10ʾ <CAʾ 1+1 ʾ &=ʾ D1>ʾ `K1 1ʾ/ʾPʾ >< A1ʾ ʾ-ʾ D1ʾ ʾ>1ʾ &=ʾ <- ʾ , ʾ- .ʾ & ʾ , ʾ- .0ʾ @<K=?@@ ʾ 1ʾ . -ʾ- .ʾ ʾ-ʾ D'0ʾ 1<@>ʾ <-Aʾ &# <ʾ-ʾ- .ʾ D1ʾ &K -ʾ &=ʾ D1ʾ 0<>1ʾ # ʾ ? ʾ ʾ @1

u ʾ & b" - ʾ . ʾ , ! ; ; . . ʾ 4@+ - /H . ʾ ! ʾ - . ʾ M&+ ; . S 1ʾ &-ʾ ! .0 - @ʾ . ʾ A . "E ʾ ; @ʾ M ʾ ! 1ʾ

-Aʾ <@0&ʾ F D1 1<0ʾ D1ʾ 0<ʾAʾ @< 1ʾ C 1 1-01Aʾ , ʾ- .ʾ 1 - ʾ D1ʾ 'L Dʾ @ ʾ -ʾ " 11Aʾ <-Aʾ -& ʾ &=ʾ ʾ . D ʾ , ʾ- .ʾ &=ʾ D'0ʾ 1<@>ʾ # ʾ D'0ʾ D< 1 ʾ ʾ-A1 - 1Aʾ ? - A1 ʾ D1ʾ 1<ʾ &=ʾ D1ʾ " ?BD ʾ &=ʾ <-B<0 1 ʾ 01<@1Aʾ #1< ʾ - .ʾ " < 1ʾ D1ʾ K1 - ʾ1 D ʾ " < ʾ &=ʾ ##@< BDʾ D1ʾ LL ʾ+ ʾ 1< ʾ &=ʾ D'0ʾ ?0? C1Aʾ 1ʾ . -ʾ A ʾA ʾ . ʾ+1ʾ <-Aʾ . <- ʾ <-Aʾ # ʾ D1ʾ 0<>1ʾ D< 1 ʾ B&-=ʾ >1Aʾ & F ʾ@@ʾ<>ʾ ##& ʾ &=ʾ @<-Aʾ D1ʾ <-& ʾ &=ʾ , ʾ@#&? -ʾ K ʾ D ʾ D1ʾ CC? 1-<-B10ʾ ʾ-ʾ =ʾ1ʾ &?- ʾ &=ʾ & aʾ K ʾ D ʾ <@@ʾ D1ʾ , -ʾ . D 0ʾ ! 110ʾ ʾ1K0ʾ &=ʾ ! <-aC@1A . 1ʾ ! <-BD ʾ 010ʾ ʾ#1 8ʾ ʾ10 ʾ &> >&A ʾ ʾ10ʾ &=ʾ 0ʾ <-Aʾ CC? 1-<-B10ʾ &ʾ D1ʾ 0<>1ʾ <-& ʾ ʾ-ʾ <- ʾ K ʾ 01ʾ #1@& - . ʾ- .ʾ & ʾ <CC1 <ʾ-ʾ-ʾ . ʾ &ʾ D<+1ʾ <-Aʾ &ʾ D&@Aʾ D1ʾ 0<-@1ʾ <-& ʾ K ʾ Dʾ D1ʾ & D1 ʾ 1j >ʾ 010ʾ &ʾ D1ʾ 0<ʾAʾ ##& ʾ <-Aʾ D'0ʾ ?BB100& 0ʾ =& ʾ 1+1 ʾ ʾ1@Aʾ - .ʾ D1 1=ʾ 1ʾ &ʾ D1ʾ 0<ʾAʾC 1 1-0 Aʾ , ʾ- .ʾ 1 - ʾ D1ʾ D1ʾ 'L Dʾ <DAʾ ʾ0ʾ 1ʾ 0ʾ " ?a10ʾ &=ʾ <-B<0 1 ʾ LL "@ʾ ʾ 1< @ ʾ KD1 1ʾ D1ʾ 0<ʾAʾ C 1 1-01Aʾ , ʾ- .ʾ -& ʾ <- ʾ &=ʾ ʾ0ʾ -B10 & 0ʾ " ?a10ʾ &=ʾ <-B<0 1 ʾ #1=& 1ʾ ` D1ʾ 0<>1 Pʾ ʾ>1ʾ S K1 1ʾ -1+1 ʾ <-0K1 1Aʾ &=ʾ D1ʾ 0<ʾAʾ 1< @ ʾ 00?10ʾ <-Aʾ &=ʾ 0ʾ &=ʾ D1ʾ 0<>1ʾ <-& ʾ ʾ#? ʾ &=ʾ L+ ʾ@ʾ ʾ # ʾ 1< ʾ &-@ ʾ D1ʾ 0<ʾAʾ LL "@ʾ ʾ &ʾ #1ʾ C<ʾAʾ < ʾ D1ʾ ! 1<0 0ʾ &=ʾ 1- 1B&0 ʾ <-Aʾ ʾ < ʾ-ʾ ʾ-ʾ F ʾ- 1 ʾ ʾ # ʾ 1+1 -ʾ & ʾ&-0ʾ =& ʾ <@@ʾ 01B?@< ʾ 1 +ʾB10ʾ ʾ K ʾ Dʾ @<?01ʾ &=ʾ " ʾ0 1=0ʾ =& ʾ " 1=<?@ ʾ &=ʾ D >1C ʾ &=ʾ D1ʾ 0<ʾAʾ 1- ʾ # ʾ <@=ʾ < 1< ʾ ʾ-ʾ <@@ʾ D1ʾ <-& 0ʾ <-A0ʾ <-Aʾ 1-1>1- 0ʾ &=ʾ D1ʾ 0<ʾAʾ ##& ʾ <CAʾ &-+1- ʾ K ʾ D ʾ -ʾ D1ʾ 0<>1ʾ &?- ʾ ʾ <0ʾ ʾ-ʾ D1ʾ 0<>1ʾ D< 1 ʾ D1 1&=ʾ ><A1ʾ >& 1ʾ C@<ʾ-@ ʾ <CC1< 1 Dʾ D< ʾ `<@@ʾ ʾPʾ D1ʾ 0<>1ʾ D< 1 ʾ E ʾ= ʾ <-Aʾ E <- ʾ 0D<@@ #1ʾ ? - ʾ@ D'0ʾ ʾ>1ʾ <-Aʾ D1 1<= 1 ʾ &ʾ D1ʾ 0<ʾAʾ ##& ʾ <-Aʾ &-+1- ʾ <-Aʾ &ʾ] D1ʾ ʾ ?BB100& 0ʾ &=ʾ @ʾa1ʾ ! & B1ʾ <-Aʾ ==1= ʾ <0ʾ D1 ʾ K1 1ʾ D1ʾ ! ʾ 0 ʾ " < ʾ &=ʾ < BDʾ @<0 ʾ <- ʾ ^ ʾ & ʾ A ʾ -<-B1ʾ ><A1ʾ ʾ-ʾ D'0ʾ C 101- ʾ < @ʾ<ʾ= 1 - ʾ -& K ʾ D0 <-Aʾ - .

k ,8 b" - ʾ . ʾ - ! - ʾ .ʾ # . . 2 ! ʾ ! & ʾ ; ; 2 ʾ C #

-Aʾ <@0& ʾ D< ʾ <@@ʾ E <- 0ʾ <-Aʾ 'B1-B10ʾ ><A1ʾ # ʾ 1 1 0ʾ < 1- Rʾ &=ʾ <- ʾ &=ʾ D1ʾ 0<ʾAʾ @< 1ʾ C 1 1-01Aʾ , ʾ- .0ʾ &ʾ <- ʾ ##& ʾ <-Aʾ & +1- ʾ & ʾ 'ʾ &ʾ <-Aʾ &-+1- ʾ & ʾ &ʾ <- ʾ & ʾ=ʾ1 ʾ 1 0&-ʾ & ʾ 1 0&-0ʾ &ʾ D<+1ʾ <-Aʾ ><a1ʾ # ʾ = 11ʾ @1A &-ʾ K ʾ D ʾ -ʾ D1>01@+10ʾ <ʾ `<- ʾ P ʾ +&ʾ A<-B1ʾ <-ʾ ##& ʾ & ʾ <ʾ 'ʾ & ʾ <-Aʾ &ʾ #1ʾ B&-+1- ʾ ?<@@ʾ C1 C1 ?<@@ʾ <-Aʾ 1@1 ʾ+1ʾ KD1 1ʾ #1=& 1ʾ D1 ʾ K1 1ʾ A< ʾ+1ʾ <-Aʾ B>&+1<#ʾ1ʾ 0D<@@ #1ʾ &=ʾ `@ʾa1ʾ 1 - . Dʾ/ʾPʾ ʾ ?1ʾ <-Aʾ ==1A ʾ <0ʾ ʾ=ʾ D1ʾ 0<>1ʾ E <- 0ʾ <-Aʾ 'B1-B10ʾ & ʾ <- ʾ &=ʾ D1>ʾ `K1 1ʾ/ʾPʾ ><A1ʾ # ʾ <- ʾ , ʾ- .ʾ @<K=?@@ ʾ 1ʾ . -ʾ- .ʾ ʾ-ʾ D'0ʾ 1<@>ʾ <-Aʾ &# <ʾ-ʾ- .ʾ D1ʾ &K -ʾ &=ʾ D1ʾ 0<>1ʾ # ʾ ?0 ʾ ʾ @1

M <& 6 ! #. *-&j -k #!2 -/ ! ! / 2 &-". ! /

-Aʾ <@0&ʾ D< ʾ <@@ʾ 1B& A0ʾ &=ʾ 1B& . - ʾ\ <-B10ʾ <-Aʾ &=ʾ " 11A0ʾ ʾ- &@@1Aʾ ʾ `D<Aʾ <-Aʾ ><A1ʾ 0Pʾ ʾ-ʾ <- ʾ &? ʾ & ʾ &? 0ʾ &=ʾ 1B& Aʾ & ʾ #1=& 1ʾ <- ʾ ?0 ʾB1ʾ &=ʾ 1B& Aʾ ʾ-ʾ D1ʾ ʾ>1ʾ &=ʾ D1ʾ 1ʾ . - 0ʾ &=ʾ <- ʾ &=ʾ D1ʾ 0<ʾAʾ @< 1ʾ C 1 1-01Aʾ , ʾ- .0ʾ 0D<@@ #1ʾ &=ʾ @ʾa1ʾ ! & B1ʾ ʾ ?1ʾ <-Aʾ ==1=@ʾ <0ʾ ʾ=ʾ D1ʾ 0<>1ʾ 1B& Aʾ `K1 1ʾ D<Aʾ & ʾ ><A1/ Pʾ ʾ-ʾ D1ʾ ʾ>1ʾ &=ʾ <- ʾ , ʾ- .ʾ @<K=?@@ ʾ 1ʾ . -ʾ- .ʾ ʾ-ʾ D'0ʾ 1<@>ʾ <-Aʾ &# <ʾ-ʾ- .ʾ D1ʾ &K -ʾ &=ʾ D1ʾ 0<>1ʾ # ʾ ?0 ʾ @18

ʾ 1 . -*!ʾ F< !" 0!ʾ ʾ /ʾ ; ! ! - N ʾ $ % Uʾ ! ʾ ! "@ ʾ" +ʾ 2 0 # ʾ . "#! **N$** *ʾ ʾR 8 Qʾ 1 /!ʾ /ʾ -/ʾ / .-ʾ (ʾ /ʾ ; ! !-ʾ 1 /!ʾ /ʾ .ʾ" / . -

ʾ <?L ʾ- ʾ H ʾ &? \ ʾ > 1\ ʾ <B 1 0ʾ I ʾ & A1 ʾ . - -B1\ ʾ =<ʾ \ ʾ Cʾ <?B & ʾ 1ʾ A<0B?-ʾ C@1>1- ʾ &?ʾ C@1>1- 1\ ʾ 1-?\ ʾ 1-ʾ @1ʾ 1>C0ʾ A<0B?-ʾ A1ʾ @1\ ʾ A ʾ \ ʾ -<A . <ʾ 0ʾ C 1-01\ ʾ &'0 9ʾ C ʾ @<ʾ B& - =+<B'& -ʾ 5R . < A1ʾ A1@ ʾ +'@@1ʾ A1ʾ D 1K10#1 ʾ9 I ʾ A1ʾ #& - 1ʾ C<ʾ0<#@1ʾ I ʾ H?ʾ1 1ʾ ?@1ʾ I ʾ . & , -< @1ʾ A1ʾ - \ ʾ @< Aʾ 1ʾ ʾ@@1 9ʾ - 1ʾ @10ʾ 1 - D<#ʾ 3?- 1\ ʾ A ʾ B1@=9 I ʾ BD?-ʾ A1?L 9ʾ 0&'1 - ʾ A1ʾ 01>##<##1ʾ =& B1ʾ , ?1ʾ I ʾ 1==1B 9 <ʾ B&>1ʾ @10ʾ >10>10ʾ <B \ ʾ &?ʾ & A1 - 0 - B1\ ʾ I ʾ BD?-ʾ A1?L ʾ =1?001 - ʾ =<ʾ \ ʾ 1 - ʾ 1>C0ʾ A<0B?-ʾ & ʾ &?ʾ &'0ʾ &<ʾD - 1 - ʾ 1ʾ . </ - \ ʾ 1 - ʾ B 0ʾ &'<@>1 9ʾ I ʾ Cʾ ?0 1ʾ ʾ @1ʾ &C 1ʾ . - / - \ ʾ @<ʾ & & 1ʾ A1@ >10>1

ʾ <?L ʾ- ʾ Cʾ @<ʾ &?ʾ @1ʾ Aʾ ʾ Ca1 - 01\ ʾ &" 1 - ʾ @1ʾ 0'0>1 9ʾ <Aʾ0ʾ 1 - ʾ = ʾ ʾ I ʾ - ʾ1 - ʾ Aʾ1ʾ A &ʾ ʾ &" Aʾ1ʾ B10ʾ &'<@>1 9ʾ Cʾ 0<ʾ B=ʾ 1ʾ 1DA1 - 1\ ʾ A10&?#\ ʾ @1ʾ 0B<@1ʾ A1@ ʾ " ?BD'1ʾ A?ʾ <-8ʾ B<0 =ʾ 1 - 01<@1\ 9ʾ C& <- ʾ A< 1ʾ @1ʾ =ʾ - '0>1ʾ &? ʾ Aʾ1ʾ < BD1ʾ <-ʾ Aʾ1ʾ 0&-ʾ 1ʾ . - 1ʾ ?0? C1m 9ʾ LL ʾ'' 9ʾ A&-<ʾ I ʾ . J?- <ʾ I ʾ Cʾ >10>1ʾ @<ʾ D< 1ʾ B&-=1 ><9ʾ <?ʾ F ʾ@@ʾ<>ʾ @<##1ʾ Aʾ1ʾ @&-A 9ʾ @1ʾ ><51ʾ Aʾ1ʾ , ʾ@#&? -1ʾ &+1ʾ @1\ ʾ <CC 1 - / - B10ʾ 1 - ʾ @1ʾ &?- 1ʾ " 1+ K a 9ʾ &+1ʾ &? \ ʾ Aʾ1 0ʾ D'+<@1 0 9ʾ +'1?1ʾ Aʾ1ʾ ! <-1'C@1 . . 9ʾ ! <?= BD'010 9ʾ ʾ# 110 9ʾ &>&A ʾ 11\ 9ʾ C=ʾ 10ʾ <-Aʾ <CC/ 1 - W - B1\ ʾ <ʾ >10>1ʾ @1ʾ <51ʾ 1 - ʾ <0B?-ʾ >< 1ʾ 1 . < AW?- \ ʾ &?ʾ <CC1 - A<- \ 9ʾ A<+&ʾ ʾ I ʾ 1 - ʾ ʾ >10>1ʾ @1ʾ < 1ʾ &+1ʾ @1\ ʾ <? 1\ ʾ C > ʾ001\ ʾ <@ Aʾ ʾ ##1ʾ I ʾ <0ʾ ! ʾ 0?BB100&? 0ʾ C ʾ &? \ ʾ &? 0 9ʾ 1 - A/?- ʾ 1 - ʾ <?ʾ >10>1ʾ @1ʾ 1-01ʾ &" 1 - =ʾ @1ʾ 0'0>1ʾ I ʾ 01\ ʾ D1ʾ 0ʾ " ?10ʾ A1ʾ ?- B<0 =ʾ LL ʾ ʾ ʾ <- - ?1@>1 - 9ʾ @&?ʾ A1ʾ Aʾ ʾ C 1 - 01ʾ &" -1ʾ - ?@@ʾ A1ʾ 01\ ʾ ?- B10 1\ ʾ " ?10ʾ A1ʾ <-B<0 =ʾ <+ - ʾ B1@@ʾ 1>C0ʾ - 1ʾ =1?0 ʾ ?- H10ʾ 10C& ʾ . - 1\ ʾ A1ʾ @1\ ʾ <- - ?1@L ʾ '00?1\ ʾ I ʾ C=ʾ \ ʾ A1ʾ >10>1ʾ @1ʾ <51ʾ =& 0H 9ʾ A1ʾ L+ ʾ ʾ ʾ Cʾ <-ʾ <CB0&?@1>1 - 9ʾ @1\ ʾ A ʾ \ ʾ LL ʾ ʾ ʾ ʾ <ʾ C<ʾ1 0ʾ <ʾ @1\ ʾ =10 10ʾ A1ʾ 1 - 1B&0 1ʾ I ʾ 1 ʾ - ʾ < -ʾ 1 - ʾ +1 - 1ʾ Cʾ &K1@0ʾ C& B ʾ &-0ʾ C ʾ &? \ ʾ +ʾ B1\ ʾ 01B?@1 0 9ʾ &+1ʾ @<ʾ B@<?01ʾ A1ʾ A1 1001ʾ C ʾ A1=<? 1ʾ A1@ Cʾ <ʾ1>1 - ʾ A?ʾ Aʾ ʾ 1 - ʾ Cʾ A1>ʾ" <-ʾ 1 - ʾ &? \ ʾ @1\ ʾ < 1\ ʾ R 10ʾ I ʾ 1? 1\ ʾ A?ʾ Aʾ ʾ ##1ʾ I ʾ &-+1 - ʾ A1ʾ - \ ʾ >10>1ʾ @1ʾ &?- 11 9ʾ B&>1ʾ 1 - ʾ >10 <1ʾ @<ʾ BD< 1ʾ 1 - ʾ =<ʾ ʾ C@?ʾ 0ʾ C@1ʾ - 1>1 - ʾ <CC ʾ1 ʾG ʾH ʾ >10>10ʾ @10ʾ =ʾ 1ʾ A&-1ʾ I ʾ . 0?-ʾ" 0&'1 - ʾ ?0H10ʾ <ʾ B10ʾ 1>C0ʾ I ʾ A1B ʾ 1 - <+W - ʾ <@ A= \ ʾ ##1ʾ I ʾ &-+1 - ʾ I ʾ <ʾ @&? ʾ ?BB100&? 0ʾ A1ʾ 01>#@<#@1ʾ =& B1ʾ I ʾ 1==1B ʾ B&>1ʾ @10ʾ =? 1 - ʾ @1ʾ C ʾ ʾ ʾ &? ʾ A1ʾ < BD1ʾ A< 1ʾ - 1ʾ C<001\ ʾ G <0B?-ʾ <B ʾ &?ʾ & A1 - 3 - B1ʾ 1 - ʾ B10 ʾ C01 - ʾ C< @18ʾ >1 - ʾ =<ʾ ʾ - ʾ1 - ʾ &#0 <-

ʾ <?L "ʾ H ʾ &? \ ʾ . ? - 10ʾ I ʾ @ʾB1 - B10 9ʾ =<ʾ \ ʾ Cʾ <0B?- ʾ 10ʾ C< 1 - 1\ ʾ A<0B?-ʾ A1ʾ @1\ ʾ A ʾ \ ʾ - <A . <ʾ 0ʾ C 1 - 01\ ʾ &'0 9ʾ <@ <0B?-ʾ ##1ʾ I ʾ &-+1 - 9ʾ &?ʾ '&? ʾ I ʾ &-+1 - 9ʾ &?ʾ <@ <0B?-ʾ <? 1ʾ C0&-1ʾ &?ʾ C0&-1\ 9ʾ A<+&ʾ 1ʾ I ʾ =<ʾ 1ʾ Cʾ = <-Bʾ B@1B1 '&-ʾ AH ʾ-0ʾ 0& ʾ >10>10ʾ <@ BD?-ʾ &'A<?-B1 9ʾ ##1ʾ &?ʾ C ʾ&? 9ʾ I ʾ A10 1ʾ &-+1 - ?1 'ʾ@ CC1 ?<@ʾ I ʾ 1@1B ʾ+1 9ʾ @&?ʾ C<+ ʾ ʾ ʾ@0ʾ =? 1 - ʾ A< ʾ=0ʾ I ʾ 1>?<#@1] 9ʾ 0&'1 - ʾ Aʾ1ʾ &?ʾ <? ʾ1@ =& B1ʾ , ?1ʾ I ʾ 1==1B 1 9ʾ 0ʾB&>1ʾ >10>1\ ʾ @1\ ʾ . ?- 10ʾ I ʾ @ʾB1 - B1\ ʾ &?ʾ <0B?-ʾ A1?L ʾ =1?001 - ʾ =<ʾ \ ʾ &?ʾ .0? 1\ ʾ Cʾ <0B?-ʾ &" @&'<@>1 - ʾ 1ʾ . - - ʾ 1 - ʾ B10 ʾ &'<@>1 9ʾ I ʾ Cʾ ?0 1ʾ ʾ @1ʾ &C 1ʾ . - - ʾ @<ʾ & &-1ʾ A1@ >10>1

' 7\f

' <?L'- ' H' &? \' . ?- 1\' I ' @'B1-B10 =1' \' C' <0B?-' A1' @1\' A' \' -<A.<' 0' ? ! !' &'0' <@ <01?-1' C0&<1' &?' C0&-10 C ' =<' 1' <+&' ' 1-B&01 ' I ' 1- & 1 ' <0B?-' < a1' &?' < a1 F < 1' -' &?' = <-B' D<B1 &?' A1-#< 1@@1 ' 1< -1@@1 ' ><0B&@@1 ' &?' A1' =<' 1' <0=?-' &? 1 D<0 1e &? =& =10 1' A1' -0' B10 ' &'<@>1 0&'1- ' A1' 01>#@<#@1' =& B1' @?1' I ' 1=@1= 1' 0" B&>1' @1\' A' \' .0?- 10' I ' @'B1-B10' =1?001- ' =<' \' C' <RB?-' &" @&'<@>1- ' 1' . -#' ' 1-' B10 ' &'<@>1 I ' C' ?R 1' ' @1' &C 1' . -3- ' @<' & &-1' A1@ >1 >1 ? +1?' &? \' =#' \' H' B10 ' C01- ' <Q@1' -1L 1-A1' C<0' -1' 0&' ' C ?A'B'< ' <' 10-&#@1' D<? 1' I ' C?'00 ?- ' '-8' B1001' 1B'@@1')?BD10' " 1 K a 11 1' <?' -=1' A' ' 0& <' . -1' _ ' @1' & 9' A<0B?-0' . # > 10' &?' .0?- 1' A1' C' @1' & ' =<' \' C' 01\' 10' C< 1- 1\' <' 1@ 1 A1+0- ' @1' C ' ' &? ' A1' B10 ' C01- ' C@1>1- 9' C' H1B&-H' C ?-1' &?' -&?-1\' 1@@1' 0 ' ' -&>1\' 1-' >10>10' @10' 1R' C< 1- 10' 1'-0' H' 'B1@ 10' 10' C< << \9' I ' BD10B >' .3?- ' 1C' 'B1?L' B&C A.8' -?\9' &'1- ' A1' &? ' <??1@ =& B1' I ' 1==1 ' B&>1' @10' =? 1- ' <+/- ' @1' C ' ' &? ' A1' B10 ' =201- ' C@1>1- 9 `B10 ' <Q ' &?' <0B?-' <? 1' 1-' 110 ' C/ 1- 'C< @1>1' ' ' & ' &?' < 1' 03' -'1- ' &#0 <-

? +1?' &? 10=&' \' H' B10 ' <^1' -1' -?@" < 'B@1' A'B1@" -1L <K'1' C<0' <i' <0B?-0' R 10' 1- 10' C&00100'&-0' 1<D18' ' 1>1- \' &?' <? 1 ' BD&010 H?1@L' @1' & ' A&' ' <+&' ' 1-' <0B?-' >< 1' C' =& B1' A<0B?-' <B 1' A< 1'-A 1' A<0B?-1' C0&-1' &?' C0&-1\' & ' 1-' B10 ' C@01- ' C@1>1-

? +1?' <?L" d -? 1' C0 -1' &?' C0B>10' < 1'- ' &?' < 1'- " 1-' B10 ' C01- ' C@1>1- 9 &?' 10 <- ' &?' 10 < ' \' A1D& 0' &+1' @1\' 1-C1- 10' A?' & 9' C 1' . -1' &?' C 1' .<1- ' <0B?-' #1-1='B1' &?' <+0- <.1' C' B10 ' <B 9 -1' -?@@ <? 1' <B ' ='" ' & ' <='<' 1' 1-' @1' A' ' C@1>1-

=>' H' B&>1' C@?0&? 0' A1@ =&@<@@ @'1.1' C1&C@1' A?' &'9 0'#'1-' 10C?1@L' B&>1' 1>C& 1@L9' C' @10' 1-& A'-1\' I ' A10@ >10? <#@1\' 1-A' 1>1- \' I ' C01- 1>1 '\9' 0'#'1-' A1' =1@&-'1' 10C<001\' I ' &==1-01\' B&>1' A<? 10' BD& 109' H?1?L' A1' &-.' 1>C0' &?- ' 10 1' C I 1\' 1?1\' I ' ?01\' A1'-\' @10' &?- 11\' A1' B10 1' &'<@>19' I ' C '01\' A1+ ' '0B&?- 1\' C ' @1' 1>C0' 10 1<- \' 10' &?- 11\' 01, <@>1- 9' @&? 0' i ? D+@0B&?- 1\' @&? 0' @1 a10' <' ' I ' I ' &? ' , &@8' 0 1\9' <@ @&? ' &? -10' &?' <K1A<'10' 1- \' A1+> ' 1?L' 01C<@>1- ' 1-' @10' &?- 11\9' @10' H?1@L' 1?A' 1>1- R' 5' 1- 1>1- \' 0&?-=' 0&+1- =&' \' <=1 '1\' C' ? &/0' -? ' B&-B'1-B1' 1'<- \9' -1' = <-B' 1=' ' I ' C1 ' ' A10' #'1-0 ' 1' 0&?+1- ' =&' \' C' +#' 1\' >1-'<@L' I ' #<'@@''0' A1' @1\' A' \' '0B&-=' 1m' I @&? 0 ? D+'0B&?" @1\9' C' H?1@L' 1>=' 1>>' \' I ' C01- 1>1- \' @1' A' ' =&'<@@ @'1.1' C1&C@19' C' @1\' A' \' '0B&?- 1\' ? D+'0B&?- 1\' @&? ' @1 a10' <'@@'=0' I ' @&? ' =' -'0 10 0&- ' <=m< D1\' > 10 ? \' C' @&? ' B& C0' I ' >'01\' 1-' C '0&-9' <?' .J?-A' A? 1001' A1' @1? 0' C0&-10' 1 ' B1?L' '00'- ' 10 1<- \' 1-' C '0&-' C' @1 ' A' \' '0B&?- 1\9' ? Dj +'0B&?- 1\' @1 a10' <' '=0' ' ' @&? 0' '-'0 10 @1' A' ' =&'<@)' @'1.1' C1&C@1' 1-0" 1-' C '0&-' B&-0 1' . -&- ' I ' =&?- ' B1?L' A1' & 1 ' &+1H0' 1?L' .0?-A' ='-10' I ' <?-0&-0 I ' < L" A1' B1?L' @1+1- ' . &'A\' @'-10' I ' < ><1- 1\' C? ' @10' A' \' 1-A' 1>1- \' I ' C01- 1>1- \9' 1-' .3? A' C ?A'B1' I ' <-'1- 10>1- ' A?' @'1.1' C1&C@1' <+0- A' G' C 10' H?1@L' ='-10' <?-0&-0' I ' < B'<>1- =9' 1- ' C' @1\' A' \' '0B&?- 1\

K - !"+&-!/' .-' !' 6.++

-A' <@0&' D< ' <@@ E <- 0' <-A' 'B1-B10' ><A1' # ' <- ' &=' D1' 0<'A' @< 1' C 1 1-01A' , '- .0' &' <- ' 1 0&-' & ' 1 ' 0&-09' &' ><a19' D<+19' '-B@&019' <-A' 1- & ' <- ' < a' & ' < a09' F < 1-' & ' = 11' D<019' & ' &' 1>#< @19' &' B<>1@9' &' Q><0 &@9'P' & ' &' ><a1' <- ' &K1 9' <0 @1' & ' ! & j 1009' +' D'-' D'0' 1<@>9' 0D<@@' #1' &=' @'a1' ! & B19' ' ?19' <-A' ==1B 9' <0' '=' D1' 0<'A' E <- 0' <-A' 'B1-B10' ^K1 1'0P' ><A1' # ' <- ' , '- .' @<K=?@@ ' 1' . -'- .' '-' D'0' 1<@>9' <-A' &# <'-'-.' D1' &K -' &=' D1' 0<>1'# ' ?0 ' ' @1

&+'A1A' <@K< 0' D< ' D'0' B' AC' -& '1L 1-A' -& ' #'1' C 1 ?A'B'<@ &' D1' '.D ' &#@1' '.D' <-A' '.D ' '-' B100' 'B'@ ' "?BD100' &=' & a9' & D1 ' ?- &' C? ' 0<'A' C+1 1' . -' C A' D1' , '- .9' C=' <- 'E <- 0' & ' E <- ' ><A1' &' D1 ' # ' =D1' , '- .9' # ' D'0' 1 1 0' < 1- 0' #1=& 1' D1' ! ' 0 ' " < ' &=' D'0' < @'<>1- 9 # ' FD< 0&1+1 ' <>1' & ' <>10' 0D1' D<@@ #1' B<@@0A' '-' D1' 0<>1' 1 1 0' < 1- 0<@ #?' D< ' D1' 0<>1' 1 1 0' < 1- 09<-A' 1+1 ' E <- ' D1 1'-' B&- <'-1A9' #1' &=' ='#a1'/P' ! & B1' <-A' ==1B 9' <0' D1 ' K1 1' #1=& 1' D1' ! ' 0 ' " < ' &=' D'0' < @'<>1- G' D'0' B 9' & ' <D ' & D1 9' ><A1' & ' &' #1' ><A1' '-' =&'0' C 18' 0> ' < @'<>1- 9' -& K' D0 <-A' -.

&+'A1A' <@K< 0' D< ' D'0' B 9' -& ' <- ' = 'B@1' &=' D1' 0<>19' A&' -& ' 1L 1='A' &' <- ' <-A09' 1-1>1- 09' &00100'&-09' 1 1A' <>1- 09' & ' & D1 ' D'- .09' KD'BD' D1' , '- .' &?. D ' '-' <- ' K'01' &' F 1' # ' ! & B1' &=' <- ' B ' &=' <'-A1 ' &=' <- ' 1 0&-' & ' 1 0&-0' ><A1' '-' D'0' C 18' 0> ' < @'<>1-

&+'A1A' <@0&9' D< ' -&' 1 0&-' & ' 1 0&-0' < <'- 1A' '-' D'0' C 101- ' < @'<>1- 9' & ' #1'-.' ?' K' D' D1' , '- ./0' -1>'10' <a1' <- ' 1-1=' ' & ' A+<- <.1' # ' D'0' B 9' -& ' 8<- ' & D1 ' B ' ><A1' & ' &' #1' ><A1' '-' D1' 0<'A' < @'<>1-

9' F D1 1<0' ><- ' &=' D1' , '- ./0' => D=&@' @'1.1' 1&C@19' <08KA@ CD ' ?<@<0' 1>C&)' # ' =D1' '-& A'-< 1' <-A' '-='-' 1' -A'B >1- 0' <-A' 101- >1- 09' <0' K1@@' &=' 1@&- ' 10C<0010' <-A' ==1-B10' <0' &=' & D1 ' D'- .09' $ K@ABD' &=' &-.' '>1' D<+1' #11-Z '0)' D<A' <-A' ?01A' +' # ?' D1' &?- '10' &=' D'0' 1<D-9' <-A' <a1-' #1=& 1' D1 '@=1' =& ' D1' '>1' #1' -.' '-' D1' &?- '10' 01+1 <@@ 9' D1' ' -A1 8' D1 f 9' D ' @1 a09' <'@'==09' <-A' #@??0 1 09' < ' D1' ' & >1& ' <K' " < 09' DA@@1 -' #1=& 1' D1-+' 01+1 <@@ ' '-' D1' &?- '109' FD'BD' -A'B >1- 0' <-A' 101- >1- 0' #1' &= 1- ' >10' <@ >1A' # ' ? & 0' D<+' -.' -&' &-0B'1-B19' -& ' <- ' ! 11D&@A9' <-A' @' @1' E&&A09' <-A' &= 1-' # ' =@D1' 0<'A' D1 @='09' 1-'<@ 1 +<- 09' <-A' <'@'==09/P' <-A' D1' -A1 8' D1 '==09' # ' KD'BD' -A'B >1- 0' <-A' 101- >1- 0' D1' 0<'A' @<K=?@ @'1.1' 1&C@1' #1' < <BD1A9' < 10 1A' # ' D1' ' &T='10' <-A' C? ' '-' '0&-9' $ ' 0<'A' D1 '==09' =' -A1 ' D1 '==09' D1' ' @1 a09' <'@'==0' <-A' '-'0 1 0' &' D1' . 1<' ` &00' &=' D1' ' E&&A0/P' 2 <-A' D1 ' 0&' #1' -.' '-' '0&-9' # ' D1' 0<'A D1 h 9' -A1 ' D1 '==19' D1' ' 1 a09' <D'==09' <-A' D1' ' '-'0 1 09' `< 1' B&-0 <'-1A' &' ><a1' . '1+&?0/P' ! '-10' <-A' <-0&>09' <-A' @1+ ' &=' D1>' . 1<' ! '-10' <-A' >1 B'<>1- 0' =& ' D1' <'A' -A'=D-1- 0' <-A' 101- >1- 09' '-' . 1<' '-A <-B1' <-A' ? 1 ' -A&' -.' &=' D1' 0<'A' @'1.1' 1&C@1' <= 1 ' KD'BD' ! '-10' <-0&>09' <-A' >1 B'<>1- 0' 0&' ` < 1AO' <-A' @1+'1A' # ' D1' 0<'A

K 6*
&#! -#12' .' &-#+.2!'3 !"E2 ' C#' . '" .' 1 E!' 2 +!2 '

' 55
3". ' &2.' ." &#&+@ ' 0# !22' . ' A ."E . !"' .' !' M&-*

M 64
3 . ' &2.' ." 0>1 ' ." ! & ! /' ; @' &- / ! "' &-' &2' 3 "+& 1 !-

' 6%'
3 !"2 .-2' 2.' &- ! / ' !%#! ! ! /' &d%8- &2 J+

-@<K=?@ -A'!= >1- 0 &-' !"& 2(.0"-2' .0-/' ; @' 1 ! .-' K-0

D1 '==0 -A1 ' D1 '==0 @1 a0 <'@'==0 <-A' D1' ' 'j -'0 1 0 D1' 1&C@1' <=& 10<'A' #1' '-@< .1A' &? ' &=' '0&-
<-A' D1' 0<'A' -A' >1- 0' <-A' 101- >1- 0' #1' 0)' '>#18
\ @1A' <-A' K' DA <K-6 ? ' 0<'A' & A' D1' , '-.' B&-0'j
A1 '-.' D1' 1>'010 # ' D1' A+'B1' <-A' 001- ' &=' D1'
& A0' C' ' ?<@ <-A' 1'CCC <@ <-A' <' D1' 1H?10 ' &=' D1'
&> >&-0' '-' D'0' C 101- ' < @'<>1- ' <001># 1A ' <-A' # '
D1' ? D& ' ' &=' D1' 0<>1 D< D' & A<'-1A' <-A' 0 <# 0D1A
D< ')' <@@8><--1 ' -A' I -=1- 0' <-A' 101- >1- 0' D< '
0D<@@ #1' <a1-' D1 1<= 1 #1=& 1' <- ' &=' D'0' 0<'A' D1 '==0'
&=' D'0' &?- '10' =& ' D1' '>1' #1'-.' D1' ' -A1 ' D1j
'==0 @1 a0 <'@' 0' & ' '-'0 1 0 <' D1' ' &? -0 & '
<K' "< 0' #1=& 1' >1- '&-1A D1 ' -& ' <- ' &=' D1>'
0D<@@ D<+1' &K1 ' &=' ? D& ' ' &' < 10 <BD ' C? '
'-' '0&- & ' &' @1+ '<- ' !'-10' & ' >1 B'<>1- 0' &=' <- '
1 0 -' & ' 1 0&-0' 0&' '-A' 1A' & ' C 101- 1A # ' 1<0&-'
& ' B&@&? ' &=' <- ' 0?BD' -A' >1>' & ' 101- >1- ' <a1-'
``&' &' #1' <a1-'0P' #1=& 1' D1>' & ' <- ' &=' D1>' -H ' &'
><a1' & ' <a1' &=' <- ' 0?BD' 1 0&-' & ' 1 0&-0' 0&' '-A'=@1A'
& ' C 101- 1A <- ' !'-1' & ' <-0&>6 #? ' D<' D1' 0<'A'
D1 '==0 D1?;' -A1 ' D1 '==0 @1 a0 & ' <'@'==0 <-A'
D1' ' '-'0 1 0 0D<@@ # '-.' C 101- <-A' A1@'+1 ' <@@
0?BD' -A' >1- 0' <-A' C 101- >1- 0 <a1-' #1=& 1' D1>'
& ' <- ' &=' D1>' '-' D1' ' &? -0' & ' <K' "< 0' <=& 10<'A
&' D1' ?0 'B10' &=' 1<B1 <' D1' ' -1L ' 100'&-' &=' D1'
1<B1' D<' 0D<@@ #1' D&@A1-' '-' D1' &?- ' ' &?- '10'
KD1 1' 0?BD' -A' I >1- 0' & ' 101- >1- 0' 0D<@@ #1' <a1-
#1=& 1' D1' 0<'A' ?0 'B10' &=' 0?BD' &?- ' C ' &?- '10' =& '
D1' '>1' #1'-.' -A' '=' <- ' &=' D1' 0<'A' D1 '==0 -A1 '
D1 '==0 @1 a0 <'@'==0 <-A' D1' ' '-'0 1 0 A& -& '
'-.' A1@'+1 <-A' C 101- ' <@@ 0?BD' -A'= >1- 0' & ' 1j
01- >1- 0 0(' <a1-' #1=& 1' D1>' <-A' 1+1 ' &=' D1>' '-'
D1' ' &? -0' & ' <K' "< 0' <0' #1=& 1' '0 1B' 1A <' 0?BD'
100'&-0' &=' D1' 1<B1 #1=& 1' D1' 0<'A' ?0 'B10' &=' 1<B1
D<' D1-' <@@ 0?BD' D1 '==0 -A1 ' D1 '==0 @1 a0 <'j
@'==0 <-A' D1' ' '-'0 1 0 <-A' 1+1 ' &=' D1>' D<' 0C' 0D<@@
=&'@ `V /P' # '-.'-.' A1@'+1 '-.' <-A' C 101- '-.' &=' 0?BD'
-A'A>1- 0' <-A' 101- >1- 0 0D<@@ =& =1' ' &' D1' , '-.'
! & ' &?-A0' <' 1+1 ' '>1' D<' D1' & ' 0> ' &=' D1>'
A& D' D1' B&- < ;' -A' D<' D1' 0<'A' ?0 'B10' &=' 1<B1'
0D<@@ D<+1' &K1 ' <-A' ? D& ' ' &' <K< A' &B100' ?C&-'
<@@ 0?BD' -A'= >1- 0' <-A' 101- >1- 0 <0' D1' <K' A& D'
1H?' 1 <-A' '-' @'a1' ! & >' <0' '=' D1' 0<'A' -A' >1- '
<-A' 101- >1- 0' K1 1' <a1-' #1=& 1' D1' 0<'A' ?0 'B10' &='
1<B1' '-' D1' 0<'A' &?- ' & ' &?- '10 <-A' <@0& &' < '
<'.-' <-A' A1@'+1 ' <@@ 0?BD' 1 0C-' & ' 1 0&-0 0&' '-A'=@1A'
`<-A'(' C 101- 1A' #1=& 1' D1' 0<'A' D1 '==0 -A1 ' D1 '==0
D1' ' @1 a0 <'@'==0 <-A' D1' ' '-'0 1 0 & ' <- ' =' D1>'
'-' D1' ' 0<'A' &? -0' C 'C<K' "< 0' <-A' <@@ 0?A" 1 0&-0'
& ' 1 0&-' KD'BD' #1' '-A' ^1A' & ' C 101- 1A' &=' 10C<00
`0D<@@ ><a1U ' 0?BD' ! '-1' <0' 0D<@@ 011>' @<K=?@ # ' D1' '
"'0B 1 '&-0'@<-A' D1' 0 1< 0' &=' D1' 0<'A' ! '-10' <-A' >1 j
B'<>1- 0' 0D<@@ #1' 1- &@@1A <-A' # ' -A1- ? 1' #1' A1@'+1 1A'
&' D1' 0<'A' D1 '==0 -A1 ' D1 '==0 @1 a0 <'@'==0 & '
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D<' K<0' D1 '==' `'-' D1' 0<'A' &?- '10' & ' &?- ' ' ' < '
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0 C? @& -1A' 1 #' 0' &=' 0' &' = ' = &'
V &' > 1'K' D' D1 >'<-A' 1+1 '&=' D1 >' ' 5
' '-' 1+1 ' D' 1

? D+'0B&?- 1\' @1 a10' <'@@'=1' I ' @&? ' '-' 1\' '00'- '
=1' \' 1?1\' I ' @1+1\' @1' C1&C@1' <+D' A' ' 10 ' 1-@< .1' D& 0'
A1' C '0&-' I ' @1\' A' R' 1-A' 1>1- \' I ' C 01- 1>1- \' 0&- '
<@&'. -1\' 1-'#10'@10' I ' 0?0 1' \ 1' A' ' &, < -' ?' @1'
&" @10' C > '001\' B&-0'A1 1\' C' @<A+'0)' <001- ' A10' ! 0'
10C?1@L' I ' 1>C& 1@L' I ' <' @<' 1H?10 ' A1\' &10' 1-' @<'
A' ' C< =&>1C ' <001>=<@1\' I ' C' <?=@& ' 1' A'B1 ' <A' & 8'
A1'. -1' 10 <#@'1' H' &? \' ><51\' A1-A' 1>C- 1\' I '
C01- 1>1- \' H?1@L' &- ' C '01\' 1-' <C 10' A +JD ' <0B?-'
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@&' ? D+'0B&?- \' @1 a10' '@@'=' &?' '-'0 10' <' @&? '
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A1' B1?L' <' ' C&<' ' -1' <?^& ' 1' A< 10 1 ' < <BD1 ' &?'
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C' 10&-' &?' B&@&? ' A<0B?-' '1@ 1-A' 1>1- 'C?' C@01- 1>1- '
A1+/-' 1?L' &?' <0C?-' A1?L' C '0 6 1' A1' =<' 1' C?'
C 1-A 1' A<0B?-' '1@ C0&-1' &?' C0&-10' '00'- ' 1-A' 1\' H?'
C01- 1\' <0B?-' ='-1' ? <?-0&>1 >10' H' @10' =1B&?- 10'
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C '01\' A1+W- ' 1?L' &?' <0B?-' A1?L' 1-' @&? ' & -10' &?'
@<K1A<'10' A10?'0' -& >1' <>10-1- ' =001- 1- ' I ' A1@'+F '
<' @10' ?0 'B1\' A?' C1<L' <?' @1? ' C0BD1'-' B100'&-' A1' C1<L'
H' , <' 1-?\' 1-' @1' &?- 1' &?' &?- 11\' @&?' <? '1@L'
1-A' 1>1- \' I ' C201- 1>1- \' , &-' C '01\' A1+W- ' @1\'
A' \' ?0 'B10' A<? '1' &?- 1' &?' &?- 11\' C ' X1' 1>C'
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@1 a10' <'@@'=' I ' @&? ' '-'0 10' -<>10-1' A1@' 1' I '
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<KA<'10' B&>1' A1+ - ' 10 ' 1B' 11' <0' '1@L' B100'&-0' A1'
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'-'0 10' I ' B='?-' A1?L' H" &?' H?1?L' '00'- ' =<?@A <' &?'
=1?@A &- ' A<>1' . =-B1' A1@' <-B1' I ' C01- <B'&-' A1' '1?L'
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&" L@ '@' ' <' <?-' A1' =&' \' H' B1?L' &?' <0B?-' A1?L' =1 '
&- ' &?' =1 <' @1' B&- =' '1' ;' ' H' @10' A' \' ?0 'B10' A1'
C1<0' <'1- ' C&<' ' I ' <?=@& ' 1' A<.< A1 ' CB1001' 0? ' &? \'
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<'-1 ' I ' A1@'+1 ' &? \' '1@L' C0&-10' &?' C0&-1' '00'- '
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<0B?-' A1?L' 1-' @&? ' A' \' &? -10' &?' <K1A<'10' 1='
&? \' '1@L' C0&-10' &?' C0&-1' H' 0&?- ' &?' 10 ' 1-A' 1\' &?'
C01- 1\' 1-A' 1' &?' C01- 1' A1' 10C<0' A1' =<' 1' & 1H'
1?L' I ' B='?-' A1?L' '1' ='-1' B&>1' @&'<@>1- ' C' @1? ' A'0'
1B'&-0' 01>#@1 <' 1 ' @10' 10 1 1\' A1' @1\' A' \' ='-10'
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A1@', 1\' <' @1\' A' \' '0B&?- \' ? D+'0B&?- \' @1 a10'
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' 0" <0B?-' A10 A' \' '0B&?- 1\ @&? ' ? D+'0B&?- \' @1 a10 <'@@'=1 &?' '-'0 1\ =<B1 < 10 1 ' < <BD1 ' &?' >1 1 1-' C '0&- &?' =<B1 =1' 1 &?' C 1-A 1 <0B?-' ='-1 <?-0&>' &?' @1+1 ' <='B'<>1- A<0B?-1 C0&-1 &?' C0&-10 1-0" 1-A' 1\' &?' C001- 1\ C' 1<0&-' &?' B&@&? ' A<0B?-' A1@ 1-A' 1>1- ' &?' C201- 1>1- A1+W- ' @? ' < @10 & -10 &?' <KA<'10 A10?'0 1B@ 1\ C '01 <+ - ' H'@0 &?- ' CB1001 A1 @10 A' \' ?0 'B1\' A1 C1<L &?' 10 1 1\' A1@'+01\' D& 0 A1 @10 A' \' 1-A' 1>1- \' &?' C01- 1>1- \' '00'- ' <>1'. -1R A1@' , 1\' I ' C01- 1\' <0 1?L H <A&-H10 @1\' A' \' '0B&?- 1\' H" '00'- ' =&?- ' '=& =1B1- ' '@' ' ?-1 >&' 1 A1- ' A10 1 1>' C@&'1\' < @10 1LC1-01\' A? @&0 1 ' A1 & I ' @<? 1 >&' 1 <@ C< '1 &?' C< '10 H &?' H?1@L' 10 ' &?' 01- ' 1-A<?'<.1\' 1 ' <' ' &?' ?1- ' 1- ' <BB'&-' A1 A1 1'<@ B&.' @1 ' I '01>##@<#@1 CB10 1 B&>1 10 ' 1-' <BB'&-' A1 A1 1'<@ B&1 @1 ' H @1 A1=1= A<?- ' &?' A1=1-A ?- \' 1-' AD@L' 0? 10 &?' <BB'&-0 A1 A1 1'-1'0&' '&?'0 '1- '100&'-1\' -1'. <.1' '.<. - '@1 '@1 ' 0'@ ' 1?L' &?' <0B?-' A1?L 1-B&- 1 H" &?' H?1?L' @<' A' 1' <AA&-' C '01 &== 1' &?' >1 1 &@= 1- ' & ' >1 1- ' <0B?-' C 1BB'&-' 1-' 1 C1A'>1- ' &?' 1 < A<-B1 A1 @10 A' \' 0?1 1\' &?' <BB'&-0 H'@ -1 0C' ' <' @? ' <@@&?1 ' ? +1?' &? \' =&' \' H' B10 ' C01- ' & AA. -[-B1 -1L 1-A1 C<0 -1-1 0&' ' C ?A'B'< ' 1-' 0B?-' >< 1 <@10 '0B& - 1m V A1@ ' 1 A1 &?-A 1\' & 1 10 1<- \ &?' H1-<C 10 <0B?-' =&' \' M &- HW?- ' <0 <0B?-0 1-A' 1>1- 1\' &?' C01- 18 >1- \' A10 1 C '01\' A1'-0 @<' A' 1 ' C ? +1?' D?L" H' B10 ' & A1-J-B1 -1L 1-A1 C<0 -1-1 0&' ' C ?A'B'<@@ <@ <0B?-' C0&-1 &?' C0&C10 H' <A &?' &?- . 'C 0 A<0B?-0 ='-10 &?' A10 <0B?-0 <'5B'<>1- 1\ C' <0B?-0 =10 C< 1- 1\' -=1 A' ' &, <'. -1 = ' @1 &" &?' A<0B?-' A1 010 C.1-'8 &? 0 &?' A1BH00&- 0 C& <- \' A< 1 A1+ '@ ' @1 A'0>1 &? ' A1 "1B1-<#= C0HD1'-' <C0 A B&>1-B1>1- ' A1 B10 ' C@1>1- ' H B10 ' & A1'. -3-B1 -1L 1-A1 C<0 -1-1 0&' ' @ ?A'B'<@@ <@ <01?' 1 C0&-H &?' C0&-10 <'<C ' &?' <'<- \' <0B?-0 @'= '10 &?' = <?-BD'01\' C' <0B?-0 A10 A' \' 10 C< 1- 10 &?' 1-'<? 1 >< ' C 0B 'CB'&- ' H B10 ' &=A1'. - -B1'0&' ' 1-'0<=& B1' I ' B&&<1-B1A<CC 1-A 1'1==1B ' <' @< H?< <- '0>1 & 'CA1D1'? <C 10 @1 + J ' &? ' AR < ' C0BD1'-' <C 10 @1 B&>1-B1>1- ' A1 B10 ' C01- ' C< @1>1- @1 H?1@ 0 ' 1 & ' @1 A' 'C< @1>1- ' ?0 A'00 D'1

-A' '=' <- ' &=' D1 0<'A D1 '==0 D1' ' -A1 ' D1 '==0 @1 a0 <'@'==0 & ' '-'0 1 0 A& < 10 < <BD & ' C? ' '-' '0&- `& ' B<?01' <- ' !'-1' & ' <-0&>' &' #1 <a1- W P' & ' @1+ ' <- ' >1 B'<>1- ' &=' <- ' 1 0&-' & ' 1 0& 0&' '-A'= 1A' & ' C 101- 1A # ' 1<0&-' & ' B&j @&? ' &=' <- ' 0?BD -A'B >1- ' & ' 101- >1- 0 0&' # &?.D A1@'+1 1A <-A' C 101- 1A' &' D1> D<' D1-' D1' 0<'A D1 '==0 KD'BD' 0&' A& 0D<@@ =& =1' ' <-' ?-A 1A' &?-A0 D1' &-1' <@=' D1 1A=' &' #1' 1>C@& 1A' &' D1' LC1-B10 &=' D1' , '-./0 &?01 <-A' D1' & D1 ' <@=' &' D1' < ' & ' < '10 KD'BD' #1' & ' '0 '-A<><.1A <-A' D1' & ' D1 ' 0D<@@ D<+1 D1 1=& 1' <-' B '&-' &=' " 1# ' <' D1' &>>&-' <K <-A' @'a1' &B100 <0 '-'<-' =, &-'&=' " 1# ' <' D1' &>>&-' <K -A' D<' D1' " 1=1-A<- ' & ' " 1=1-A<- 0 '-' 0?BD' ?' 0 & ' B '&-0 &=' " 1# 0D<@@ -& ' #1' 100&'-1A -& ' K<.1' D1' ' <K <-A' '=' D1' & ' D1 ' & ' <- ' &=' D1>' <.<'-0 ' KD&>' ` D'0 pP B '&-'0D<@@ #1' <a1- A&' &==1 ' & 'B<0 ' <- ' & 1Bj '&- `& ' & D1 ' >C1A' >1- ' '-' 1 < A< '&- P' &=' D1' 0<'A ?' 0 & ' B '&-0 D<' `0D<@@ -& ' #1' <@@&K1A/ P' ?- &' D'>' &+'A1A' <@K< 0 ' D<' D'0 C 101- ' A' j -<-B1' A&' -& ' 1L 1-A -& ' '-' <- K'01' #1' C 1 ?A'B'<@@ & D1' D1 '==0 &=' D1' ' '&=' &-A&-' -&K' #1' - . ' & ' KD'BD' <' <- ' '>1' D1 1<= 1 ' 0D<@@ #1 B&-B1 -'-.' <- ' -A'B j >1- 0 & ' 101- >1- 0 &' #1' <a1-' K' D'-' D1' 0<'A' ' ' `&=' &-A&- P &+'A1A' <@0&' D<' D'0 B ' 1L 1-A' -& -& ' #1' C .?A'B'<@ &' <- ' 1 0&-' & ' 1 0&-0 KD'BD' #< D E <- 0 &=' < ' ! '-10 & ' >1 B'<>1- 0 # ' <- ' 1 j 1 0 < 1- 0 &=' &? ' 0<'A &+1 1'. -' & A' D1' , '-. ' &=' <- ' &=' D'0 &.1-' & 0 & ' 1A1B100& 0 #1< '-.' "< 1' #1=& 1' D1' 1- D' "< ' &=' "1B1>#1 ' -1L ' <= 1 ' D1' #1. ''>'-.' &=' D'0 < @'<>1- ' -A' D<' D'0 `' B ' <-A' A' -<-B1'W P' A&' -& ' 1L 1-A -& ' #1' C 1 ?A'B'<@ &' <- ' 1 0&-' & ' 1 0&-0 D<+'-.' <- ' '#1 '10 & ' ! <-BD'010 # ' <- ' &=' D1'0<'A' 1 1 0' < 1- 0 & ' '-' <- ' & D1 ' <--1 ' # ' 10B 'C '&-' -A' D<' D'0 A' -<-B1' #1' '-' D'0 ! & B1 <-A' #1. '-' @&' <a1' ==1B ' <' D1' ! & '1 D' < ' -1L ' <= 1 ' D1' 'L D' "< ' &=' < -1L ' <= 1 ' D1' #1. '--'-.' &=' D'0 C 101- ' < @'<>1- ?C&-' D1' KD'BD' 'L D' "< ' D1' 0<'A' < @'<>1- ' K<0 ='00&@+1A

' & ' A&' ><a1' & ' <a1' <- ' = -1 <?-0&>1' C ' ' ' : W D >' /' D1' 1F W '-@1 -.& < ' -.' '' 2 h' ' #1' - & '<@&K<#@1 Ü <

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' ==@1>1-' 0 >&-1\' <' F 10 >' @1' LL@L ' &? '

"<C 1@@ <-' A?' 1'.-1' -=1' @1' & ' AK< A' @1' H?< ' <C 10 @1' B&-H?10 ' '1 B1 A'1010 10 < ? 1\' I' & A1-D'B1\' < @&-[? ' A1' "@1?' =1' 1'- ' 0.@'B1 I'C? ' @1'#'1-' A?' A' ' & ' I' 0&-' C1&C@1 A1'@<A+'0 I' <001- 'A<0 0' 10C?1@L' I' 1>C& 1@L' I' @1 i' &10 1-' @1' A' ' C< @1>1-' 10 1<- \ I' C' @<?B & ' 1' A1' >10>1' @1' C@ >1- =' 1- '='A 1\' 1-' >< 1 I' =& >1' 1-0?<- \

''51>1-' C' B1&' H'@<00? 1' <+<'@1' I' D&-&? ' A?' @<'-1' B 100<-' A1'-0 @1' &'<@>1' "1-.@1 1 @1' BD'1=' I' C ' -j B'C<@ B&>&A' 11' >10>1' @1' &'<@>1 10 ' 1-' A1?L' 1- 1' <? 10 C ' 1' H' '1@ 0?=='B'1-' C'1'- 1' A?' A' ' @<'-1' 0&=' B&- '-?1@>1-' A1>? <-' I' 1 -<'.?>' A1'-0 @1' A' \' &'<@>1 H?1 C&1' R+=' 10&-<#@1>1-' I' B&>C1 1- 8 >1-' < @&BB?C<B'&-' A10 =10&? 0' A1' A <C0 I' A1' &? \' @1' >1># 10 I' # <-BD'10 1- C' &? '@10 ' 1B\' ? .D I' '@@10 >10>1' @1' &'<@>1 1='1'1\' 1-' .J?-A1' I' C'1 1?&?\' A1B@'-1' A10&@<B'&-' I' ?'-1' C'@&BB<0'&-' A1 &B'&0' 1 C?'001-' <?' C 1<0' '" '1?' 10 1' 1>&+1\' ;' " <A' -=1' A' ' @1' & ' 1-' B&-0'A1 < '&-' A1' @1\' C-?001\' A1' @<A+'0 <001-' I' <?B & ' 1' 0> 0A' \' &'A1'.-1' I' 10 <#@'1 ' < @1' =10 ' A1' 1'-' &D-' <C '0 1' C0BD1'-' <+1-' ' -?@@1' C0&-1' <@'1-' &?' 10 <-.1' -11\ C' @? ' >10>1'&?' <0B?-1' <? 1' C i&-1' C' @? ' C '+1' &?' <CC'1 @ <BD< 1' &?' 10a@CC1' <01?-10 ><-1B0 @<'-10 &?' C1<@L' @<-? \' & @ -.' &?' D& @ -.' A1'-\' < B -1 C< ' B10 ' &'<@>1' &?' ER@10 &?' B1?L' &?' <0B?-' A1?L' B< '1' D& 0' >10>1' @1' &'<@>1' &?' E<@10 1' H' <0B?-1' C0&-1' 10 <?-.1' <@'1-' &?' A1'-0\'-@&?' <0B??' <? 1' 0?#.1' A?' & @ <' @1' A' ' =10 ' B< '1' <0B?-0 @<'-10 C1<@L' @<-? \' >& @ -.' & ' 0D& @ -.@ A1@ B 1 ? 1' A10 C1<'01\' &?' &?- 1' A1' B1<' @1<?1' A1' 1101' & ' 1' >10>1'@1<?1' 1-,0' @1' & D' 0? ' C1 -' A1@ =& =1' ? 1' A<>'1@L' @<'-10 C1<@L' @<-? \' & @ -.' I' D& @ -.@ ?-1' >&' 1' 1-' A10 1' 1?1' <@ &1C0 -=1' A' ' = '@1' & '1' @<? 1' >&' 1' 1-' <@ &1C0 I' C=' ' B1'? ' &?' B1?L' H' &,&-' I' @&'<@>1-' C+1 &-' &?' &,<' I' @&'<@ >1- C+1 <' '1@ <BD< 1' 10a'CC10&-' &?' B< '<.1' B -= '1' <' @<' A' 1' & A1-0-B1 @1 0' @<'-10 C1<@L' @<-? 1\' & @ -.' I' D& @ -.' AA' B &'0 ? 1' A10 @' > 11\' <CC1@@1\' @A1 @ &-0D' 1' I' 'B#1>&-A0D' 1' <-B0&?@1>1-' =& C '01\;

5 ' ' (. ' %

' D1' < @'<>1-' 0?>' &D1A' <' F 10 >'-0 1 ' D1' '-18<-A8 K1- '1 D' " A ' &=' C '@@ D1' D' A' 1< ' &=' D1' 1'.-' &=' &? ' D< A' , ' @.' AK< A' D1' !&? D@ <= 1 ' D1' &-H?10 @ A'+1 0 < ? 10 <-A' A'-<-B10@ & D1' &-&? ' &=' E&A' <-A' &=' &@ ' D? BD@ <-A' =& ' D1' F 1<@ D' &=' D1' 0<'A' , '-.'<-A' F 0 1&C@1@ # ' D1' A+'B1' <-A' 001-' &=' D'0 <2 A ' C' ' ?<@ <-A' 1>C& <@ <-A' D1' &>>&-0@ '-' D1' 0<'A' k/< @'<>1-' <001>#@1A@ <-A' # ' ? D& ' ' &=' D1' 0<>10 F1 1' ><A1' '-' D1' <--1 ' <-A' !& >' <0 =& &K1 D@

! @ 1B<?01' D< ' ` D1' BD'1=<-A' C >B'C<@ &>j >&A' ' &=' D'0 1<@>' &=' -.@<-A' B&-0@0 1 D' '-' D1' F&&@0@ . &K'-.' K' D'-' D1' 0<'A' 1<@>@ <-A' &' D1' -1-' D< '\ ' 0?==B'1-' @1- ' &=' D1' 0<'A' F&&@0' >< ' B&- '-?<@@ '<#'A1' <-A' 1><'-' K' D'-' D1' 0<'A' 1<@>@ <0 >< 'B&>C1 1- @ '<-A' > 0&-<#@ '01 +1'=& ' D1' BB?C< '&-' &=' @& D><a1 0 `&=' -.@<-A@P <-A'&=' <@@ D1' 1>#1 0 <-A' >'BD10 &=' D1' 0<>1@ KD1 1# ' D1' ' '10@ & &?.D0 <-A' &K-0 &=' D1' 0<>1' 1<@>@ =<@@1-' '- &' . 1<' <-A' - '&?0 " 10&@< '&-@ ?'-' <-A' " 1B< ' # ' D1' BB<0'&-' &=' A@1-100@ >< '#1@ '=' E&A' K'@@@ >?@ 'C@'1A' '-' -D<#' < '&-@ <-A' # ' <#&? ' 10 & 1A' &' D1' ' <-B'1-' & ' <-A' &0j C1 ' @ # ' KD'BD' D1' 'B10 <-A' -B&-+1-'1-B10)' >< ' &' D1' @1<0? 1' &=' E&A' #1' <+&'A1A;' ? ' &+1 1'.-' & A' D1' , '-.@'-' &-0'A1 < '&-' &=' D1' 1>'010@`# ' D1' A+'B1' <-A' 001-' &=' D1' & A0' C' ' ?<@ <-A' 1>j C& <@@ <-A' < ' D1' 1H?10 ' &=' D1' &>>&-0'<=& 10<'A9/P' #< D' & A<'-1A' <-A' 10 <#@'0D1A' D< ' = &>' D1' !1<0 ' &=' <'- ' &D-' <C '0 '-1' ' 1-0?'-.@ -&' 1 0&-' @'1-'='& ' <-.1 '#& -@# '`D'>/P' & ' < ' '& D1 '=& 'D'>@ `C '+ '& ' <C1 9/P' 0D<@@ #? ' & ' 0D'C' <-' '><-.1 ' F&&@0' & ' F&&@8' =1@0@ & @'-.' ' D& @'-.@ K' D'-' <-' ' < '&=' D'0 1<@>' `&=' >.@<-AP' & ' F <@10@ & ' D1>' & ' <-' &=' D1>' B< ' &? '&=' D180<>1' 1<@>' & ' F <@10' -& ' D< ' <-' 1 0&-' <-.1 ' @'1-' & " "1-'\1-@ ' <-' & D1 ' D1' ,'-.0' ?# 1B @ = &>' D1' 0<'A' !1<0 @ 0D<@@ B< ' <-' F&&@0@ F &@=1@0@ & @'-.' & ' D& @'-.@ D1' &-1' <@=' D1 1&=' &' #1' D<A' &' D1' ` &=' ' <-A/P " 0 1' &=' &? ' 0'<'A' ` 1A&?# 1A' &+1 1'.-P' & A' D1' , >.@ <-A' D1' & D1 ' <@=' D1 1&=' &' D1' 01' <-A' &=' '&='D'>' & ' D1>' D<' <@@' ='-A' <-A' @<K=?@@ ' C &+1' 0?BD' ? '-.@ D'CC'-.@ & ' `' < '<.1'WP' B&-j < ' &' D1' 0<'A' A'-<-B1'G D1' F&&@0@ F&&@=1@0@ & @'-.'<-A' D& @'-.@ = D1' . &K'-.'&=' D1' &?- '10' B<@@1A' 1 &-0D' 1' <-A' 'BD>&-A0D' 1' &-@ ' 1LB1C ;

QL11C aK

/' D1'<00? 1A'<+<'@@1'<-A' K? 0D'C' &=' D1' F &@=1' . &K -.' K' D'-' D1' 1<>1' &=' -.=1-A@ D1' BD'1=' <-A' C '-B'C<@" B&>&A' 1' &=' D1' 0<>1' 1'>1@ 10 1 D' '-' K&' <>&-.10' & D1 @ !' 0' ' ' D<' 0?BD' 0 &=' A1@-10 ' *5

V # ' DC 01'A' <A+'0 <001-' '<-A' <-A'& ' 1' / D > 01@=' C '+1@ ' & '&C1-@ W D' 1' /' # VB< ' -.

2 +' . . ' !% ." ' V . .+2

V . .+2' . ' !' b". 7 . ' . ' &2' &/!' !' !!2!'2 +' -. ' ;!'2!-' .' !' ."<

ME' = ' ' 'G '6 #'%H' ˢ ˢ

< '=

' ==@1>1-' 0 >&-1\' <' F 10 >' @1' LL@L ' &? '

"<C 1@@ <-' A?' 1'.-1' -=1' @1' & ' AK< A' @1' H?< ' <C 10 @1' B&-H?10 ' '1 B1 A'1010 10 < ? 1\' I' & A1-D'B1\' < @&-[? ' A1' "@1?' =1' 1'- ' 0.@'B1 I'C? ' @1'#'1-' A?' A' ' & ' I' 0&-' C1&C@1 A1'@<A+'0 I' <001- 'A<0 0' 10C?1@L' I' 1>C& 1@L' I' @1 i' &10 1-' @1' A' ' C< @1>1-' 10 1<- \ I' C' @<?B & ' 1' A1' >10>1' @1' C@ >1- =' 1- '='A 1\' 1-' >< 1 I' =& >1' 1-0?<- \

''51>1-' C' B1&' H'@<00? 1' <+<'@1' I' D&-&? ' A?' @<'-1' B 100<-' A1'-0 @1' &'<@>1' "1-.@1 1 @1' BD'1=' I' C ' -j B'C<@ B&>&A' 11' >10>1' @1' &'<@>1 10 ' 1-' A1?L' 1- 1' <? 10 C ' 1' H' '1@ 0?=='B'1-' C'1'- 1' A?' A' ' @<'-1' 0&=' B&- '-?1@>1-' A1>? <-' I' 1 -<'.?>' A1'-0 @1' A' \' &'<@>1 H?1 C&1' R+=' 10&-<#@1>1-' I' B&>C1 1- 8 >1-' < @&BB?C<B'&-' A10 =10&? 0' A1' A <C0 I' A1' &? \' @1' >1># 10 I' # <-BD'10 1- C' &? '@10 ' 1B\' ? .D I' '@@10 >10>1' @1' &'<@>1 1='1'1\' 1-' .J?-A1' I' C'1 1?&?\' A1B@'-1' A10&@<B'&-' I' ?'-1' C'@&BB<0'&-' A1 &B'&0' 1 C?'001-' <?' C 1<0' '" '1?' 10 1' 1>&+1\' ;' " <A' -=1' A' ' @1' & ' 1-' B&-0'A1 < '&-' A1' @1\' C-?001\' A1' @<A+'0 <001-' I' <?B & ' 1' 0> 0A' \' &'A1'.-1' I' 10 <#@'1 ' < @1' =10 ' A1' 1'-' &D-' <C '0 1' C0BD1'-' <+1-' ' -?@@1' C0&-1' <@'1-' &?' 10 <-.1' -11\ C' @? ' >10>1'&?' <0B?-1' <? 1' C i&-1' C' @? ' C '+1' &?' <CC'1 @ <BD< 1' &?' 10a@CC1' <01?-10 ><-1B0 @<'-10 &?' C1<@L' @<-? \' & @ -.' &?' D& @ -.' A1'-\' < B -1 C< ' B10 ' &'<@>1' &?' ER@10 &?' B1?L' &?' <0B?-' A1?L' B< '1' D& 0' >10>1' @1' &'<@>1' &?' E<@10 1' H' <0B?-1' C0&-1' 10 <?-.1' <@'1-' &?' A1'-0\'-@&?' <0B??' <? 1' 0?#.1' A?' & @ <' @1' A' ' =10 ' B< '1' <0B?-0 @<'-10 C1<@L' @<-? \' >& @ -.' & ' 0D& @ -.@ A1@ B 1 ? 1' A10 C1<'01\' &?' &?- 1' A1' B1<' @1<?1' A1' 1101' & ' 1' >10>1'@1<?1' 1-,0' @1' & D' 0? ' C1 -' A1@ =& =1' ? 1' A<>'1@L' @<'-10 C1<@L' @<-? \' & @ -.' I' D& @ -.@ ?-1' >&' 1' 1-' A10 1' 1?1' <@ &1C0 -=1' A' ' = '@1' & '1' @<? 1' >&' 1' 1-' <@ &1C0 I' C=' ' B1'? ' &?' B1?L' H' &,&-' I' @&'<@>1-' C+1 &-' &?' &,<' I' @&'<@ >1- C+1 <' '1@ <BD< 1' 10a'CC10&-' &?' B< '<.1' B -= '1' <' @<' A' 1' & A1-0-B1 @1 0' @<'-10 C1<@L' @<-? 1\' & @ -.' I' D& @ -.' AA' B &'0 ? 1' A10 @' > 11\' <CC1@@1\' @A1 @ &-0D' 1' I' 'B#1>&-A0D' 1' <-B0&?@1>1-' =& C '01\;

0 D1'!< >1-' &@@ 4 I'% AK' ' '0 B&-'<?1A' '-' <-' ?-'' 1 <C 1A' 1 '10 = &>' 47 C '@ 4 AK' ' ' '' *%T24

& ' <-?< '% AK' ' ' '' *%(%84

1 <?L" <A & A1'.-1 I'10 <#@'1 H -?= C< A10 A' \' @< -10 C1<a @<-?\' & @ -.' &?' D& @ -.' 0&'@ 10a'CC1' &?' B< '1' <? <0B?-' <? 1'@'1?' D& 0' A?' A' ' &'<@>1'&?' E<@10 >10 <-B0&?@1>1-' < @<' '@@1' A1' <@<'0 @10 @<'-10 C1<a' @<-? \' & @ -.' 5R D& @ -.' A1 B 10 ? 1' A1' @1\' &?- 11\' A1' & D?>#' ?>#1 @&-A' I' F 10 ='@ I' A1 B 10 ? 1' A1' @1+10BD'1' A1' "? D<>' 1- 1' @1\' 1<?\' A1' -1' I' 1101 I' A1' @1\' A' \' &?- 11\' A1' @A1 &-' I' 'BD1>&-A' =& 0C '010 1' 0" <0B?-1' C0&-1' =<B1' @1' B&-= '1 &?' 10a'CC1' <0B?-10 @<'-10 C1<a' @<-? 1\' & @ -.' &?' D& @ -.' A1 B &'0 ? 1' A<0B?-1' C<'0 &?' &?- 11' A?' A' ' &'<@>1 =&=0C 'B1\' <+0-' =& 0C 'R1\ A1' B1<' @<' A' ' 1<?1' A1' 1101 <?' <0B?-' C& ' &?' 1a1' A1' @<' >10>1' @1<?1' &?' <-' >10>1' @1<?1 H' <A&-H10 B1@? ' H" '00'-' 10a'CC1 <' &?' B< '1 <@ &?' =1 <' A10 1' 10a'CC1\' &' ' B< @1\ @ =& =<B1' I' CA1' &? \' '1 L' @<'-10 & @ -.' I' D& @ -.' &?' @1' +<@?1' 1- @?-1' D&' 1' A1 >10>1' @<' =& j =1' ? 1' A10 1' <CC@'1\' <A' &1C0 -=1' A' '5 ?' @1' & @ 1' @<? 1' >&' 1' < B1@? ' H" '1 =& =1' ? 1' C+1 <@ I' >10>10 @10 @<'-10 C1<a' @<-? \' & @ -.' &?' D& @ -.' 01'01 <@ 1' <?L" <A' & A1'.-1' I' 10 <#@'1' H' -? .0&-1' C?'0 @1' A' '=10 ' 10a'CC1' <0B? 10 @<'-10 C1<a' @<-? \' D& @ -.' &?' & j @ -.@ A1 B 10 ? 1' A1'-0 <0B?-' A1' @1\' A' \' &?- 11L' A1' & D? - 1 ' ?>=1 ' I' F 10 ='@ &?' A1A1'-0 @1' A' ' +10 BD'1' A1' "? D<>' 1- 1' @1\' A' \' 1<?0 A1' -1' I' 1101 &?' A1A1'-0 @10 A' \' &?- 110 <CC1@@1\' 'BD1>&-A0D' 1' I' @A1 &-0D' 1 >10 <-B0&?@1>1-' <?' '@@1' A1' 1= D<0 1@@ 0? ' -1 0? ' C1'-1' A1' =& =1' 1' >10>10 @10 @<'-10 C1<a' @<-? \' & @ -.' I' D& @ -.@ @?-1' >&' 1' A1' B1&' < - 1' A' ' 5 ?' @1' & @ I' @<? 1' >&' 19A1' B1&' <@ <0B?-' A10 @'1.10 @1' & ' 1-D<#' <-' 1-' @<' A' ' '@@1' A1' &1= D<0 1@@ H" @<' A' ' =& =1' ? 1' 01'01 <@ A10 1' <CC@'1\' <@ ?01' I' C=' ' >10> ' @<' +'@'1' ' <?L" <A' & A1'.-1' I' 10 <#@'1' H' -?@@ C0&-1' <' @1' =10 ' ?'0A' ' 1-' C '+1' &?' <CC1 ' B&-+&'1' &?' B< '1 -1' B<?01' A10 1' B&-+&'1\' &?' B< '1\ <0B?-0 @1'-10 &?' C1<a' @<-? 1\' D& 0' A1' B10 ' &'<@>1' &?' E<@10 <?' <0B?-' <? 1' @'1?' H' <' <@1'0 =& 0C '01 '@10 @1'-1\' I' C1<a' @<<? \' A1+-' =& H?'010 0? ' C1 ''1' A1-C =1&-18 >1-' A1' ' <-0 I' A1' =& =1' 1' @1' +<@?1' A1 ' >10>10 @10 @1'-10 I' C1<a' @<-? \9'@?-1' >&' 1' A1-' <' -=1' A' ' _' @1' &")' <@ <0B?-' A101\' @'1.10 H" '1 =& =1' ?= 10C 1 < I' C ' >10>1' @<' =& =1' ? 1' 0?1 <@ 1' H' @' A1' B1&' 1' ' <B1'&-' A1' A1 1' <?L'#'1-' C\' @1' & ' B& @<1' C ' @? ' >10>1' A1' A' ' +<@?1' A1 =& =1' ? 1' <+D' A' 9 A10 1' 1?1' I' C 0?1' 1-' @1' &?- 11' 1-' H" '1 =& =1' ? 1' <+'1-A <@ 1-' H?1 <BB'&-' @1' A1=1-A<-' -1' 0&' ' 10B1?' A1' .<.1 ' 0< @1 9 -<0 ?-1' 100& -' -1' C 1BB'&-' C ' >10>1' @1' A1=1-A3?D ' <0B?-1>1-' 0&' ' <@@&K1 ' 1-&? 1' <A' & A1'.-1' I' 10 <#@'1' C' @<?=@& ' 1' 0?'0A' 9@H' -?@@ BD<?-' A?' A' ' <C@1' A1' <@1'0 C' @? ' >10>1' -1' C' -?@@ <? 1' C0&-1' C? ' @? 9 +1-A1' &?' ? 1' < @1' =10 ' A1' 1'-' 'BD1A' @< BD<-.1@1' C0BD1'-18 >1'@ ' <+1-' ' <0B?-10 @<'-10 C1<a' @<-? \' & @ -.' &?' D& @ -.9 &?' <0B?-10' <? 10' ='BD<?-A'01\' A1@ <C@1 9 < @<' A' ' <C@1 1'-0' H'@ <+ -' &?' '@<' @' 11' A1@ >10>1' 101 +1' I' C 1'.-1' C 10' C<'1>1-' I' B&- 1- <B'&-' C ' >10>10 @10 @1'-10 C1<a' @<-?\' B<? 1\' ='BD<?-A'01\

' C' + 0 !'" 1.@ !' %'.$- +

-A' <@0&' D1' D< D' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' -&' < B1@ &=' D1' 0<'A' F &&@0 F &&@=1@0 & @'-.' &' D& @'-.9 #1' 0D'CC1A' &' B< '1A' &' <- ' & D1 ' @<B1' &? ' &=' D1' 0<'A' 1<@>' &' F <@10 #?' &-@ ' &' D1' &K-' &=' <@<'0 D1' F &&@0 F &&@=1@0 & @'-.' <-A' D& @'-.' &=' D1' . &K'-.' &=' D1' &?- '10 &=' & D?>#1 @<-A ?>#1 @<-A <-A' F 10 >& @<-A <-A' &=' D1' . &K'-.' &=' D1' '0D&C 'Ba' &=' "? D<>' #1 K'L ' D1' F < 1 0' &=' -1' <-A' 110 <-A' &=' D1'0<'A' &?- '10 &=' @A1 &-' <-A' 'BD>&-A' 1LB1C 1A' -A' '=' <- ' 1 0&-' & ' 1 0&-0' A& D1' B&- < ' D1 1&=9 & '0D'C <- ' F &&@0 F &&@=1@0 & @'-.' &' D& @'-.9 &=' D1' . &K'-.' &=' <- ' &?- ' &' &?- ' &=' D1' 0<'A' 1<@>' `&=' -.@<-A9 1LB1C ' #1=& 1' 1LB1C 1A9 &-' D'0 'A1' D1' <'A' F < 1 '&=' 110 `& 'P' <- ' & ' & ' 11a' `&=0 ' D1'0<>1' F < 1 9 & ' '-' D1'0<>1' F < 1 9 D<' D1-' D1' KD'BD' 0D<@@ 0&' 0D'C & ' B< 9 & ' `A&' &' #1' 0D'CC1A' & 'B< '1A)' 0D<@@ =& =1' ' <-A' @&01' <@@ 0?BD' F &&@0 ` F &&@j =1@09 & @'-.' <-A' D& @'-.9 & ' D1' <@?1' D1 1&=9 D1' &-1' <@=' &=' D1' 0<>1' ! & =1' ? 1' &' #1' <CC@'1A' &' D1' " 01' &=' &? ' 0<'A' &+1 1'.-' &'< D1' , '-.9 <-A' D1' & D1 ' <@=' &' D' >' D< ' 0D<@@ C &+1' 0?BD' ! & =1' ? 1 9 <-A' 0#<@@ 01'\1' D1'0<>1' F &&@0 F &&@=1@0 & @'-.' <-A' D& @'-.G -A' <@0&' ` D1' 0<>1' &? ' &+1 1'.-' & A' D1' , '-.9 # ' D1' A>B1' <-A' 001-' <=& 10<'A9 D< D' & A<'-1A' <-A' 10 <##@'0D1A ' D< ' -&' 1 0&-9 <= 1 ' D1' <'A' ! 1<0 9 0D<@@ 0D'C <- ' F &&@0 F &&@=1@0 D& @'-.' & ' & @'-.9 H=' D1' . &K'-.' K' D'-' <- ' &=' D1' 0>A' &?- '10 &=' & D?>j #1 @<-A ?>#1 @<-A <-A' F 10 >& @<-A 9 & ' 8K' D'-' D1' <'A' '0D&C 'Ba' &=' "? D<>9 #1 K'L ' D1' <'A' ` F < 1 '3 &=' -1' <-A' 110 ' K' D'-' D1' 0<'A' &?- '10 <@@1A' 'BD>&-A0D' 1' <-A' @A1 &-0D' 1 9 #?' & @ ' < ' D1' &K-' &=' 1KB<0 @1') C&-' ?-' =! & =1' ? 1' &=' D1' 0<>1 F &&@0 F &&@=A'0 & @'-.' <-A' D& @'-.9 D1' &-1' <@=' D1 1&=' &' &?' 0<'A' &+1 1'.-' & A' D1' , '-.9 <-A' D1' D1 ' <@=' &' <-' '&=' D1' , '-./0 @'1.1' 1&C@1 '-D<#' '-.' '-' D1' N)' &K-'&=' 1KB<0 @1 KD'BD' 0D<@@ 01'\1' D1' 0<'A' ! & =1' ? 1' &' #1' <CC@'1A' &' D1' 01' <-A' &=' ' &=' D1' 0<>1' &K-' -A' <@0&' `# ' D1' 0010 ' <-A' ? D& ' ' <=& 10<'A9 ' ' '0 P' & A<'-1A' <-A' 10 <#@'0D1A ' D< ' -& 1 0&-' = &>' D1' 0< A' ! 1<0 9 C '+'@ ' -& ' <C1 @ 9 0D<@@ B&-+1 ' & ' B< 9 `& ' A& H9 &'# ' B&-+1 1A' & ' B< '1A' <-' <- ' F &&@0 & ' F &&@=1@0 &? ' &=' D'0' 1<@>' `&=' -.@<-AP & ' F <@10 &' <-' & D1 ' @<B1' = '<-' &' <@<'0 1LB1C ' D1' F &&@ <-A' F &&@=1@0 #1=& 1' 1LB1C 1A9 ?C&-' <'-' &=' >j C '0&->1-' # ' K&' 1< 0 <-A' &' =& =1' ' D1' .@?1' &=' D1' 0<>1' F &&@0 <-A' F &&@=1@0 D1' &-1' <@=' D1 1&=' & `#1' C<'A' &' D1' 01' &=P' &? ' 0 ?A' &+1 1'.-' & A' D1' , '-.9 <-A' D1' & D1 ' <@=' &' <-' &=' #'0 @'1.1' 1&C@1 KD'BD' 0D<@@ 10C '0?BD' ! & =1' ? 1' <-A' 0?1' =& ' D1' 0<>1 <-A' D<' D1' D<+1' D1 1&=' <-' = '&-' &=' "1# ' <' K1@@ =& ' `&? ' &+1 1'.-' & AP D1' , '-.' <0 =& ' D' >01@=9 &=' D1' 0<'A' <@?1' &=' D1' ! & =1' ? 1' <=& 10<'A9 &' #1' D<A' <-A' C? 0?1A' 'D' D1' &?- ' KD1 1' 0?BD' ! & =1' ? 1' 0D<@@ D<CC1-G '-' KD'BD' = '&-' D1' "1=1-A<-' 0D<@@ -& ' #1' 1B1'+1A' &' F<.1' D'0 <K9 -& ' -&' 00&'D' -& ' & 1=@'&-' =& ' D1' 0<>1' "1=1-A<-' ` &'/P' #1' <@@&K1A8 -A' & 1j &+1 ' ` D1' 0' >1' &? ' &+1 1'.-' & A' D1' , '-.P' D< D' & j A<'-1A' <-A' 10 <#@'0D1A9 # ' D1' ` 001-' T 'AP ? D& ' ' <=& 10<'A' D< ' -&' 1 BD<-' &=' D1' 0 ?A' <HA1'& =' <@<'0 9 # ' D' >01@=' -& ' # ' -&-1' & D1 ' 1 0&-' =& ' D' >9 0D<@@ 01@@ &' ? 1' = &>' D1' !1<0 ' &=' <'-' D<1@ D1' BDj <-.1@ -1L ' 1-0?'-.9 <-' F &&@0 F &&@=1@0 & @'-.' &' D& @'-.9 <-' F &&@0 F &&@=1@0 <-A' & D1 ' 1 BD<-A'010 &=' D1' <C@1' ` &'WP' D1' 0<'A' <C@1 9 #?' D< ' D1' #1=& 1 9 &' ?C&-' D1' " 1@'j +1 '&=' D1' 0<>1 9 11A+1' <-A' <a1' 1<A ' < >1-' <-A' & 1- < '1>' =& ' D1' 0<>1' F &&@0 F &&@=1@0 <-A' & D1

V..+2 +' ;2' !% ." !/' . + &2.-+@

%#! &.-' 2 ' V..+2 ' !' ." !"-' .0- &!2

B." !& 0"!' ." 2 & &-*' -@ V..+2 #.-" "@' .' &2 Z

V..+2 . ' !' .' !"-' .0- &!2 2 +' ;!' 2 & !/' ' .7# 2&+!' .-+@

30-&2 1!-' -/3!- +@ .'" !% ." &-*' V..+2 !+2!7 !"!' -' 02

D= BD<-0'&&=' ! +!' . + &2 2 +' 2!+' V..+2' C#' .'"'! /@' < 1- ' .-+@

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3". '&2. ' .'" <.22!/' ;@' 3!"&Z. ' !' !

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02 &#!Z . ' ! #!' - ;@' !-SO&"!' !"!. ' L

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1 BD<-A'010 &=' D1' 0<'A' <C'1' '-' <-A KD1 1&=' D1' <@=' < ' 0D<@@ #1' '-' @<K=?@ &-1 ' &=' -.@<-A @< 1' & ' ?@@'&-'&=' '@+1 ' & ' E &@A< <-A' A@ D1' 0<>1' &-1 ' A?@ ' ` &' # '-. P' '- &' D'0 1<@>' `&=' -.@<-A9P' <-A' D1' @< 1'<-A' ?@@'&-'0&' 1B1'+1A' `A&' A?@ '0P &' #1' B&'-1A' < ' D1' '-' '&=' <@<'0 <-A' <@@ D1' &'21 ' D1 1&=' ><A1'<-A' B&'-1A A' @ ' # '-.' '- &' ` -.@<-A/P' K' D'-' D 11' &- D0 -1L ' <= 1 ' D1' <=& 10<'A' <@1 ?C&-' <'-' &' =& j =1' '=& ' 1+1 ' <Ba' &=' F &&@ !'+1' < a0 <-A' =& ' 1+1 ' 0@ ' F &&@=1@0 & D1 K'01' 0&@A' !'+1' < a0 <-A' =& ' D1' B&- < ' <@1' &=' 1+1 ' <@=' <Ba' &=' F &&@ & ' <- ' & D1 ' ^?<- ' ' &=' F &&@ <-A' 1+1 ' LL ' F &&@=1@0 <-A' 1+1 ' D1 ' ?>#1 ' D1 1&=@ <= 1 ' D1' < 1'<-A' ^?<-j ' ' &=' D1' 0<'A' !'+1' < a0 -A' D<' -&' 1 BD<-' &=' D1' 0<'A' <C@1 = & " D1' 0<'A' !1<0 ' C=' <'-' 'BD<1@ 0D<@@ 01@@ ? 1 ` -& ' <@'1-1' D'0 &C1 3P' &=' D1' 0<'A' 1 BD<-A'010 &=' D1' 0<'A' <C@1 -& ' -& < B1 &=' D1' 0<>1 ` &'/'P' <- ' @<B1' &?' &=' D'0 1<@>@ & D1 ' D<-' ` &/'P' D1' 0<'A' <C@1' &=' <@<'0 &+'A1A' <@K< 0 ' D<' '=' D1' 0<'A' &-1 ' & A<'-1A' # ' D'0 A'-<-B1' &' #1' # &?.D ' '- &' D'0 1<@>@ #13 A &K-1A' '-' D1' 1<@ & ' <a1-'<K< ' # ' -1>'10''-' D1 1<@ & ' '=' D1' ℕ)' # '-.'-.' D1 1&=' `#1' @1 ' # '/P' B&- < ' F '-A' & ' ` 1>C10 90P' <-A' D1-' D1' 0<>1' &-1 @ KD&01' # '-.'-.' 0D<@@ #1' @1 ' # ' 0?BD' F '-A' & ' ` 1>C10 90P' /)' # &?.D ' '- &' D'0 1<@>' `&=' -.@<-AP' <0' 0&&-' <0' B&-+1-'1-' <00<.1' =& ' D1' 0<>1' >< ' #1' D<A@ D1-' D1' 1 BD<-' K-1 ' &=' D1' 0<-'1' 0D<@@ '-' -&' K'01' #1' 1-A<><.1A' # ' D1' BB<0'&-' &=' D1' -& ' # '-.'-.' D1' 0<>1' &-1 ' <0' <=& 1' '0' 0<'A' -A' & 1&+1 ' #1B ?01' D<' A<'@ ' . 1<' "1B1' ' '0' A&-1' '-' D1' K'-A'-.@ `K <CC> .@JP'<-A' ><a'-.' !@11B10' &=' F &&@ K' D'-' D'0 1<@>@ # ' D1' K-1 0' &=' DC' 0<>1' F &&@@ # ' C? '-.''-' !@11B10' &Ba0' &=' F &&@@ <-A' '1B10' &=' >?BD' K& 01' F &&@' D<-' D1' !@11B1' '0@ <-A' <@0& C? j '-.' '-' D1' 0<>1' !@11B10' ` < 9J P' &-10@ <-A@ `E <00@ & ' " ' 93P' &' D1' . 1<' "<>< .1' 8&=' D1' ? 1 ' &=' D1' 0<>1' F &&@' K' D'-' D'0 1<@>' `&=' -.@<-A9P' <-A' &' D1' . 1<' 1C &&=' <-A' "<>< .1' &=' D1' 1 j BD<-0' &=' D'0 1< >' `&=' -.@<-A9P' KD'BD' B< ' D1' 0<>1' F &&@0' &? ' &=' D1' 0<'A' 1<@>G ` ? ' &+1 1' .-' C A' D1' , '-.P' D< D' & A<'-1A' <-A' 10 <#@'0D1A@ # ' ?j D& ' ' <=& 10<'A' D< ' 1+1 ' 1 0&-' K' D'-' D'0 1<@>' `&=' -.@<-A9P' D< ' K'@@ `01@@ 'OP' <- ' F &&@0' '-' <- ' < ' K' D'-' D1' 0<>1' 1<@>' `&=' -.@<-AP' # ' K< ' &=' <@1@ ==& >' D1' 0<'A' !1<0 ' &=' <'-' &D-@ `& A<'-1A' <-A' C &+'A1A@ 3P' D< ' D1' 0<>1' F &&@' #1' K1@@ <-A' `aK=?@= ' K&?-A@ ' F' D&?' A&' -.' <- ' "1B1' ' '-' D1' 0<>1@/'P' ?C&-' <'-' &' =& =1' ' &' D1' , '-.'=& '1+1 '0?BD' !@11B1@ '-' KD'BD' <- '0 BD' "1=<?@ ' 0D<@@ #1' =&?-A@ 'Lj C1-B1'G <-A' D< ' D1' ?0 'B10' &=' 1<B1' &=' &?' &+1 1'.-' & A' D1' , '-.' '-' 1+1 ' &?- @ ' @ <-A' K-' &=' D'0 1<@>' `&=' -.@<-A9P' D<+1' ? D& ' ' <-A' &K1 ' &' 1-H?' 1' &=' D1'0<'A' "1B1' 0' '-' D1' ' 100'&-0' &=' 1<B1@ <-A' &' D1< ' <-A' A1 1 >'-1' D1' 0<'A' "1=<?@ 0' <0' F1@@ # ' AC1' L<>'-< '&-' <0' & D1 K'01' & 1&+1 ' D1' D< D' & j A<'-1A' <-A' 10 <#@'0D1A' # ' D1' ? D& ' ' <=& 10<'A' D< ' -&' 1 0&-' '-D<#' '-.' K' D'-' D'0 1<@>' `&=' -.@<-A9P' & D1 ' D<-' 1 BD<- 0' <-.1 0@ = &>' D1' 0<'A' !1<0 ' &=' ?-' &D-@ 0D<@@ = 1'.D ' - ' BD< .1' K' D'-' D'0 1<@>' `&=' -.@<-AP' & ' F <@10@ <- ' D'C' & ' & D1 ' 1001@ &=' <- ' @'1-' & ' <-.1 @ K' D' <- ' 1 BD<-A'010' &' #1' B< '1A' &? ' &=' D1' <'A' 1<@>' `&=' -.@<-AP' & ' F <@10@

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F' !" !' ([." /!@-' -/' ."2!!
0 !'" F' "0+@' 7.0-/!-' 7& .0 !'!-@' /!#!& !"&-' .' ;!' /..'

A?' A' ' 10 <C@1' 1 ' ><'-1@ A&?-' @<' A1> ' C< ' 0&' ' 1-' @&'< ' >&-1 ' "1-.@1R 1' C < 1' &?' #?@@'&-' A< .1-' &?' A& @ 1 ' &?' >10>1' @<' >&-1 ' 1-' B10 ' &'<@>1' A?1@ >1-' <>10-1@ I ' @10' C@< 1' I ' #?@@'&-' '00'-' 111?\' =110' A?1>1-' A10 1' B&'.-1\' <@ '-1' A1' <@1'0G I ' &?' @<' >&-1 ' 1-' =<' \' I ' B&'.-1\' A?1>1-' >10-1' 1-' >10>1' @1' &'<@>1G >10= '10 @10' C@< 1' I ' #?@@'&-' 10 1' B&'.-1\' I ' @<' >&-1 ' 1-' >10-10' 1-' @1' A' ' &'<@>1@ A1'-\' &'0' >&'0' C0BDA-0' 1-0?<- \' @<+0- A' ' +1-A1@ 0? ' C1D'1' A1' =&1' 1' C ' 1='?-' 0<a' A?' @1'-1@ +' >< B@ I ' C ' BD?-' L ' C1<@L' @<<? \' <? 1>1-' +1-A?\'+' >< B@ 1 ' C ' @<' B&- '1'+1-A1' A1@ BD?-' A1> ' 0<a' A1' @1 -1@ &?' <0B?-1' <? 1' H?<-A 1' A1' @1 -1@ I ' C= 1='?-0' ' LL 8' C1<@L' @<C? \' I ' BD?-' <? 1' -&>#1' 1-@ 0&@&-H' @<' < 1' I ' H?<-A 1' A10' A' \' ' >< B@ 1 ' H' -? ' BD<?-' \' A?' A' ' 0 <C@1' <' @<' =10 ' A1' 1'-1' =&D1 ' +1-A1' ? 1' &?' <@'1-1' @<' CC 1 1 o'<' @? @ A10' A' \' I D<?-A'01\' A?' A' ' <C@1' -<0@ ' B?-1' C< ' A'B1?L@ <?' <0B -1'@'1?' D& 0' A1' B10 ' &'<@>1' <? 1' H' < @<' A' ' <C@1' A1' <@1'0 ' ? +1?' &? \' =&' \' H' 0" @<' A' ' >&-1 @ & A1'.-1\' C' B1 ' & A1-M-B1' 1-' B10 ' &'<@>1' 10 1' <>10-1\@ 0&' ' 0 ->A1\' 1-' @1' >11 1' &?' C '010' C' 1-1>'10' 1-' @1' >11 1@ &?' 0" @<' A' ' <>10- D B1' 1-' -1' C&1 ' 10 1' 1?1' C ' B& '1' +1-' &?' 1>C10 @ I ' <A&-H10' >10>1' @<' <&-1'1@ A1' H?1=0' @1' >10-3-B1' M <' 1>C1BD1' C' +1-' &?' 1>C10 @ 0&' ' <>10-1' 1-' B10 ' &'<@>1' <?L" &0 ' B&>1' B&+1-<#@1' C<00<.1' C ' B1&' C&1 ' 10 1' 1?1@ A&-H@ @1' ='BD D>' C&0 100&?' A1' B1&' 1-' -? ' ><51' 0&' ' 1-A<==@D.1' C' B<?01' A1@ -&-' >10-/-B1' A1' >10>1' @<' >&-1'1' B&>1' A1+D ' 10 ' A' ' C@?'0' &?0 1' C' B<?01' H' A1' &? ' 1-' <? 1' .D>A1' A10B1' ' 10 ' =<' ' 1-' @1- & 1>1-' +&@?1>1 ' I ' =1'0? 1' A10' &'0&-0' A?' @1'-1' A1'-0' B10 ' &'<@>1@ C' @10' C&00100&? 0' >10>1' @<' @<'-1@ C' >1 1' 1-' '0&-0' @&aa10' A?' @1'-1@ I ' C1B10' A1' C@?0' C1'1 ' @1'-1' H' A1' >10>1' @1' &'0&-@ I ' <?L" >1 <- \' 1-' 'B1?L' &'0&-0' 1 1' C1 10' \<#?@&-' & A? 1' &?' C1@1@ <?' . ?-A1' A<><.1' A1@ <BD< &' A?' >10>1' @1' @1'-1' A1=&0' B10 ' &'<@>1@ I ' .0?-A' 1C &BD1' I ' A<><.1' <' @1\' ='BD<?- \' A'B1@' &'<@>1' H" B< '&?-' @1\' A' \' @1'-10' D& 0' >10>1' @1' &'<@>1@ <A' & A1'.-1' I ' 10 <#@@1' C' @<?B & ' 1' 0?@0A' @ H' BD?-' C0&-1' A1'-0' B10 ' &'<@>1@ H +1-A 1' ' +&'@@1 ' <0B?-0' @<'-10' 1-' <0B?-' C< ' A1'-0' >10>1' @1' &'<@>1' C' +&'1' A1' +1-A1@ <' @1' A' ' =10 ' A1 1'-' &D-@ & A1'.-1' I ' C +1'1' H' >10>1' @<' @1'-1' 0&' ' #'1-' I ' @&'<@>1-' 1D &@@1@ 0<?-B1' <0B?-' A10B1' ' 1-' 'B1 ' <='<' 1@ 0? ' C1'-1' A1' =& =1' 1' <?' & ' C ' 1= ?-' A1@ &'0&-' 1-' H?1@ <? '1@ A1=<? 1' <' &+1' +' A1-'1 0G 1 ' H' @10' ?0 'B1\' A1' C1<0' -=1' A' ' ?' @1' &'@ 1-' B '?-' &?- 1' ' 1' I ' '@@1' A1' B10 ' &'<@>1@ <' ' <?=& @ 1' I ' C&@< ' A1-H?1 1 ' A1' @1\' A' \' A10B1' 1\' 1-' @1? ' B100'&-0' A1' C1<0G 1 ' <' &'1 ' I ' >' -1 ' @1\' A' \' A1=1? 10' 0'#'1-' C' A?1' 1L<>' -<B'&-' B&>1' <? 1C'1- ' ?L" <A' & A1'.-1' I ' 10 <#@'1' C' @<?= & ' 1' 0?'0A' @ H' -? ' C0&-1' '-D<#' 11' A1'-0' B10 ' 1<>1@ <? 1' H' '5BD<?- \' 10 <?-.10@ <@1' A' ' =10 ' A1' 1'-' ' &D-@ = 1 1' -1' BD< .1' A1@-0' 'B1 ' 1<>1' &?' E<@10' <0B?-1' -'1=' &?' <? 1' +1001<?' A<0B?-1' @'1-' &?' 10 <?-.1@ &+1H' <0B?-0' I D<?-A'01\' <' B< '1 0' D& 0' A1@ B10 ' &'<@>1' &?' E<@10@

3!"2.-Z &1 ." &-* #!" &- &+E - & <0"!Z 2 +# ." !& ! 2 1 ! -/ ! '3.0-/2

B&-B1 -'-.' Q D1 0 1 ' &=' '@a F & a1 0' '-' <- ' < P & ' @<B1 &=' D'0 ` 1<@-" &=' -.@<-A 0P = &>' #1 &-A D1 1<9 D< ' D1-' D1 0<>1 K &?.D ' '@a D &K-' '#j #<-A09 <B10 & 0109 <-A &D1 ' D'-.0 0& # &?.D ' <-A K &?.D 9 &?BD'-.' D1 0<>1 0 1 9 0D<@ #1 =& =1 ' -A D< '1+1 ' 1@@1 '&=' <- '&=' D1 D'-.0 <#&+1 -<>1A9 # &?.D ' <0 <=# 1 '0 0<'A9 0D<@ =& =1 ' ' =& ' 1+1 ' "1=<?@ ' 1-' &?-A09 D1 &-1 <@=' D1 1&=' &' #1 @1+1 A <-A D<A &' D1 01 &=' D1 LC1-B10 &=' D1 , '-./0 &?019 <-A D1 D< ' K '@@ 0?1 =& ' D1 0<>1 0D<@ D<+1 D1 & D1 ' <@=' Q&=' D1 0<>1 ! & =1 ' ? 1G -A D< ' ' #1 @<K=?9 &' 1+1 ' 1 0&-' `& ' 1 0&-0P8&=' D1 , '-./0 @'1.1 1&C@1 &' D<+1 <-A ><'- <'-' <-' =@ -' & ' = '&-0 &=' "1# ' <' 1+1 ' '>19 <0 K1@@ =& ' D1 0<'A ! & =1 ' ? 1 &=' 1-' &?-A09 <0 =& ' D1 D'-.' 0& =& =1 ' 9 <-A &B100 &=' ? @<K ' '-' D1 0<>19 <-A <@@ & D1 ' &B1001 <0 '-' <-' '&-' &=' "1# ' <' D1 & > >&-' <K9 <-A D< ' '-' D1 0<>1 -& 1^'&-' -& 00&'-' &' #1 <@@&K<##@1 -A D< ' D1 < & ' &=' D1 0<'A ' ' =& ' D1 '>1 #1 '-.9 D<+1 `'0?='B'1-' &K1 ' <-A P ? D& ' ' &' <00'.-' K&9 D 119 & ' !&? ' 0?='B'1-' <-A 1A'#@1 1-' &=' D1 0<>1 ' ' # ' D'0 "'0B 1 '&-9 &' #1 0K& -' ?C&-' <' &&a9 &' ><a1 A?1 1< BD K' D'-' D1 0<>1 ^ ' <-A @'1 ' #1 ' D1 1&=9 <0 &= 1-' <0 &' D1'C 0D<@@ 11>' 1LC1A'1-9 &=' <@@ D'-.0 D<A & ' A&-1 B&- < ' &' D1 1>'0106 <-A D1 ' &' ><a1 A?1 1@< '&-' &' D1 < & ' <-A @j A1 >1-' &=' D1 0<'A ' ' =& ' D1 '>1 #1'-.9 =& ' >& 1 C@<'-' -=& >< '&-' '-' D'0 1D<@=' &' `&? ' 0<'A &+1 1'.-' & AP D1 , '-.9 <-A &' D&01 1 0&-0 + D'BD '+'@@ 0?1 =& ' D1 0<>1 ' -A D< ' D'0 `0<'AP A'-<-B1 <#'A1 <-A #1 ' -' D'0 ! & B19 <-A <a1 ==1B ' `< /P D1 ! 1<0 ' &=' <'-' 1 1 ' B<@@1A <A +'-B?@<9 -1L ' B& > '-.G <-A ` D'0' A'-<-B1P 0D<@@ 1-A? 1 '@@ D1 -A &=' ! '+1 1< 0 D1-' -1L ' 1-0?'-.

.11!-#!k 1!-' .

'&' . ' &1 ."&-* V "!Z"! /@ 7".0* '&- . &Z 6! +1

9 F D1 1<0 '-' D1 0<'A < @'<>1-9 # ' D1 8 '='B1 ' `&=' ><-?<@ BB?C< '&-0@P 1-' <-A F &>1-9 `'-D<#' '-.' <-A 10'A1-P '-' D1 ' ' &=' &-A&-9 <-A & D1 ' ''109 &K-09 & &?.D09 <-A '@@<.10 K' D'-' D'0 1<D-' `&=' -.@<-AP <-A F <@109 ' ' D< D 1 <@@ '-' .1-1 <@9 0D1K1A <-A B&>C@<'-1A9 D&K' D< ' @ 1 ' <@@ '-' .1-1 <@9 <-A 1+1 '&=' D1>9 #1' . 1< @ ' '>C&+1 '0D1A9 <-A >?BD D'-A1 1A <-A C 1 ?A'B1A &=' D1' ' K& @A@ ' -B 1<019 <-A A<'@ ' '+'-.9 # ' D1 . 1<' ?@ ' ?A1' &='A'+1 0 ` & > >&j A' '10/P' <-A F < 10 C1 <'-'-.' & D1= ' 0 1 '10 <-A Bj B?C< '&-09 #<-.' = '@@ ' K &?.D 9 <-A 1<A ' ><A1' &' <=19 <0 F1@@ # ' D1' < @A0' &=' <-.1 0 #1'-.' D1' , '-./0 -1j >'10 <0 & D1 9 `'-NP' D'0 1<@>9 <-A' F <@109 `=1 BD1A' <-A P' # &?.D ' = &>' #1 &-A' D1' 1<9 <0 K1@@ # ' 1 j BD<- 0 <-.1 0 < ' " -'\1-0=>A' & D1 ' 1 0&-09 KD1 1&=' D1' . 1< 10 ' < ''-' ?#0 <-B1' '0' A1B1' =?@@ <-A' -& D'-.' K& D' '-' 1.< A' &=' <- ' <-/0' BB?C< '&-' & ' &=' G ' `# ' KD'BD' BB<0'&-'/P' D1' 0<'A' '='B1 0 B<--&'@'+1' # ' D1' ' '0 1 '10 <-A' BB?C< '&-09 <0' D1 ' D<+1' A&-1' '-' '>10 C<0 9 #?' A'+1 0 &=' D1>9 <0' K1@@ &?01D&@A1 0 <0 ` ' 1@'-.09 0P <-A' & D1 ' 1 +<- 0' <-A' CC 1- 'B10 '-' . ' ?>#1 9 #1' <' D'0 " < ' ?-&BB?C'1A9 <-A' A& D< A@ '@'+19 D" . 1<' ` '01 9/P' &+1 9 <-A' ` 11A9 3P KD1 1# ' ><- ' -B&-+1-'1-B10 D<+1' . &K-' #1=& 1' D'0 '>19 <-A' D1 1<= 1 ' >& 1' #1' @'a1' &' B(>19 KD'BD' E&A' A1=1-A9 '=' `A?1P 1>1A ' #1' -&' '-' D'0 1D<@=' C &j +'A1A' ; ? '0<'A' ` 1A&?# 1AP &+1 1' .-' & A' D1' , '-.' B&-0'A1 '-.' D1' 1>'0109 `<-A' K'@@'-.' '-' D'0' <01' &' C &+'A1' 1>1A 9P # ' D1' A+'B19 001-9 <-A' ? D&j ' ' <=& 10''A9 D< D' & A<'-1A' 1-<A 1A' <-A' 10<##@'0D1A9

4 ((' =)' !' # () ')8 ' 'V# = ' k)7 ' L ' *5 ' ')7*' 8 L' E8* 6 '=5 ' (N f() ' k" 6') 8)' P87) ' IP'68) % ')55 I

B&-R-<-' @<' >10 '1 ' A10 C1001\' A1' 1'1' 1-' <0B?-' & ' &?' @'1?' A1' B10 ' R 1' A&? 1' @1' >1 19 H' >10>1' @1' 1'1' &,11' D &K1-' '#<-0 @<B10 B& 010 I ' <? 10 BD&010 ' 0'-' <>1'.-1\' I ' &,1\' &?BD<- \' >10>1' @<' >10 '1 ' 0&'1-' =& ='' ' \;' ' H' BD?-' +1-A&? ' A<0B?-' A1' @1R BD&01\' A10?'0 -&>1\9 B&>1' A1+D' ' 10 ' A' ' <>1'.-1\9 =& =1B1' C ' BD?-' A1=<? 1' L' '' ' @?-1' >&' 1' 1-' A10 1'@1+1\' I ' 1?1\' <@ ?01' A1' @10 1LC1-010 A?' @&0 1= ' A1' & 9 I ' B1@? ' H' C? ' B1&' 0?1 ' +&1 ' A<+&' ' @<? 1' >&a1G 1 'H'@ #'1-' @'01' <' BD10B?<' C0&-' A10 @'1.10 A?' &" A<+&' ' I ' ><'- 1'.-1 ' <BB'&-' &?' <BB'&-0 A1' A1 1' < BD?-' 1>C0 0'#'1-' C? ' >10>1' @<' =& =1' ? 1' A1\' L ' ' B&>1'C ' @<' BD&01' 1D0" =& =<' 1\9 I ' CB1001' A? @<.< '1' 1-' '&1=9 I ' &? \'<? 10 C 10010 B&>1' 1-' <BB'&-' A1' A1 1' <@ B&1' @< 9 1 ' H' 1-' 'B1= ' -?=' C 1BB@&-' -1' 100& -1' 0&=' <@@&K<##@1 ' H' @1' <= 1' A1' @<' A' ' 1' C ' @1' 1>C0 1 @1<-' <' ' <?A@& ' 1' A<00'.-1 ' A1?L' &'0 &?' H?< 1' D&>10 A1' >10>1' @<' 19 0?==' A1- \' I ' B 1 '#@1\' C0&-10 C' 0<' A'0B 1B'&-9 A10 1' ? 1\' 0?' ?-1' @'+ 19 A1' =1' 1' A?1' 01 BD1' A1'-0 @<' A' 1' ' 1' I ' 'D '1' A'B1==9 <' <?- \' A1' =&' \' B&>1' +1 <' 1LC1A'1-9 A1' &? \' BD&010 1?1\' &?' =<' \' B&- '1' <' @10 C>'0010G 1 ' '@0 A1' =1' 1' A?1' 1@<B'&-' <@ <' 1' I ' @A1 >1-' A1' @<' A' 1' ' 1' C ' @1' 1>C0 10 1<- \9 C ' C@?'0 C@1'-' 1-=#'><B'&-' 1-' 'B1 ' C< @1' <?' & 9 I ' <0 1?L' H' C? ' B1&' 0?1 ' +&'@@1- ' ' H' B10 ' & A18 -0-B1' 0&=' 1-' 0<' =& B1' I ' C 1' .-1' 1==1'@' <' @1' =10 ' A1' 1'-' '1 1' <CC1@@1' @<A+'-B@1' C0BD1'-'0<+1' .-1 9 I ' 1-A? 1' ?0H10' <@ ='-1' A1' +' <-0 A1' @& 0' C0BD1'-' \' 1-0?<- \ =>'B&>1'1-' @1' A' ' C@1>1-9 C' @< '='B1 0' A10 >10 '1 0 ' ><'-?1@L' D&>10' I ' =1>10' 1-' @<' ' 1' A1' &?-A 109 I ' <? 10 ' 11\' '@@1\' ? .D0' 5B '@@<.10 A1'-0' B10 ' &'8 <@>1' P' E<@10' '-D<#' <?- \' B 101<?- \9 C' 1&?0>1-' <A' 10 1' >&-0 1' B B&>C@1'.-19 B&>1-' &? \' B1?L' 1-' . <==' B' BD?-' A1?L' 0&-' ./?-A1>1-' 1>C& 1\9 I '. 18 +&?0>1-' 1-A<><.1\' B C ?A'B1\' A1' @&? ' 1-B 1B1' A?' > -A' B +'+ 1' B& 'A'<-9 C' @<' ./?-A' >?@ ' ?A1' A10' A'C0 BD<==< 10' I ' K< 109 <' @1? ' >10 '1 0' 5B &BB?C<B'&-0' <CC8 1'.-= 1\9 10 1<- \' C@ '-1>1-' &C1\' ' C0 ' =<' \' <@ +1-A1' 0" #'1-' C' @10 ><'-0' A10 <?-.1\' 10 1<- \' 1-1>'1\' A?' & ' B&>1' <? 10' 1-' B10 ' &'<@>1' 5B E<@10' A1' @<' @1' >1 1' <>10-1\9 0'#'1-' C' ' BD<- \' 10 <-.10' B&>1' A1'-08 \1'' 0' 5B <? 10' C0&-109 A&?-' @<' . 1'-A 1' C< ' 1-' 0?#8 0 <?-B1' 10 ' A1B ' <##@1' 5B -'1-' +<'@@<##@1' 1-' 1.< A' A1@ &BB?C<B'&-' &?' C?==' ' A<0B?-' G' < B<?01' A1' H& ' @10' A' \' '=' ' C' '1? 08 >10 '1 0' ' &BB?C<B'&-0' +'+ 1' -1' C&'1-= 0'B&>1' 10 &? 0' C<001\' '@0' &@&'1-9 >10' C@?0&? 0' A1' 11?L9 0'#=&-' D&0 '1'L' 1- - \' B&>1' B&-A?E\' ' <? 10 +=< 10 5B <CC 1- '010 9 1-' .W?-A' -&># 1' B10 ? ' &? <&-' 1-&BB?C'1\9 I ' 1-' . >A' ?A'= 1' C&C 1' 5B >'-1' +'+&-' BD1' '= -1- 9 A&?-' C@?0&? 0' 1-B&-+1-'1-B10' &?-' A<=- / B10 ' 1>C0' <+1-?\' 5B C@?0&? 0' 1-<C 10' 0&-' 01>#@<##@1\' <+1-' 0' H' "'1?' A1=1-A09 <' 1>1A'1' 1-' -1' 0& ' C/+1<; =1' A' ' & <'-' _ ' @1' & ' @10' C>'001\' B&-0'A1 <-' A1' @<A+'0<001-' 5B <?= & ' 1'0?'0A' \' <A' & A1'.-1' 5B 10 <#@'1

H -? @ BD<- -11\ 0?#C1 A? &" A1'-\1'- -18 0 <?-.1 -1 <0B?-1 <? 1 C0&-19 <C 10 @1 =10 A1 1'- 'BD1 a BD<-.1'@ C0BD1'- <+1- 9 <>10-1 ><?-A1 -1 B&-+&'1 -1 B<?01 A<0>1-1 ><?-A1 -1 B&-+C'1 1- B10 &'<@>1 "1-.@1R 1 I _ '1 A1 E<@10 <0B?-0 A1 B10 10 K< 10 &?' BD&010 A10&?#\' 10B 'C 1\G B10 <00<+&' <0B?-0 #&= 1 10 @<-?\9 <0B?-0 A <C0 @<-?\9 @<B10 B& 010 '#<-0 = 1-.10 A1'0&@1' I A1'='@1 @<B10 A1'='@1 0&@1 1-='@1 0&'11-' <0B?-' ><5 1-# <?A1\9 @<B1 'A& 9 ' 10 A1 0&@1 & ' A& 9 01@@10 10 '+1-0 &?' <0B?-1 D1 -1'01 1.< A<-' <0 1@@1 0 10C1 &-0 >&@1'-0 C? ' =' 1'-10 <?-A' 1-0 . 18 A' -10 <0B?-0 ><50 01B? 10 >< 1-0 +?@.< 1>1-' -A>1\ D<>1 0 C'-0&-0 =' 1 &-.10 A 1C -.C<--10 A'010 1- 0#<@@10 C&'- 10 @<B10 #? 010 E<?-\ B1'-B 10 D<>1'0 C 'B1'-^10 A1 =1 1 A1 @< &-9 A<001 'A10 <'-1 &?' A1 <@a1>'-1 <0B?-1 BD&01 &511 A<0B?-' H?' 1 <K1 <0B?-' ><-1 'C1@@? 1 <K1 D?01A-0 0&@1 0 .<8 @&.10 &'@ B& a10 B& 1@0 A<..1 0 K&A1a- +10 #& a -0 0D1 10 C? ' < @&? 0 B'0&? 0 < ? 0 0D1 #10 B< A10 <' ?1 ' 10C'-.10 C< '-0 <.?@10 C? ' 0<B10 +?@.< 1>1-' 'C<a-1@A<0 <0B?-1 ><51 K< 1 A1C1@- 1 =& B1 0 B<0a1 10 <-1?0 A1 B&C1 ' 0?'0& 1 &?' A1 @< A-9 &?' BD<? -.A'00D10 BD<?-A1@1 0 C1-A3?- \ &?' 10 <- \ @<+&? 0 C1-A<- m B@'<?=='-.#<@@10 0<a1 '-.#1@@1 9 <-1?0 C? ' B? 1'-0 @<A1@0 0B&>1 0 B&+> 1=1' '#<0 -0 1K1 0 D< 10 # ?00D10 B< A10 C? ' @<'-1 & ' #@<-B ='@1 A1 =1 1 +?@.< 1>1-' -&>1 KD' 1K 1 &?' <0B?-0 A1 B1?L A10 1 ? R1\ I ' +1-A?\ A1'-0 ! ' &'<@>1 &?' E<@10 C +&'1 A1 ', BD<-A'01 0? ' C1'-1 A1 =& =1 1 B1?L' I B=1?- A1 B1?L <' B#?'" = ' \ I ' <C- \ A1 =& \ B&>1 '@ C?'001-' 10 1 &+1\ 1-' @10 ><'-0 A<B?-1 C0&-1 &?' C0&-10 A10 1 +1-A?\ @?-1 >&' 1 1-' <? &" I ' @<? 1 >&' 1 <' B1@? ' H" B1&'C '>10 01'01 <' C? ' @1 &'9 >10>1 @<' >&' 1 '00'-' 0A0'1' C? ' @1 &" A10 1 A1@ 11 C @1 A@ ' 01'0&? ' 1-' <' @10BD1 &? ' A1@ &+ - 11 &?' @'1?9 @&?' A' 1 01'0'-1 <9 C'1-A1- ? 10 1- 1'B1?L' <==< 1\9 <' 10C&?-A 1 1-' A?1>1-' 1-' 0&-' <BB&>C ' ? +1?' &? \' =&' \' H 1' <0B?-0 A10 Aa<' K< 10 &?' BD<'A 10 D& 0 A1' B10 ' , 1 ='''' \9 0&'1-' 0? ' @1' >1 1' C '01\' 0W?-\' = <?A0' &?' B&@@?j 0'&-9 &?' +1'. -1-' 1-' B10 ' &'<@>1' &?' E<@10 C' +&'1' A1' F 1B9 H' B1?L' 1-' -?='' >< 1' 0&'1-' B&>C '01\' A1D@\' B10 ' & A1-#@B1 >10 H' @10 C?'001-' 10 1' +1-A?\' A1'-\' B10 ' &'<@>1' &?' E<@10 B10 ' & A1-#'B1' -'1-' ?#0 <- ' ? +1?' <?L" H' &? \' K< 10 I ' BD<==< 10 =<' \' I ' &51\' 1-' @&-A' &?' E<@10 C?'001-' 10 1' <>10-1\' I ' 1-A?\' 1-' @1' ' &'<@>1' "1-.@1 1 0'B&>1' '@0' 0&@&'1-' 1+O-' @<' =1'0#>B1' A1' B10 ' & A1-W-B1 B10 ' & A1- -B1' -'1-' &#0 <- 9 ' <?L" <A' & A1'.-1' I ' 1 <A1' C' @<?=@& ' 1' 0?'0A' ' J @10 <'0 10 &?' .< A1'='0 C? ' @1' 1>C0 10 1<- \' A1' BD?-' < 1' I ' >10 '1 ' 1-' BD?-' ' 11 ? .D' '@@1' I ' '@@<.1 @&?' <0B?-' A1 < 1' &?' >10 '1 ' 10 ' ?011' &?' &BB @C'1 <'1-' 0?=='B'1-' C&<' ' I ' <?A& ' 1' 1-' B '?-' T?1 E' 11 ? .D' ' 1' I ' '@@<.1 @&?' H' B1?L' C? ' @1' 1>C0 10 1<- \' M &-' <'0 10 &?' E< A1'-0 A<0B?-1' A1 < 1' &?' >10 '1 9 1' @1' <' 1' A<?A1 ' 11' '@@1' ? .D' ?' '@@<.1' C? ' @1' 1>C0 10 1<- 9 0" <0B?-' <' 1' ' 0&' 9 &?' @10' <'@@'=0 &?' <'@@'=' A<?A1 ' 11' '@@1' ? .D' &?' '@@<.1' C? ' @1' 1>C0 10 1<- \

D<' -&' 1 BD<-' #& =' <' ?# 1=@ &=' =&? ' <'A' & AP' D1' ,'-." "1-'\1-9 & ' <-.1 9 -& '<-' & D1 ' 1 0&-9 <= 1 ' D1' !1<0 ' &=' <'-' 'BD<1@ D1' BD<-.1@ -1L ' B&>'-.9 0D<@@ # '-.9 01-A9 -& ' B&-+1 9 -& ' B<?01' &' #1' # &?.D 9 01-9 -& ' B&-+1 1A' '- &' D'0 1<@>' &=' -.@<-A9 <-A' 1'.-'& ' &=' F<@10 9 <-' &=' D101' ` D<==1 09P F< 10 &' D'-.0 ?-A1 8K ' 1-G D<' '0 &' 0< 9 <-' F &&@@1-' ` <C09'P' <-' F &&@@1-' @& D' <B10 & 010 '##<-A0 ! '-.10 &=' '@a' <-A' D 1<A 9 <B10 &=' D 1<A9 ` '@a' K'-1A9/P' '@a' '-' <-' K'01' 1># &'A1 1A' <B10 &=' E&@A9 /)' &=' '@a' & ' E&@A9 <AA@10 ' ?C09 & ' <-' < -10010 C1 <'-'-.' &' <Aj A@10 C? 09 ` &0010 &=/'P' 'A@10 ?-A' &-09 E 'A'j &-09 <-' <--1 ' &=' &Ba0 <>>1 0 '-0&-0 ! ' 1' &-.09 " 'CC'-.8C<-0 `" 'B1ZP' 1-'0 <@@0 &'- 0 W)' ? 010 E@&+10 E' A@10 < -100 =& ' E' A@10 &=' &-' < 1-' 11 '-' & ' &=' @a1>'-1 <-' D'-.' F &?.D ' &=' <-' <K1A' 1< D1 8 <-' ` <K1A' !? 0 ?0B<-09 P' D&10 E<@&0D10 & ' & a0 , -'+10 "<..1 0 F &&A8 , -'+10 &Aa'-0 D11 0 =& ' < @& 0 B'001 0 <\1 9 D1< D0 C@< '-.' < A0 '-0 < 1-0 <Ba' 11A@10 <-' C<'- 1A' F < 1 ! & B1 0 <0a1 0 '-.0 &=' &CC1 9 `& '&=' < 1-'.' 9O P' & ' D<==' -.'"'0D10 `D<-.-.' <-j A@10 'Ba0 P' D<==' -.' <@@0 <B '-.' 1@@0 '-.0 =& ' ? E?-0 <A@10 B?>>1 0 B&?-1 =1 ' <0&-0 K1 0 < 0 ?0D10 < A0 =& ' F & 9 #@<-BD' &-' D 1<A B&>>&-@ ' B<@@1A' <-A' -<>1A' F D' 1' F ' 1 &' <-' &=' ` D& 1F< 10 & ' D<==1 0 JP' &'#1'? 1 1A'<-A'0&@A'K' D'-' D1' 0<>1' 1<@>'`&=' -.@<-A9P' &' '-' `D1' &?- '&=P' F<@10 # ' K< '&=' 1 BD<-A'01' ' ?C& ' <'-' &' =& =1 ' ` D1'0<>1' 1 BD<-A'010 3'P' <'1+1 ' '>1 <-A' <0 &= 1-' <0 D1 ' >< '#1' =&?-A' '-' D1' <-A0 &=' <-' 1 0&-' ' 1 ' 0&-0 &'#1' 0&@A D1' &-1' <@=' &=' D1' 0<>1' !& =1' ? 1 3 P' &' `#1C<'A' &' D1' 01' &=' &?' & A' P' D1' , '-.9 <-A' D1' & D1 ' <@=' &' D'>' D< ' K'@@ =' 0 ' 01'\1' D1' 0<>1' =& ' D1' , '-.G D1' 0<>1' <@=' `# ' D'>P' 0&' 01'\1A' =& ' `&?' & AP' D1' , '-.' &' D1' A1@'+> 1A' # ' D1' 0<'A' 1'0& ' D1 1&=' & D1' 0BD1< & ' &=' D1' &?- ' & ' @<B1' KD1 1' D1' 0<>1' 1'01 ' 0D<@@ #1 # ' -A1- ? 1' #1 K'L ' D1>' ' 0)' ><A1 A?@ ' &' <-0K1 ' D1 1&=' '-' D'0' BB&?- ' &+'A1A3 <@K< 0 D< ''=' <- ' &=' D1' 0<'A' F < 10 & ' D<==1 0 ><A1' &?' &=' D'0 <-A 9 #1' <a1-' C&-' D1' 1< F' D&?' ! <?A' & ' &@@?0'&-9 & ' B&>1' '-' D'0 1<D-' `&=' -.@<-A9P' & ' ` D1' &?- ' &=P' F<@10 # ' K< ' &=' F 1Ba9 D< ' D&01' #1' '- -&' K'01' ` <a1-' J P' K' D'-' D'0 Q `& ' < ? 1P'G' #? 'BD<' D1 ' >< ' #1' 0&@A' K' D'-' D'0 1<@>' `&=' -.@<-A9P' & ' F<@10 D'0 = ' `& ' < ? 1P -& K' D0 <-A'-. ' &+'A1A <@0& D< ' <@@ F < 10 <-A' D<==1 0 ><A1' <-A' K &?.D ' '- ` D1' <-A' &=P' 1@<-AO & ' F <@10 >< ' #1' # &?.D ' <-A' 0&@A' '-' D'0 1<@>' &=' -.@<-A9 <0 D1 ' K1 1' K&-' #1=& 1' D1' ><a'-.' &=' D'0 < ? 19 D'0 I ' `& ' < ? 1P -& K' Dj 0 <-A'-. ' -A' <@0&' `&? ' & A' D1' , '-.P' D< D' & A<'-1A' <-A' 1-<A@1A9 # ' D1' ` 001- ' <-A P' ? D& ' ' <=& 10<'A' D< ' D1' <0 1 0' & ' F < A1-0 =& ' D1' '>1' #1'-.9 &=' 1+1 ' <=' <-A' 0 1 9 '-' 1+1 ' ' ' & &?.D' &K-' <-A' ' <.1' KD1 1' <-' 0?BD' <=' & ' 0 1 ' '0 ?01A' & ' &BB?C'1A9 0D<@@ D<+1' 0?==' B'1-' &K1 ' <-A' ? D& ' ' '-' 1+1 ' 0?BD' ' ' & &?.D' &K-' <-A' '@@<.1 9 KD1 1' D1 '=& ' D1' '>1' #<-.' 0D<@@ #1' <0 1 0' & ' F < A1-0 &=' <-' 0?BD' <=' & ' 0 1 9 <-A' D1' < & ' &=' 0?BD' ' ' &K-' & &?.D' & ' '@@<.1' =& ' D1' '>1' #1'-.9 '= <-' < & ')' #1 9 & D1' <'@'=='0 & ' <'@'=='&=' <D '0?BD' ' ' &K-' & &?.D' & ' '@@<.1' =& ' D1' '>1' #1'-.9

L E) ' L 5 = 6 (B' ' 8' L 8)' " N 8 ' 4 ! L ' '8 = ' ' = 7 ' f ' " ') L !)7 (*B '5) 8) A ' (" 78) # 8) ' @ ' # 4M 5 8 ' 66+ W 5 ')7 8*5' ' 5 8 ' K 5 ' ' - J' ' #1 * +'(7 N 5 ' '

!" &-' !"k # -/&21 2 +' -. ' ;!' ;".0* ' &- .' &2' 6! +1'"! /@ 7".0*

". '&2.' ."' V "1 E!-L 0 .-' ! :' .'" 7"!#E!/' L

-/' ."V "!2 1 /!' &-' "!+ -/' .'" V +!2 L

!' # &!' &#!"2 . ' & &!2' 2 +' C'!' 0 ;"& @' .) 2! "# V "!2' -< /!(' ;@' +&!-2

'=' <- ' <'@'='0 & ' <'@'=='D 1&='#1 <-A' -&' < & ' & ' 1 1<- & ' <- ' & D1 ' =='B1 ' &' D1>' <00'.-1A' # ' D1' 0<'A' < & <'@'==0 & ' <'@'==) ' '-' 1+1 ' ' ' &K -' & &?.D' <-A' '@@<.1 KD1 1' <- ' 0?BD' <= ' & ' P @'0 1 ' '0 ?01A' & ' &BB?C'1A KD1 1' -&' 0?BD' <0 1 0 -& ' F< A1-0 &='<- ' 0?BD' <= ' & ' '0 1 ' #1 D<' D1' <0 1 0 & ' F < A1-0 &=' '1' <= 0 & ' '0 1 '10 &=' D1' ' ' &K -' & &?.D' & ' '@@<.1' -1L '<A &'-'-.' &' D1' 0<>1 <-A' D1' &-0 <#@1' &='0?BD' ' ' & &?.D' &K -' & ' '@@<.1 0D<@@ D< 1' &K ' <-A' ? D& ' ' &'01< BD' '-' D1' ' &K -' <= 1' <-A' '0 1 '10 <-A' '-' <@@ & D1 ' <= 0 <-A' '0 1 '10 ? 1 '-.' # 'K '&=' <@1'<- '&=' D1' <=& 10<'A' F< 10 <0 K1@@ K' D'-' ' '10 & &?.D0 &K-0 <-A' '@@<.10 &=' D1' <>1' 1<@'-' `&=' -.@<-A9P' <-A' &=' ` D1' &?- '&=P' F <@10 <0 K' D'-' D1' '#1 '10 <-A' ! <-j BD'01' &=' D1' 0<>1' ' '10 & &?.D0 &K-0 <-A' '@@<.10 <' <@@ '>10 1<0&-<#@=1' # ' ` D1' " < 9OP' '-' !<' 0 <-A' < a1 0 D&C0 &C1-9 <-A' F< 1D&?010 <@@ ><--1 ' 0?BD' D<==1 0 F < 10 <-A' 1 BD<-A'010 C1 <'-'-.' &' 1+1 ' &=' D1' ' C &C1 ' <= 0 <-A' '0 1 '10 KD'BD' 0D<@@ #1' ><A1' # ' <- ' @'1-' '=B1 <-' & ' F &><-9 & ' <- ' D1 ' 1 0&-' & ' 1=0&-0 K' D'-' D1' 0<>1' 1<@>' `&=' -.@<-AP' ' F <@10 ' KD'BD' <' <- ' '>1' 0D<@@ #1' &BB?C'1A' # ' <- ' &=' D1' 0<'A' <= 0 & ' '0 1 '10 '-' KD&01' <-A0 0&1+1 ' D1 ' ><' #1'=&?-A;' &+'A1A' <@j K< 0 D<' D1' 0<'A' <0 1 0 F < A1-0 <-A' & D1 '-<>1A' '-' D1' 0<'A' A'-<-B1' &' #1' 1< BD1 0 0D<@@ -& ' 1- 1 ' '-'<- ' @<B1 1L1>C ' # ' '+'@1.1' ! <-BD'01' & ' ?0 &>9 &' ><a1' '-' D1' <>1' <D ' 1< BD <0 '0 <=& 10<'A #? ' # ' D1' +1 0'.D ' &=' 0&>1' ==' B1 ' &=' 1+1 ' 0?BD' @<B1' 0& 1L1>C 9 KD1 1' <- ' ?BD' 1< BD'0D<@@ D<CC1-' &'#1' ><A1; -A' '=' D1' 00AA' 1< BD1 0 # ' D1' 0<>1' 1< BD' A&' ='-A D<' 0?BD' D<==1 0 F < 10' & ' 1 BD<-A'010 & ' <- ' < ' D1 1&=9 #1' -& ' `C? 1 @<K=?@/ P' <-A' <#@1' D<==1 0 F < 10' & ' 1 BD<-A'010 <-A' A?@ ' ><A1' <-A' K &?.D <0 D1 ' &?.D ' &' #1 <-A' D<' 0?='B'1- @ ' C &+1A D<' D1-' ' ' 0D<@@ #1' @<K=?@ &' 0?BD' 1< BD1 0 &' <a1' <-A' 01'01' <@@ 0?BD' D<==1 0 F < 10' <-A' 1 BD<-A'010 KD'BD' 0D<@@ #1' 0&'=&?-A' -& ' .&&A '`C? 1 @<K=?@/ P' & '<#@1 -& ' K1@@ K &?.D <0 <' D'-.' =& =1' D1' &-1' <@='`&=' D1' 0<>1' ! & =1' ? 1' &' #1' C<'A' &' D1' 1' &='&? ' & A/ P' D1' , '-.9 <-A' D1' & D1 ' <@='D1 1&=' &' 0?BD' <0 1 0 & ' F < A1-0 KD'BD' 0&' 0D<@@ ><a1' 1<=BD' '-A' ='-A' D1'0<>1' -A' D<' D'0' C 101-' A'-<-B1' `& ' < ? 1 B&-B1 -j '-.' D1' 0<'A' '='B1 0 0 <-A' <-A' #1' '-' #'0' ! & B1 <0 @&-.' <0 0D<@@ C@1<01' &?'' &+1 1'.-' & A' D1' , '-.9 = &+'A1A' <@K< 0 ' D<' /)' D'0 A'-<-B1' <-A' Q 9 '<- ' & D1 ' A'-<-B1' & ' I 9 ><A1' & ' &' #1' ><A1 '-' D'0 C 101-' < @'<>1- 9 0D<@@ 1L 1-A ' ' '-' <- ' K'01' #1' C 1 ?A'B'<@ & ' D? ==' @ &' &#1 ' @@'-. &-' @1 a 9 "1<-' &=' D1' =';1 ' D<C1@ &='`&? ' & AP' D1' , '-.' &=' <'-' < '-8@18E <-A' &=' &-A&-9 -& ' &' D'0 ?BB10j 0& 0 N)' &=' D1' 0<'A' D<C1@D1 1<= 1 '=C ' D1' '>1' #1'-.' '-' <- ' ><--1 'A' -& ' &' D1' 0<'A' &#1 9 "1<-9 <-A' D1' D<C' 1 ' &=' D1' 0<>1' D<C1@ <0 '-' <-A' =& ' <@@ ><--1 ' &=' '+'@1.10 '#1 '10 ! <-BD'010 '.D 0 <-A' ?0 &>0 '-' <- ' ><--1 ' C1 <'-'-.' &' D1>' #1=& 1' D'0 < @'<j >1-'G -& ' &' <- ' 1 0&-' C ' 1 0&-0 AK1@@'-.' & ' '-D<j #' '-.9 & ' KD'BD' 0D<@@ D1 1<= 1 ' AK1@@ & ' '-D<#' ' K' D'-' D1' <-= ?< ' <-A' ! 1B'D=' &=' D1' 0<>1' D<C1@ <-A' 10C1B'<@@ 0 K' D'-' D1' <-1' B&>>&-@ ' B<@@1A' <'-' < '-/0 <-1

0" <0B?-0 <'@@'=1' &-' <@@@'=' 0&' ' &?' 0&'1-9 I ' ?@@ <' 19 &?' 1 .1<-' &?' <? 1' &=='B1 ' B1?L' <00'.-1' C' @10 A' \' <' 1' <'@@'=' &?' <'@@'=9 I ' 1-' BD?-' ' 11' '@@1' ? .D' I ' '@@<.19 @[?' <0B?-' '1@ < 1' &?' >10 '1 ' 10 ' ?01\' &?' &BB?C'1\9 1-' H?1@ -?@@10 '1@L' <'0 10 -1' E< A1'-0 A<0C?-1' A1@ < 1' &?' >10A1 ' 0&?-9 H' @10 <'0 10 ' E< A1'-0 A10 < 10 &?' >10A1 0 A1@ ' 11' '@@1' ? .=1' &?' '@@<.1' 'B1@@?' CBD1'-' <A &'.-/-9 I ' @1' &-0 <#@1' A<?A1@ ' 11' ? .D' '@@1' &?' '@@<.19 <'1-' C&<' ' I ' <?^& ' 1' A1'01 BD1 9 1-' @&? ' CC 10 < 10 I ' '='10A1 0 I ' 1-' &? \' <? 10 < 10 I ' >10A1 0 ? <- \' C' +&@1' A1' +1-A1' <0B -0 A1' @10 A' \' BD<==< 10 0'#'1-' A1'-\' ' 110 ? .@@0' ' 10 I ' '@@<.10 A1' B10 ' &'<@>1' I ' E<@10 B&>1' A1'-\' @10 # 110 I ' ?-BD'010 A1' >10>10 @10 ' 110 ? .D0' '@@10 I ' '@@<.10 <' &?' 1>C0 10&-8 <#@19 C' &? ' 10 =1' 10 I ' I D110' 0D&CC10 &+0 1\' I ' K< 1D&?010 &? \' >< 0 A1@L' BD<==< 10 K< 10 I ' BD<-8 A'010 BD?-' A1' @1? ' CC 10 < 10 >10A1 0 <CC? 18 -0- \9 H?1@@10 , &- ' =<' \' C' <0B?-' <@'1-' < A='B1 ' D&>1' &?' =1>>19 &-' <0B >' C? 1' C0&-19 A1'DL' B10 ' &'<@>1' &?' E<@10 &?' H?1@@10 <?' <0B?-' 1>C0 , &?-' &BB?C'1\' C' <0B?-' A10 >10>10 @10 < 10 &?' >10A1 0 1-' H'H1' ><'-0 H'@0 C A001-' 10 1' &+1\' ? +1?' &? \' =&' \' H' @10 A' \' <'0 10 E< A1'-0 I ' <? 10 1-' @<' A' 1' & A1-/-B1' -&>1\' A10 1' 1 BD11? 0 -1- =-' C<0 1-' <0B?-' @'1? 1L1>C ' C' C '+'@1.1' = <-BD'01' &?' B?0 ?>19 A1' =1' 1' 1-' 'B1@@ <0B?-' 01 BD1' B&>1' A1 0-' 10 ' A' 9 0'-&-' C' 0? +1?' A<0B?-' ==' B1 ' A1' BD?-' <?A1@ @'1?' '00'-' 1L1>C 9 @&?' <0B?-' A1@ 01 BD1 9 A10 1' =<' ' <+'1-A <G 1' 0" @10 A' \' 1 'D1&? 0 C' >10>1' @1' 01 BD1' &+1-' H' '1@L' BD<==< 10 K< 10 &?' BD<-A'010 &?' <0B?-1' C< ' 1- 9 -1' 0&'1-' &?' 0&=' C? 1\' @&'<@L' 1 <##@1\' BD<==< 10 K< 10 &?' BD<-8 A'01\9 I ' A &' 1>1D ' =<' \' I ' &, 1\' 0'B&>1' '@0' A?'001-' 10 19 I ' B1&' A?1>1-' C+19 H' <A&-H10 ' @' <' <0' A1@L' 1 BD1&? 0 A1' C 1-A 1' I ' 01'01 ' B&>1' BD&01' =& =<' ' &? \' '1@L' BD<==< 10 K< 10 I ' ' BD<-A'010 H?1?L' '00'-' M &-' &+1\' -'1-' #&A0' C? 1\' @&'<@L' &?' <##10 -1' A &' 1>1-' &, 1 \ G @? 1' >&A1' 1-' <?' &'' A<CC1 1'.-1' I ' @<? 1' >&' 1' 1-' <?' A1@L' <'0 10 &?' E< A1'-0 H' '00'-' =1 &-' 01 BD1' I ' B1&' &, &-;' 1' H' B10 ' C01-' & A1-/-B1' @10 A' \' < '=' 0 B&-R-<-' 10 &'01' I ' 0& ' 1-' 0&-' =& B1 9 <?L'' @&-.1>1-' &>1' ' C@1 <' <' - 1' ' @1' & ' ? +1?' <?L'' H' -1' B10 ' A' ' & A1-/-B1' I ' < I 1 9 -1' -?@@ <? 1' & A1-/-B1' &?' <Q@1' =1@ ' &?' <=@ I ' 1' 1-' B10 ' C01-' C< @1>1-9 1L 1-A1' -1-1' 0&=' Cd ?A'B'<@@ &?' A<><8 .1&?0 <' &#' A@@ -. &-' @1 a' "1<-' A1@ = <-B' D<C1@@ A?' & ' A1' 1'-' < -' . >' A1' &?=@A 10 -1' <' 010 0?BB100&? 0 A?' A' ' D<C1@@ 1-' <C 10 C? ' @1' 1>C0 10 1<- \9 1-' <0B?-' >< 1G 1' <' @1' A' ' &#' "1<-19 I ' D<C' 1' A1' >10>1' @<' D<C1='9 B&>1' 1-' I ' C? ' &? \' >< 0 C '+'@1.1 é @' 110 = <?-BD'010 A &' 10 I ' B? ?>10 <0 1?L' <CC1 1'.-/- \' 1-' <0B?-' ><519 A1+/-' >10>1' $ B10 'C< @1>1-G 1' <@ <0B?-1' C0&-1' ?C0&-10 A1> <- \' &?' 1-D<#' <- \9 &?' H' 1-<C 10 A1> &-' &?' 1-D<#' &-9 A1'-\' @1' 1'- ?< '1' I ' CB'-A' A1' >10>1' @<' D<C1@@G I ' 0C1B'<@>1-' A1'-\' @<' 1-1@@1' <CC1@@1' B&1>1-' 1'-' < -0 <-1

-' "&'&+!*!/' 3+ #1Z ! ! "# '2 +' ; !'0-/!'" &!7" ' -' &#!'" !"!.

V "!2'-.' + 7 0 .'" /0+@7".0* ' 2 +' ; !' ." !&'

&2 2 +' !.-&-0!' /0"&-*' !' M&-*($ 3+! 20"!' 3",.'&2.' .'" !' &;!" &!2' ' &- "&-+!' b" -/'&-' .-/.-

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/' ## !' ?1' /' A'1 &=' &#1&-.1' & R= &' :]'<< L') (5 " K)'S -

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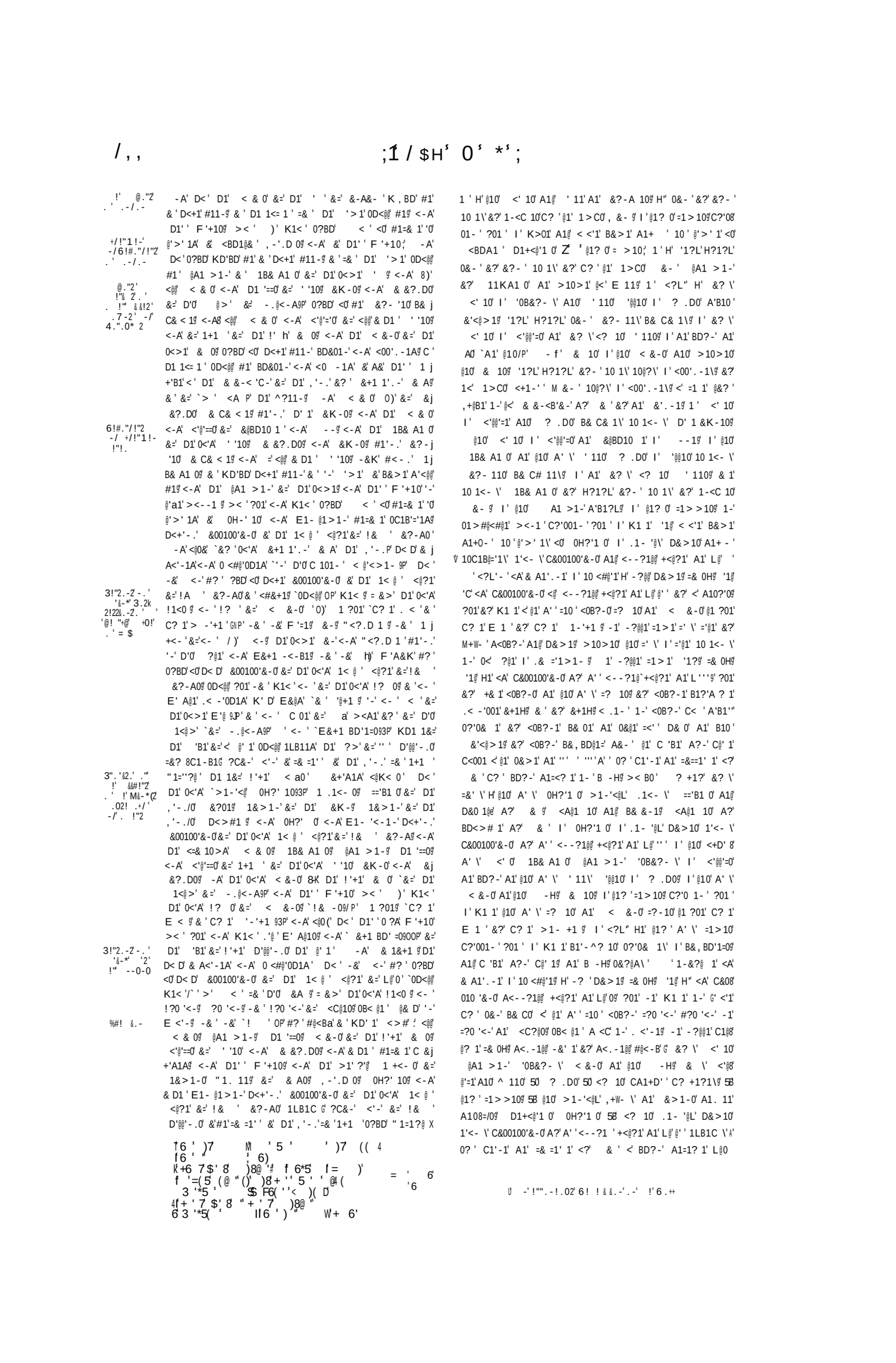

' <?L" <A' & AA. -1' I ' 10@<#@'1@ H' -?= ' +<A@1 ' -1' -?@@ <? 1' C0&-1' A10C?# ' B1= ' A1. 1@ <' @1' =10 ' A1' 1' - ' C1 1' <CC1@@10@@<A+'-B@1' ' M <' 1-' <-'A1' - 1' ?' '@@1' #B+ ' ?01' -1' K1 1' 1-' < <'1' C? ' 0&-' B& C0' <0B?-0' #&@0 1 0' -1' 0 ?==1' A1' @<'-1 ' & &-' -1' B<A<0@ -<? 1' 0 ?==? 1' 1-' 0&-' C1 C&'-' 0<?=' @'-? 1' <BB& A<- ' <@ >10>1G 0? ' C1'-1' A1' =& =1' 1' <?' & ' <@ B#?-' A1=<? 1' + ' 0' +''' ' A ' '&?@ 1' <A' & A1'. -1' I ' 10 <C@'1@ H' -? ' D1+<@'1 ' A10&?#\' @10 < 1' A1' ' 10H?'1 ' .1- '@D&>1' -1-<? 1' C0&-1' ?01' &?' K1 1' ' @1' =10 ' A1' &? \' 01'- \' H" M <' 1-' <-' - 1' ' '@@1' ' L+' <0B -' .&+-1' <a1 ' &?' B@&BD1' A1' >1'-A 1' @&-.1? @ &?' C1 C&'-' 0 ?==1@ B&-= '1' -' '10' ? !! !' ?' >10>1' @<' C1'-1@ <' B#?-' A1=<? 1G 1 ' <?L" <A' & A1'. -1' I ' 10 <#@'1' H' -? ' D1+<@'1 @ A10&?#R' @10 < 1' A1' =1 0 H ? ' 1 ' d'1- '@ D&>1' &?' <? 1' C0#-1@ ?01' -1' K1 1' <' @1' A' ' =10 ' A1' 1'- ' 11 1' <?' <0B?-' A1@ A'@m' C0&-10' B&- < '1' <' B1 'B<8A1 0-B1@ =& I B1' 1-01>1-' <?' & ' <' BD?-' A1=<? 1' H< <- ' A1-'1 ' ' <?L'- ' <A' & A1'. -1' I ' 10 <#@'1' C' @<' A' ' <?=@& ' 1' ' -? ' M+W- ' A1' D?0#& 'A '1@ -1' &1' @<#&=1 ' -1', +3- ' <?' <0B?-' < '='B1 ' 1-D<F <- ' D& 0' A1@ ' 11' &?' ? .D@ <C 10' @1' A' ' =10 ' A1' &? \' 01'- \' 01' -1' K1 1' 1 ' @1? ' +10 ? 1' <0B?-' %>C:' A&?- ' @1' # &A1 1 A1' C<001 <' 1-' C 'B1' ' ' 0 ' 1' H' <0B?-' >10>10' @10' M+W- 10' &?' @<#& 1 0' 0?== 1' <0B?-1' A1' @1? 0' =1> >1 ' A?01 ' &?' K1 1' <' >10>1' @1' =10 ' <0B?-' +10 ? 1' A1' C@?'0' D<?@ ' C 'B1' H' 10 ' A1+ - ' @' >' 1' <' @&? ' < &-0@ 1' H' B1?]' 0?== 1 ' <0B?-1' A1' @1? ' A' \' =1> >10' <C 10' >10>1' @1' =10 ' A? 1 ' &?' K1 1' <0B?-0' B&? B#'1=0' A&- ' @1' C 'B1' A1@ C@' 1' C<001 <' A&-0\1' A1-'1 0G 1' H' <0B?-' A1' @10' >10>10' + - 10' -1' @<#& 1 0' C?'0' >A0>1' @1' =10 ' ?01' A?' K1 1' <0B?-0' BD<?01\' B@&01\@ -1' <0B'?@0' BD<?010' A&- ' @1' C<' 1' C<001 <' 1?' C 'B1' L''' ' A G 1' H' @10' >10>10' M+W- 1\' &?' @<#& 1 0' -1' -? ' A1' @1? 0' =1> >10' <' >10>1' @1' =1 ' K1 1' < ?-' B1'@'B ? 1' .<>'001' A< .1- @ 0?' C1'-1' A1' =& =1' 1' C ' BD?-' A1=1? 1' <?' & ']@' A1 K1 0 ' ' C?' B1&' H' @10' B& BD'1=0' &? -1>1-' <CC& 1\' 1-' B(0 ' &'<D 1' 1-A B1-' . ?-A' BD< .1' I ' B&0 ' 1 '@1' >10>1@ ' 1-' 1==1<' ' .<0 @ 1' A' ' @1' & ' C'@<?E& ' 1' 0?'0A@ ' <A' & A1'. -1' I ' 10 <#@'1@ H' -?@@1' C0&-1' <C0' @1' =10 ' A1' 1'- ' 'BD1 ' @< BD<-.@1' H' R <' 1-' <-' A1' '@@1' ' L+' +1-A1' 1-' <0B?-1' C< ' A1@ A1'-\' B10 ' &'<@>1' <0B?-1' @<+-1' '=1@0' ?>C@1' &?' <0B?-'< 1' >< 1' A1\' B ? BD'1=1' A&? ' ' @1' C 'B1' A?-' C@' 1' C<001 <' L'0 ' 0?' C1'-1' A1' =& =1' 1' <?' & ' C?' BD?-' C@' 1' +1-A?\' <' C F 0' D<? 1' C 'B1' L'' 0 ' ? A

@ K #!' "%' .$- +

-A' <@0&' D1' D< D' & A<'-1A' <-A' 0 <#@'0D1A ' D< ' -& 1&><-@ -& ' -&-1' & D1 ' 1 0&-' ?-A1 ' ` D1' 0< > 1 P' "1. 11 ' = &>' D1' 0<'A' !1<0 ' &=' <'- ' 1 1 ' B<@@1A' <A' +'-B?@<@ KD'BD' 0D<@@ #1' '-' D1' 1< ' &=' &? ' & A' ' ' L+' 0D<@@ ?01' -& ' K1< ' '-' < ' =& ' D'0' &A @ <- ' &@0 1 0' -& ' 0 ?==' -.' &=' F &&@@ & &-@ -& ' <A< ' -& ' `< - 0P' 0 ?==' -.' '-' D' ' "&?##@1 @ #? ' &-@ ' '-'-.' <BB& A'-.' &' D1' 0<>1'G ?C&-' <'-' &' =& =1' ' &' D1' , '- ./0' 01' =& ' 1+1 ' 0?BD' "1=<?@ ' 'L' D'@@'-.0' <-A' '.D 8C1-B1 ' @0&' `&? ' 0<'A' &+1 1'.-' & A' D1' , '-.@ # ' D1' A+'B1' <-A' 001- ' <=& 10<'A9P' D< D' & j A<'-1A' <-A' 10 <#@'0D1A ' D< ' -&'=1-'.D ' ?-A1 ' D1' 0 < 1' &='<' & A@ 0H?' 1@ E1- @1><-@ -& ' -&-1' & D1 ' 1 0&-98 0D<@@ ?01' & ' K1< ' = &>' D1' !1<0 ' &=' @@' <'- 0@ KD'BD' 0D<@@ #1' '-' D1' 1< ' &=' &? ' & A' @L+ ' <- ' E&K-@ <Ba1 @ & ' ` &< @h P' ?-@100' ' '#1' &=' 0?BD' 1-. D' D< ' D1' 0<>1' N )' >< ' B&+1 ' #'0' C '+ ' 1>#1 0' <-A' ? &Ba0X' ?C&-' <'-' &' =& =1' ' &' D1' , '-.' =& ' 1+1 ' "1=<?@ ' K1- ' D'@@'-.0' ` @0&' # ' D1' 001- ' <=& 1j 0<'A@' ' ' & A<'-1A D< ''P' -&' < @& '<= ' D1' 0<'A ! 1<0 @ 0D<@@ ><a1' H' <- ' 1 0&-@ <- ' E&K-@ <Ba1 @ & ' & < h P' &=' @100' 1-. D@ & ' "&?#@1 ' 0 ?==1A@ B&- < ' &' D1' 1>'010@ ?C&-' D1' 0<>1' <'-' =& ' 1+1 ' "1=<?@ ' -A' <@0&' D< D' & A<'-1A' <-A' 10 <#@'0D1A@ `'-' D1' <<@A' C 101-' < @'<>1-9P' D< ' -&' , <'.D ' ?-A1 ' D1' < 1' &=' <' & A@ 0H?' 1@ E1- @1><-@ @'& ' & D1 ' 1 0&-@ 0D<@@ ?01' -& ' K1< @ <= 1 ' DH' 0<'A' !1<0 ' &=' <'- ' 1 1 @ <- ' D&10' & ' && 0' D<+'-.' 'a10' C<00'-.' D1' 1-. D' &=' K&' -BD10G ?C&-' <'-' &'=& =1' ' &' D1' , '-.' =& ' 1+1 ' " 1j =<?@ ' D 11' D'@@'-.0' <CA' !&? 8C1-B1 ' ` -A' h P' '=' <-' ` D&1><a1 'N' P' ><a1' <-' 'a10' &=' D&10' & ' && 0' <= 1 ' D1' 0<'A' !1<0 ' &=' <'- ' 1 1 @ &' <-' &=' DH' 0<'A' 1 0&-0@ B&- < ' &' D'0' A'-<-B1@ D1' 0D<@@ @'a1K'01' =& =1' ' &' D1' , '-.' =& ' 1+1 ' " 1=<?@ ' `! &? ' D'@@'-.0' ! &? 8C1-B1 / P' @0&' DA' D< D' A<'-1A' <-A' 10 <#@'0D1A@ `'# ' D1' A+'B1' V<-A' <R1-' <=& 10<'A@ D<' -&' 1 +<-' &=' ?0#<-A @ -& ' -&' B& > >& ' <#&? 1' -& ' 1 +<-' `-& / P' <-' 'j ='B1 ' AK1@@'-.' &? ' &=' <' ' & ' & &?.D@ <= 1' D1' 0<'A' !1<0 ' =' @@' <'- 0@ 0D<@@ ?01' -& ' K1< ' '-' D1' ' @& D'-.' <-' @& D@ KD1 1&=' D1' # &<A' < A' 0D<@@ C<00' D1' 'B1' &=' K&' D'@@'-.0' X' -& ' D<' <- ' &=' D1' 0<'A' <#&? 1 0' -& ' 1 +<-0' 0?==1 ' <-' &=' D1' ' F '+10' &' K1< ' J' <= 1 ' D1' 0<>1 ! 1<0 @ <-' E'&< D'-.' &=' D'.D1 ' 'B1' D<-' #1=& 1' '0' @' >' 1A' &' D1' ' ?0#<-A0X' -A ' D<' D1 ' 0?==1 ' <-' &=' D1' ' 0<'A' F '+10@ <= 1 ' DH' 0<>1' !1<0 @ &' '3')' K1< ' <-' ` &+1 B@''1=090 h' P' KD1 1&=' D1' 'B1' T= D1' , 1' 0D<@@ C<00 K1@+18C1-B18@ -& ' D<' -&-1' &=' D1' 0<>1' 1 +<-0' -& ' <#&? 1 0@ <= 1 ' D1' 0<>1' !1<0 @ 0D<@@ K1<' <-' B@&01' ` &01-9 h P' KD1 1&=' D1' <' ' 0D<@@ C<00' '-' 'B1' ! &? 11-8C1-B1X -& ' D<' D1' 0<>1' 1 j +<-0' -& ' <#&? 1 0@ -& ' -&-1' &=' D1' ' F '+10@ = &>' D1' 0<'A' !1<0 @ 0D<@@ F 1<' ' E' A@1' .< -'0#1A' K' D' '@+1 X' ?C&-' <'-' &' =& =1' ' =& ' 1+1 ' "1=<?@ ' &' D1' , '-.@ D 11' D'@@'-.0' !&? 8C1 B1' -A' #1B<?01' D<' ` &+1 BD'1= 'W' P' A<'@ ' # &?.D ' '- &' D'0' I <@>' A&' >A?B1' . 1<' D<' .1' <-A' &0 ' '-' D1' 0<>1@ <-A' '-' ==1 @ '-' F <0 1@ &? ' 0<'A' &+1 1'.-' & A' D1' , '-.@ # ' D1' ? D ' '<=& 10<'A@ #< D@ & A<=11A' <-A' 0 <#@'0D1A@ D< ' -&' 1 0&-@ <= 1 ' D1' ! 1<0 ' &=' <'- ' =BD<1@ D1' BDj <-.1@@ KD'BD' 0D<@@ #1' '-' D1' 1< ' &=' &? ' & A' ` -1' D&?0<-A' ='+1' D?-A 1A' 0'L 8='+19 h' 6' 0D<@@ 01@@ '-' <-' < 'K' D'-' D'0' 1<@>@<-' <K-@ '1=@10@ > C@1@ '<-' & D1 ' >< --1 ' =' `E&+1 BD'1=19 3' P' KD1 1&=' D1') ' @' 1' 0D<@@ 1LB11A' 1-' D'' -.0@ ?C&-' '-' &' =& =1' ' &' D1' , '-.' =& ' 1+1 ' @' 1' 0&@A' < ' <-' D'.D1 ' 'B1@ L''' ' '''' A

4 5 ' M 5 " M! B' <' N K .', !@-*' 0 "&* ' ' "0@@2!" (%+' / ' ' "' Q 4M+" 6 ' S 4f 6 ' " S@WK ' 4f 2=*5(' M' 5 #) ")@5 ' - H' 5' 3 '*5(' C+'(* ' ' ' ; Q ' L+' N$ ' ' Q' N - ; '"% % * $' '$ % % % M* % ' * ' ' '6

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3!- + @' . -' &+. "2

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"!+ . ' !"' - 2' &- 02; -/"@ (' .0"!"2 ' 11

3"&#!' . ' ' M!"# &! 2

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W8 !-#!2

-A' <@0& #1' D< D' & A<'-1A' <-A' 0 <#@'0D1A ' D< ' D1'
?0 'B10' &=' D1' 1<B1' &=' 1+1 ' &?- 0' < & 0' &='
' '10' <-A' & &?.D0' K' D'-' D'0' 1<@>9' 0D<@@' D<+1'
? D& ' '<-A' &K1 ' &' 1-H?' 1@ D10@ 9' <-A' A1 1 >'-1'
<@@' <-A' 1+1 ' &=' D1' 0<'A' "1='"?@ 0' <-A' !& =1' ? 10@ <0
F1@@ # ' -H?' ' <0' # ' A?1' L<>'-< '&-' &=' 1+1 ' &='
D1' 0<'A' '!1-A1 0' B&- < ' &' D'0' A'-<-B1G <-A'
D1' < 1 0' <-A' <?0 0@ B&-B1 -'-.' D1' 0<'A' ==1-B10'
<-A' !& =1' ? 10@ &' A1 1 >'-1' # ' @'a1' &B100' <-A'
'-' @'a1' <--1 ' <-A' !& >' #1=& 1' <'-A1 ' '-' D'0'
1D<@=9 <0' '0' B&> >&-@ ' ?01A' # ' D1>' &=' 10C<00'
A&-1' K' D' !& B1' <-A' >0' <.<'-0 ' D1' , '-./0' 1<B19
U A' <= 1 ' D1' <'-A1 ' ,a1' L1B? '&- 8' -AG '=' <- '
< 1 9' &?BD'-.' <- '&=' D1' 0<'A' ==1-B10@ #18=1>& 1A'
`& =P' <- ' &=' D1' 0<'A' ?0 'B10' &=' C1<B1' &=' < & 0@
#1=& 1' D1', '-.9' D< ' D1-' D1' ?0 'B10' `< . K ' =& 0P'
@1<0' #1=& 1' D1', '-.' &' #1' D&@A1-9 0D<@@' D<+1' &K1 '
&' <K< A' 0?BD' &B100' <-A' L1B? '&-' '-' D'0' 1D<@=9 I '
#1=& 1''0' @' >' 1A ' @0&' D1' D< D' & A<'-1A' <-A' 0 <#@'0D1A '
D< ' <@@' D1' 0<'A' !& =1' ? 10@ <-A' 1+1 ' &=' D1>9 0D<@@
#1' @1+'1A@ <CC@'1A@ <-A' 1>C@& 1A' &' D1' 01' <-A' L8 '
C1-B10' &=' D1', '-./0' &?01 ' &+'A1A' <@K< 0@@ D<' D'0'
` < ? 1/P' &=' < '#1' '-'-&' K'01' C 1 ?A'B'<@ [' D? j
=?@ &'<-' 1 0&-9&='<-A'=& ' /)' K1< '-.' &='<-' ' ` -<8'
>1-9/P' 10 ? 1@ &' CC< 1@' '-' A&'-.'&=' '+'-1' 1 +'B19'
<-A' < 1-A'-.' &' D1' 0<>1G -&' D<' D'0' A'-<-B1'
1L 1-A' &' D1' ?0 'B10' &=' <-' 1-BD' &=' &?' &+1 1'.-'
& A' D1', '-.9 <0 1' & ' ` F < A1-'N P' &=' D1' &@@09'
` <0 1 /P' &=' D1', '-./0' D<-B1 9' < &-0' &=' D1'
, '-./0' LBD1H?1 9' -&' D<-B1@@&' &=' D1' 0<>1@ KD'BD'
-&K' #1@ &' D1 1<= 1 ' 0D<=' #1@ -&' &' <-' &=' D1>9/
&+'A1A' <@0&' D<' D1' BD&@< 0' &=' D1' -'+1 0' '10'
&=' D'0' 1<@>9' <-A' BD&@< 0' &=' <-' -'+1 0' ' &?' &='
D'0' 1<@>9' >< ' /)' K1< '80?BD' < ' <0' D1 ' >< ' kO)'
K1< ' # ' D1' ?@1' &=' D1' 0<'A' -'+1 0' '10@ -& K' Dj
0 <-A'-.' D'0' A'-<-B1' &+'A1A' <@0&' D<' 1-BDj
>1-9' 1 <@A0@ ? 0-' <- 0@ K& A8#1< 1 0' &' < & 0@
1001-.1 0@<-A' >0 1@0@ -&' -&-1' C=' D1>9 -&' @< j
1 0' '-' D1' ' - 1 '?A10@ 0D<@@ -&' #1' B&>C '01A' K' D'-'
D'0' ` < ? 1/'P - & ' -&' 1 0&-0' <0' I ' K1< '-.'&='<-'
` ? 010@ &BD109J P' & ' &K-0' =& ' <C0' &=' D'@A 1-9
0D<='#1' W')' B&>C '01A' K' D'-' D1'0<>1' &+'A1A' <@0&'
D< ' D'0' ` A'-<-B1/P' A&' '-' -&' K'01' 1L 1-A' &' >@'
><--1 ' &=' < ' -1B100< '@ ' &' #1' `K& -0/P' '-' F < 9'
& ' '-' ` D1' !1< 0'//'P' &=' D1' 0<>1

6!1.'' ♯ . '
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&+& "@
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A1' 1='?-' E&?- 11@ <' 10' A10' ' 110' I ' ? .#0' A1A1'-\' '(
B10 ' & I 'D1@<'1-' '< A=& ' 1' I ' C& ?=' A>H?1 1 '&@1=' I '
>'-1 ' &? \' I ' BD?-' A1' @10' A' \' A1= '? 10' I ' =& =<' ? 1 '
0'#'1-' C' 1-H?1 1' B&>1' C' A?1' 1L<>'-<B'&-' A1' B ?'=
9A1' @10' A' \' &==1-A&? 0' B&- '1' <' 10' & ''1-W-B1G I ' @10'
><'1 0' I ' B<?010' @10' A' \' &==1-010' I ' =& =1' ? 10' B&- '
I -<- \'< R>'-1 ' C' 01>#@<#@1' CB1001' I ' 1-' 01>#@<#@ '
>< 1' I ' =&? >1' A1+ - ' < 1'-A 1' 1-' B1@@ C< '1@ B&>1'
C' B1?L' 10 ' ?0?1@==@1- ' ?01\' A1' =10C<001'=1' '&+1' =& B1'
I ' < >10' 1-B&- 1' @<' C1<L' A?' & 9 1 ' C?'0' @< 1'-A 1'
01>#@<#@1' 1L1B?B'&-G 1 ' 0" <0B?-1' >< '1 ' &?BD<-'
<0B?-' A1' @10' A' \' &==1-010' 0&@ ' 1>&1+1\' A<0B?-' A1' @10'
<+0- A' \' ?0 'B10' A1' 1<0' &?' <' 10' A1+W- ' @1' & 9' H'
<AC-H10' @10' ?0 'B10' <0' C@110' A1+>' @1' & ' <' 1-'1 0'
<'1- 'C&<@' A<.< A1 ' '1@L' CB1001' I ' 1L1B?B'&-'1-'B1 '
C< '1' B&>1' A1+0- ' 10 ' @' >' \' '<?L'-' <A' & A1@.-1'
I ' 10 <#= 1' H' &? \' @10' A' \' =& =1' ? 10' I ' BD?-' A1?L'
0&'1- ' @1+1\' <CC@'1\' I ' 1>C@&'1\' <@' &1C0' I ' 1LC1-010'
A1@@ D&0 1@@ -=1' A' ' _/' @1' & ' ? +1?' &? \' =&' \' H'
B10 ' & A1-0-B1' A< <'1' 1-' -?5' ><51' C ?A'B1' -1-BD?'
><.1' <0B?-' C0&-1@ A1' &?' C? ' ?01 ' &?' K1 -.' A<0B?-'
& -<>1-' +10 ? 1' &?' <CC< <'@@' 1-' =1'0<-' A'+'-1' ,+'B1'
I ' <' 'B1@@' 1- 1-A<-G 1' H' B10 ' & A1-0-B1' 1L 1-A1' <0'
?0 'B10' A<0B'>' A10' <-B0' A?' & 9' <'0 1 ' &?' E< A1'-'
A10' &@@10@ ><'0 10' A1@ D<?-B1@@< @1' A?' & 9' < &-0'
A10BD1H?1 ' A?' & 9' -1' D<?-B1@@1 ' A'B1@@9 H" & 1'0&- '
&-' 1-<C 10' M &- 9' -1' <0' <0B?-0' A1?L ' ? +1?' 1-018'
>1-' H' @10' B&@1 0' AB0' -' 0' 110' B10 ' &'<@>1@ I '
B&@1 0' A<0B?-1' -'+00' 1' D& 0' A1' B10 ' &'<@>1@ C?'0@
01-' ?01 ' I ' K1 1' '1@ C <'1' B&>1' B1?L' C?'001-' ?01 ' I '
K1 1' 0&@&-B' @<' ?@1' A1' @10' A' \' -', 0@ 11\@ B10 ' & A1@
-W-B1' -'1-' B&- '0 1<- ' ? +1?' <?L" H' 1-0>1-@
1 &@A10@ ? B +0- 1\@ K1 A1#1 1 0' <0' <' 10@ 10 '
0<.1 0' I ' '-'0 1@@10@ -<0B?-' A1?L' -1' &?1 0' 1-' @&?'
1- 1@?A10' -1' 0&'1-' B&>C '01\' 1-' B10 ' & A1-/-B1 '
1' <0B?-1' C0&-1' B&>1' C? ' K1 -.' A<0B?-0' #? 010'
C<? 1-1 ' &?' B& &?-10' C< ' B<CC10' A10' 1-=1?- 0' 0&' ' 1-'
<0B?-' > 1' B&>C '01' 1-' B1 ' ? +1?' <?L" H' B10 '
& A1-0- 1' 1-' -? ' ><5' 1L 1-A1' <?' <0B?-' >< 1' A<
<'1' A10 1' -1B100< 1 <1-' ?01\@ 1-' .?1 1' &?' 1-' =11 10'
A1@ >1<-1

W &=' 0' & A1- -B1
/' D&-&- 1>1-'
' <0 1 0' V ?01'<-A
? 110' <K 1-1 0'
?01A' !1 10

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& ?

=1 K @1 # AK< A C? @1 &-H?10 H?< <
0&- C< @1- 1- 0 <> &-1\ < F 10 > @1 LL L &? A<C <- A1 0&- 1 . -1 1 B1 I C A 010 C &. B &-0 I <A C -<-@1- \ ?0H10 @1 LL &? A1 <-+1 > 1 0&- 1 . -1 H?< &- -?1\ >10 > 1 @1 LL &? A1 <-+1 < 1 1C 1 A1 " 1? I C? @1 #1 - A1 @? I 0&- C&1C@1 A1 @<A+0 I <001 - A10 _ 0 10C?1@L I @1T- C& 1@L I < 0C1A<@ 1H?10 A1 01\ &1\ 1- &C A C< @1 > 1 - 10 1<- C0 I C @<?= & 1 A1 >10 > 1 @1 C< @18 > 1 - =0 & A1 . -1 I 10 <#@1 R 1 -0 10 < ? 10 I & A18 -0-B10 1- @< =&? > 1 H1 -0? ; - C >10 C? B1& H B& > 1 C@? &? 0 <-0 C<001\ @ <A 10 1 I 1 - B10 1 &? 0 @ 10 H F < . - 1 A1 A <C0 I @10 > 1 > # 10 5 1H? 1R < B1= = = 0 5 10 A1 1@ = <?A1 A1B1 1 I =<?@L - 1@ H @1 A A <C0 1 C< =10 A<? 10 R 10 -10 C<0 1 1 1 @ <0B?-1 1C? <H &<@ 1- .0?- D&?- A1 B10 R 1G <? <BD10&- A1 B1& A <C0 A<? 10 10 0?- .1\ R 10 &- < -10-1\ 1- .0?-A H?<- 01 1- > 10 > 1 @1 &<@ A h I @@1&H10 +1-A?R A1@ #<?@ I 1LB10A+1 C B1@ > &-0 <- B@1 1 > 1 - @&==1&B1 A1=<? 1 I =<?@L - 1 1- @< =<0<-C1 A1 A <C0 A? @<-1 A1 10 R 1 1 A = @1 & C @< 1 > ? > 1 - A1 @10 G > 001\@ I 1 - C2=1 1 > 1 - A1 1@L @<#&? 0 I &BB?C< @&-0 H?1@@10 &? 10 1 ?01R C @< =1 0<-B1 A A A <C0@ A1 @<A+0 <001 1H?10 I <?B #@ 1 <+ A \ <A & A1 . -1 I 10 <#@1 1 -\ 0 < ? R I & A1-3-B1\ B0 > < B =&? > 1 1-0?<- \

=1 > 1 - & A1 1\ 10 I 10 <#@1 C @<?I A 1 8 ?0 A @H B5?- < 1 A <C @<-?\@ <CC1@@1\ # &A1 @# , <=< I > 0 <+1-A <@1 =10 A1 1 - 1 <CC1@@1 <A+-B?@1@ H M < <- A1 _ @1 L+@ <C 10 C@1 - 1-1K<-B1 <aa ?. 0 1 - -. &? 1- ? -. A B1= C 10 <+1-A@ 1 . -1 B B&- 1 . -1 1 - @&- .1? LL <?@-10@ B < BD?- <?@-1 ?- C#?\ B&- 1 . - @< @<1? 1 A? C ?\ @& > 1@ A10 1 > 10? 1R C @< B 10 A1 > 10 > 1 @1 A <C B 1- @<1? <?@-10 H?< 0 <? > 1 -0 A1 - \ @10 0 10 G 1 0 @1 A A <C 0& C@?@0 @& . 1 - > 10? 1 H @1 \ ] L <?@-10 4 @10 C&<\@ A&- f @<1D< &? A C1@ C<=1 < <@ +1-A&? C? B1& @1LB1A1 < > A > 10? 1 A1 LL H <?@-10@ 0&@&- B @< < 1 A1 @< > 10? 1 A10?0 & A1 . -1\ ?L & A1 . -1\ 10 B 10 <#@1 C @<?I & 1 0?0A @H & \ > <50 A <C0 <CC1@@1\ 1 10 A10 1 = B > 01\ < +1-A C?0 @1 A =10 @ <C 10 C@1 - 1-1K<-B1 <aa - . 0 1 - - . &? 1- ? - . A B1_ C 10 <@ +1-A@ 1 . -1 B B&- 1 . -1 1 - @&- .1? L <?@-10 B @10 C&?\@ 0&@&-B @< > 10? 1 <+ A B 1 - @<1? 1 ?-1 <?@-1 A1 - \ @10 0 10

5 ! C , > !

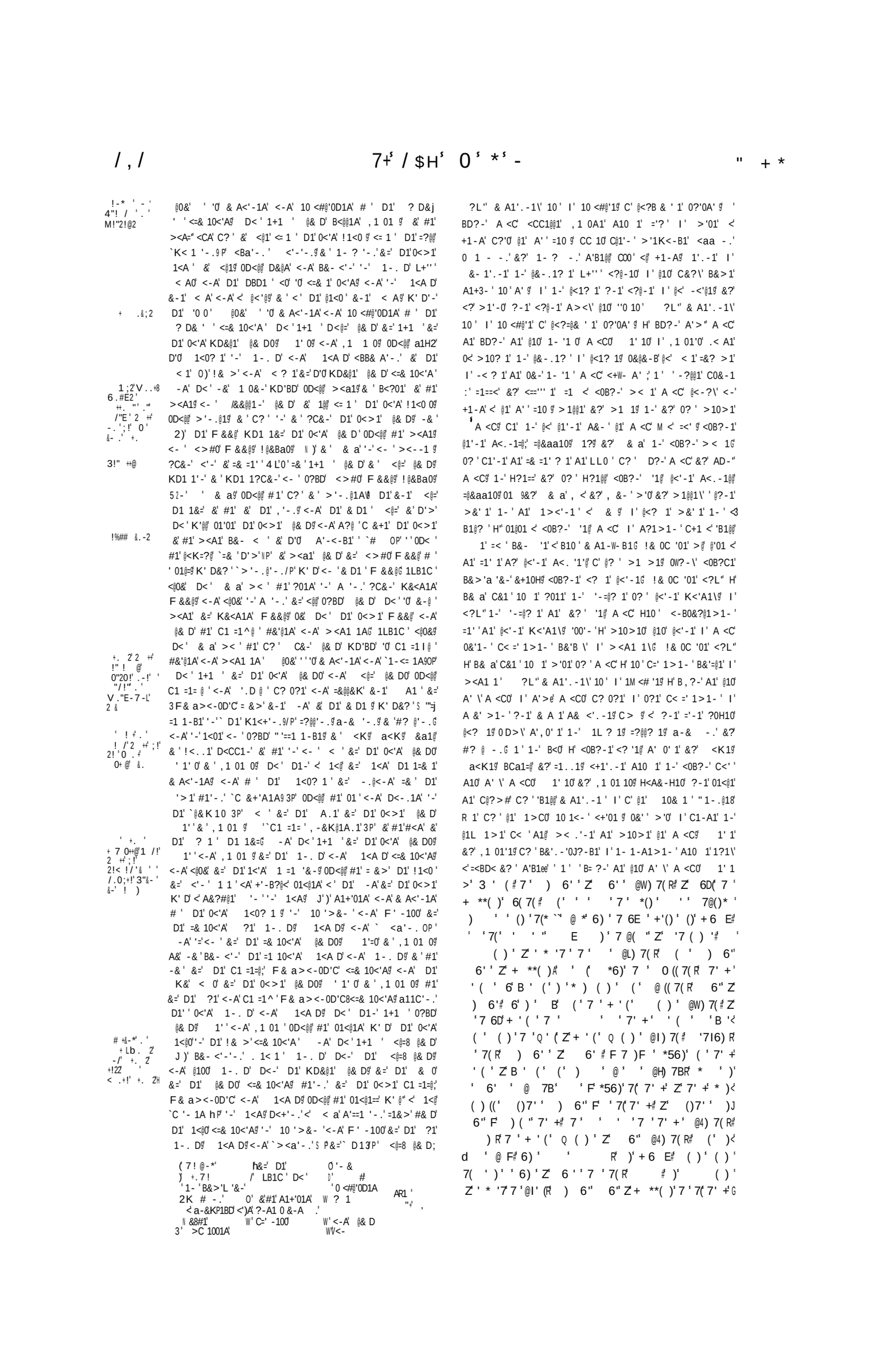
& A , - . AK< A D1 !&? D <= 1 D1 &-0 H?10 @ < D 0 < @ <> 1 - 0? > > &-1A < F 10 > - j 0 1 D1 -18<-A8 K1 - 1 D " < &= C @ - D1 D A 1< &= D 0 1 . - @ <-A # A +1 0 & &. < &-0 <-A A &? - > 1 - 0 B&- - ?1A @ D1 -18<-A8 K1 - 1 D " < &= <-?< @ - 1 ! &? D 1< &= D 0 1 . - @ &- D1 0 <> 1 -18<-A8 K1 - 1 D " < &= <-?< @ & D1 1+1 1 - B1 &= E &A @ <-A =& D1 F 1<@ D &= D > <-A D 0 1&C@1@ # D1 A+ B1 <-A 00 C G &= D1 & A0 C ?<@ <-A 1 > C& <@@ <-A < D1 C1B <@ 1H?10 &= D 0 & > > &-0 #1 - . - 1 0<A < @ <> 1 - @ D< D & A<-1A <-A 10 <j #@ 0D1A B1 <- < ? 10@?A A -<-B10 - ! & > =&@&K - . ! 0 @ F D1 1<0 > <- 1< 0 C<0 @ <-A -&K < D 0 " < @ D1 F & a > <-0D C &= @& D@ <-A D - . 0 1H?0 0 1 & D1 0<> 1@ 0 <-A D< D #11 - &= 0?BD ! <?A@ " 1B1 @ <-A ! <@0 @ D< D1 0<A @& D0 - & D1 <-A0 <-A &?- 10 #1 `D<A - > <@@ P 1C? < 8-@ & D1 . 1< D< > 1 &= D 0 < - A G <-A # 1<0&- D1 1&= < . 1< ^ ?<- &= @& D0 &= & D1 0 <- .1 <-A0 #1 # &?. D - & D 0 1<@ > @ <-A D1 1 , < <- D . D <-A 1LB10 +1 B1@ 1+ A1 - @ 0D1K - . D1 == 1-B1@ " 1=<?@ @ <-A ! <@0D&&A &= D1 > <a - . &= F &&@@1 - @& D0 &= D 0 <-A ; ? 0 <A & A D1 , - . @ =& D1 1 > 1A &= D1 1 > 0 10@ <-A & D1 1=1 > 1 - &= 0?BD <#&? 0 <-A BB?C< &-0@ KD BD D<+1 #11 - ?01A # D1 > <a - . &= D1 0<A @& D0@ # D1 A+ B1@ 001 - @ 1H?10 @ <-A ? D& <=& 10<A@ D< D &A<-1A <-A 10 <#@0D1A B1 <- < ? 10 <-A A -<-B10 @@ <- -1 <-A ! & > 1-0?- . ! @) D< 1+1 KD&@1 F &&@@1 - @& D@ <@@1A &<A @& D@ KD BD 0D<@@ #1 > <A1 <-A 01 & <@1 <= 1 D1 ! 1<0 B<@@1A A - 1 1 <A + - B?@<@ KD BD 0D<@@ #1 - D1 1< &= &? & A] <= 1 D1 = @@ `K< 1 - . P <Ba > .@ 0 <- - . & 1-8 ? - . &= D1 0<> 1 1<A & <@1@ 0D<@@ D&@A <-A B&- <- - 1 - . D LL + < A0@ <-A & 1+1 < A <- -BD@ B&- <- . D1 1<A D &= <-/0 D? > #@ & #1 > 1<j 0? 1A # D1 10 &= A 1 0<> 1 @& D@ <-A - 1<A D < A0@ & + ^ ?< 1 0 < D1 @1<0 @ K D - D1 0 0G -A = D1 0 ?A @& D #1 @& - .1 - 1<0? 1 D<- D1 0<A LL + < A0@ <-A D1 -BD10@ D1- D1 ? 1 D1 1&=0D<@@ C< & D1 1@@1 =& <0 > ?BD <0 A& D 1LB11A 0? BD 1<0? 1 &=LL + < A0@ <BB& = - . & D1 < 1 &= D1 1<0? 1 <#&+1 & A<-1A 8 `  DA  *  1 -<  @1A P  <-A  10 <#@0D1A  #  D1  ? D&  <=& 10<A@ =D<  <@@ > <- -1  &=  @& D0  B<@@1A  1 0@  &  #1  > <A1 <-A C?  &  <@1 <= 1  D1 0<> 1  !1<0 @ <= 1  D1 =?@@ `K< 1 - . P <Ba - .@ 0 <- - . & 1- ? - . D1 1&=@ 1<A & <@1@ 0D<@@ D&@A <-A B&- <- - 1 - . D L < A0 <-A D1 -BD10@ <BB& A - . & D1 1<j 0? 1 <=& 10<A@ <-A - 1<A D -1 < A K D - D1 0 0

D #$ $ $ H& & & $ $! # $ - & > A - 1 - 0 K1 - . # 0 0& #1 A1 -1A + . < 0 $ % % % C %Q % % 6" $ %

'& . 1 / ! #! & 0 - E&0 * . <T9 D

/ 1 - . D <-A - K<A # &= &<A @& =<0

1 - . D <-A 1<A D &= 1 <



' 0 <0B?-' A <C' @<-?\ A<0B?-' A1' @10' 0& 10' A1' @10' A <C0' <+3- ' 1B' 1\ C< =' >1- ' I ' 1'<>' @<1? ' 0&@&-B' 0&-' 0& 1' <+W- ' @' > ' 1\ B&- 1'. -/- ' &'0' <?@-10' I ' Ae' &?' C@?0 >1'-0' H' @1' A' > A <C' 0&' ' >'0' < +1-A' $ <C 10' @1' A' ' =10 H' >10>1' @1' A <C' 0&' ' 1-01<@1' &+1B' ?-.' 01<@1' 1>C001\' 1-' C@?>#1' 1'<- '0'. -1' A'==1 1- ' < BD?- ' A1' @10' A' \' 01<@10 C?' B&'. -'0?-B1' A10 1' 1?1' A1 A1=1? 1' A1' A' A <C @10' A' \' 01<@10' < 10 1' A1+'01\' I ' & A1'. -1\' C' @1' A' ' 10& 1 I ' 10 1' >'0' <' =' -1' A1' B='?-' A1' @10' A' A <C0' I ' A <C0' >1'-A 10' H' A' > A <C0' ?L' C' @<A+'0' <001- ' I ' <?A & ' 1' 0?'0A' \ & A1'. 1\' 10 ' I ' 10 <#@'1 H' @1' 10& 1 ' "1 -.@1R 1 I ' < &-0' '@@1&H10' C? ' @1' 1>C0' 10 1<- \ AC1>1- ' >&-0 <- ' 1-' @10' >10>10' <BB& <C 10' @1' -&># 1' A1' &@' \' A <C0' A' > A <C0' 0 1' 10' ' =B 01' ' C' 1?L' 1 01<@1\ &+1H' @10' -&?-R' A1' @10' C&00100&? 0' A'B1?LG' B#?-' A1' >10>10' @10' E< A1'-0' < 10 1'.?1 A&--1\' <-' -?1@ &1-' < 0&-' A' ' <BB&>C ' C? ' 01\' @<#&? ' I ' A'@'j .1-B1' 1-' B1' C< '1' 1?1\ <' 1B1'C ' A?' A' ' 0BD1H?1 ' C' @<' A'0B 1B'&-' A1' @10' A' \' 10& 1 ' I ' < &-0' 0?-\' < B?-' C<'1>1- ' A B?-1' BD&0 ' 1-' @1' A' ' 0BD1H?1 ' 1-' &?' C? ' @<' '<'0<-B1' A1' 0#-' A' ' <BB&>C ;' 1 ' 1-' B<0' <0B?-' A1' @10' A' \ E< A1'-0' 1-01<@1' <0 ?-' A1' @10' <+0- ' A' \' A <C ' &+1H' <0B?-' <? 1' 01<@1' &?' <0B?-' A1' >10>10' @10' A <C0' '? 1>1- ' @<' \' H' C' @10' ><-'1 ' I ' & A1-D'B1' A10?'0' 10C1B'='1\' 1 ' B1&' C' 0?==B'1- ' C &&=' I ' 1L<>'-<' B'& ' >&-0 1C' I ' <CC &+1\' A1+W- ' @10' Aa\' 10& 1 ' I ' < &-0' C' @10' A' \' A1C&0' '&-' 10 >&'. -1' I ' 1B& A' A1' '1@L' 0?=='B'1- \' C0&-1 ' A1' #&-' I ' A?1' 1C? <B'&-' H?1?L' &- ' C &>C ' 1LC'1-B1' 1-' 1L ? 1' =?@@? 1' I '=<'0? 1' A1' A <C0' G %' 0" >10>1' @1' E< A1'-' 1=?01' A1='01<@1 ' <0B?-' A1' @1 ' A' \' A <C0' =<' \' <BB& A/?- ' <' @10' >10>10' >< 1' I '& A1-3-B1' G &?' 0" <0B?-' '1' E< A1'-'&?' @-&' C 1'. -1' <' @1' A' ' =10 ' C? ' @1' & ' A<0B?-1' C0& 1' C? ' @1-01<@1 ' ^ ' <?@-<.1' A<0B?-' ><-'1 ' A <C' <0B?-' <? 1' 0&>1' A1' >&-&'1' H 0 ' B&- 1'. -?\' 10' 0 <@? \' I ' & A1-W-B10' A1+ - ' B10 ' 1>C0' 1< ' = ' \' I ' -@1- ' 1C1@@1\' G &?' 0" <0B?-' A1' < AA#' &?' >@-C? ' <' @1' =' '=10 ' 1=?01' A1>&-0 1 ' 0<' &>'00'&-' A1' 0&-' &=='B1' <?' <0B?C1' C0&-1' B1&' A10' <- ' 0 ' @1-01<@1 ' &?' >10? 1>1- ' A<0BH-' A1' @1 ' A <C0' <+0- ' A' \' I ' B &' 1L<>'-1\' I ' A?1>1- ' C &+1\' H' <A&-H10' ' <' <?- \' A1=&' \' B&>1' ' 1-' <0B?-' A1' @10' >=101\' &==1-A1' @<' 0&>1' A1' LL'0 ' =& =1 <' @?-1' >&' 1' 1- ' <?' & ' I ' @<? 1' >&' 1' <' @<' C< '1' C &+<-' @<' A' ' &==1-B1' 1-' 'B1@' C' 0?' 1' A1- ' 10 1' 1?1' A1+0- ' @10' A' \' 10& 1 ' I ' < &-0' C' #==@1' A1' A1 1' 1-' =1' A' ' 08' B#1H<1 ' 1-' H?1@' #'@@1' <?A1@L' #'@@1' I ' 1L1B?B'&-' 0&'1- ' 1-1\' H?1?L' 0&- ' ?0?1@>1- ' ?01\' I ' 1?1\' 1-,0' <? 10' <BB&>C <- \' 1-' >1 >1' @10BD1H?1 ;' 1 ' ' B10 \' 10 < ?' \' I ' & A1-0-B1\' I ' <? 10' 0 < ?' \' I ' & A1-0-B1\' A1+W- ' B1 ' 1>C0' => \' -@1- ' 1C1@@1\' B&-' I <- \' \0B?-0' A1' @10' C F 0 10' 0&'1- ' B&- 1'. -?\' I ' 10C1B'='1\' 1-' BD10B?-' E&>=10'&-' <?' B#?-' A1' E< j A1'-' &?' ?@-&? ' <C0' @1' A' ' =10 ' <==<' 1' ' <?L" @&?' CB A1+0- ' 1-' @10' &BB?C<B'&-0' A1' =1'0<-B1' A1' A <C' \' -'1 &-1&?0 1C1 ' '&-' C-' D1' &..

-A' '=' <- ' F &&@@1-' @& D' &=' <- ' ! ' $ ' @& D0' #1=& 1' 1B' 1A' C1 =1=@@ ' ><A1' <-A' D<+'-.' 1<A D' <= 1 ' D'0' & ' #1=& 1' @' >' 1A' B&- <'-'-.' D 11' < A0' <-A' <-' <@=' & ' >& 1' @100' D<-' D1' <@=8 @& D' #1' C? ' & <@1' <= 1 ' D1' 0<'A' !1<0 ' D1' 0<>1' @& D' 0D<@@ #1' 01<@1A' K' D' < 1<@ `C '- 1A P' '-' 1<A' D<+'-.' < a' A'==1 '-.' = &>' <- '&=' D1' 0<'A' 1<@0' =& ' < , -&K@1A.1' & #1' D<A' &=' D1' " 1=1?@ ' &=' D1' <@=' @& D' D1' 0<'A' 1<@0' & #1' A1+'01A' <-A' & A<'-1A' # ' D1' 0<'A' 1<j 0? 1 ' <-A' &' #1' C? ' < ' D1' -A' &=' 1+1 ' &=' D1' <@=8' @& D0' <-A' @& D0' @100' D<-' <@=' @& D0' @0&' # ' D1' A+'B1' 001- ' <-A' ? D& ' ' <=& 10<'A' ' '0' & A<'-1A' <-A' 10 <#@'0D1A' D< ' D1' 1<0? 1 ' &=' -.@<DA' =& ' D1' '>1' #1'-.' 0D<@@ D<+1' &K1 ' <-A' ? D& ' ' & ><a1' 0?BD' <-A' <0' >< - ' ,11C1 0' &=' D1' 0<'A' 1<@0' <0' D1' 0D<@@ D' -a' -1B100< G 0&' D<' -&' <-.1 ' #& -' #1' ><A1' <- ' &=' D1' 0<'A' ,11C1 0' -A' D<' 1+1 ' &=' D1' 0<'A' ,11C1 0' 0&' &' #1' ><A1' 0D<@@ <BB&>C ' 1< @ ' &=' D1' 1+1-?10' &=' D1' ' 0<'A' ='B10' '-' D1' 0<'A' LBD1H?1 ' #1=& 1' D1' 1<0? 1 ' &=' -.@<-A' <-A' D1' < & h' @?1 1' =& ' D1' '>1' #1'-.' A?@ '0D1K'-.' '-' D1' 0<>1' BB&>C 0' D1' ?>#1 ' &=' D1' @& D0' <@=' &Dh' 1' 0' <-A' ,1 01 0' 01<@1A' # ' D1>' K' D' D1' <>10' &=' D1' K-1 0' &=' D1' 0<>1G 1+1 ' &=' D1' 0<>1' , 11 K0' 0' #1' 1K< A1A' 1< @ ' < ' D'0' 0<'A' BB&-C ' =& ' '0' <#&? ' <-A' '@'8' .1-B1' D<A' ' D'0' 1D<@=' <' D1' 1B1'C ' &=' D1' 0<'A' LBD1H?1 ' # ' D1' "'0B 1 '&-' &=' D1' 0<'A' ' 1<0? 1 ' <-A' < &-0' K' D&?' < >1- ' &=' <- ' D'-.' '-' D1' 0<'A' L8' BD1H?1 ' '-' & ' =& ' D1' <h&a2D.' &=' D'0' 0<'A' BB&>C ;' -A' '-' B<01' <- ' &=' D1' <'A' ,11C1 0' A&' 01<@' <- ' &=' D1' <=& 10<'A' @& D0' K' D' <- ' & D1 ' 1<@' & ' <- ' &=' D1' 0<>1' @& D0' & D1 K'01' ><A1' D<-' <BB& A'-.' &' D1' <--1' <-A' A'-<-B1' <#&+1' 0C1B'='1A' 0-A' D<' # ' 0?==B'1- ' &&=' <-A' L<>'-< '&-' 0D1K1A' <-A' <CC &+1A' #1=& 1' D1' 0<'A' 1<0? 1 ' <-A' < &-0' # 'Q D1' 0<'A' " 1C&0' '&-' 10 '>&- ' <-A' F ' -100' 0P' &=' 0?BD' 0?==B'1- ' 1 0&-0' C=' .&&A' <-A' A?1' 1C? < '&-' KD'BD' D<+1' `C &>C / P' LC1 '1-B1' '-' `K1<+'-.90' '=?@@'-.' <-A' `><a'-.' P' &=' @& D0' & ' '=' D1' 0<>1' , 11C1 ' A&' 1=?01' &' 01<@' <-' &=' D1' 0<'A' @& D0' ><A1' <BB& A'-.' &' D1' 0<'A' <--1' <-A' A'-<-B1' <-<-B

V . .+2 ' C# ' 2 +² ; !' 2 & ! /' ' " &#0+ '" 3." 2' . -+@'H

? ' 0<'A' &+1 1' . -' & A' D1' , '- .9 B&-0'A1 '- .' D1' 1>'0109 # ' D1' A+'B19 001- 9 1H?10 9 <-A' - DA8 ' '<=& 10<'A8 A& D' . <- 9 & A<'-9 <-A' 10 <##@'0D9 D<')' F &&@0' <-A' F &&@=1@09 D& '- .' <-A' & @' - .9 DF' 0D<@@ #1' 0D'CC1A' &' C<00 &< ' &=' D'0 1<@>9 <= 1 ' D1' !1<0 ' &=' <0 1 9 KD'BD' 0D<@@ #1' '-' D1' 1< ' &=' &U ' 9 & A'] ' 0D<@@ #1' 0D'CC1A' < ' D1' &K-0 &=' '-BD' & 0 KD1 1'-' D1' , '- .' D< D' D'0 1<>9 D'0 F 1' . D 09 <-A' & 1^& 0 &=' D1' ?0 &>' &' 01 +1' <-A' A1@'+1 ' D1' `` 1 BD<- 0/P'G D<' 'R &'0< 9 < ' D1' &K-0 &=' &&@19 &? D<>C &-9 D'BD10 1 9 <-AK'BD9 &-j A&-9 C0K'BD9 &0 &-9 ?@@@ - -' <-A' '-' -&-1' & D1 ' @<B19 11a9 -& ' & G D1' F &&@0' <-A' F &C@=1@09 &' #1' 0D'CC1A' '-' E<@@1 0' <-A' < <a09 <-A' '-' -&-1' & D1 ' 1001@9 &' C<00 &? ' &=' D'0 1<@>' `# /P' D1' 1' 0 &=' < &Ba19 =& 1C '01A' < 'A' 1LB1C ' ' -A' D<' # ' D1'0< &1' ? D& ' 9 1+1 ' 1 0&-' D<' 0&' D<@@ 0D'C & ' B<?01' &' #1' 0D'CC1A' &? ' &=' D'0 1<@>9 <- ' F &&@09 F &&@=1@09 D& '- .' & ' & @' - .9 <= 1 ' D1' 0<'A' !1<0 9 ?C&-' D1' 0D'CC' - .' &=' D1 C9 <-A' #1=& 1' D<' D1 ' C<00 &? ' &=' <- ' &=' D1' 0< A' &K-09 KD1 1' D1 ' 0D<@@ #1' 0D'CC1A9 0D<@@ ='-A' 0?=='B'1- ' ? 1 ' &' D1' , '- .9 <-A' & D1' &@@1= & 0 &=' D'0 ?0 &>' D1 1' =& ' D1' '>1' #1' - .9 D<' D1' 0<> ' ' &&@09 F &&@=1@09 D& '- .' <-A' & @' - .9 0D<@@ C<00 &' <@<'09 <-A' &' -&-1' & D1 ' @<B19 K' D&? ' ! <?A' & ' &@@?0'&-' ; -A' <@0&' # ' D1' 0<>1' ? D& ' ' '0 & A<'-1A' D<' 1+1 ' 1 0&-' KD'BD' 0&' 0D<@@ 0D'C F &&@09 F &&@=1@09 D& @' - .' & ' & @' - .' &' <@<'09 0D<@@ # '- .' K' D'-' K1@+1' '&- D0 -1L ' =&@@&K'- .' 0')' 0?BD' 0D'CC' - .' '- &' D1' , '- ./0 LBD1H?1 9 D1 1' &' #1' 1- 1 1A' &=' 1B& A9 <' 1 '=' B< 1' ` &=/P' D' >9 KD'BD' '0 & ' =& ' D1' '>1' 0D<@@ #1' B<@@1A' D1' , '- ./0 ?0 &>1 9 <' D1' ` & \ P' D1 19 10 '= '- .' D1' B&>' - .' &=' <@@ 0?BD' D'C0 K' D' F &&@09 F &&@=1@09 D& '- .' & ' & @' - .' &' <@<'0' G @0&' ''0' & A<'-1A' # ' D1' ? D& ' '<=& 10<'A9 D<''=' D1' 0<>1' ?0 &>1 <' D1' ` & =0P' A&' -& ' A1@'+1 ' &' D1' 1 BD<- 9 # '- .'- .' 0?BD' F &&@0' F &&@=1@0' D& '- .' & ' & @' - .' &' <@<'09 <' A?1' 1 '=' B< 1' <= 1 ' D1' ! & >' &=' D'0 = 9 K' D'-' +'' ' "< 0' <= 1 ' A?1' 1H?10 ' &' D'>' D1 1&=' ><A19 D1' 0D<@ =& =1' ' &' D1' K-1 ' &=' D1' 0<'A' F &&@09 F &&@=1@09 D& @' - .' & ' & @' - .9 <' `<- '/P' '>1' D<' D1' D<@@ 1=?01' &' ><a1' <-A' A1@'+1 ' 0?BD' 1 '=' B< 1' '@' G -A' '=' D1' KD'BD' 0&' 0D<@@ 0D'C' F &&@09 F &&@=1@09 D& @' - .' & ' & @' - .9 &' #1' D<A' &' <@<'09 A&' -& ' # '- .' '- &' D1' , '- ./0 LBD1H?1 ' D1' 1 '=' B< 19 <0 <#&+1' '0 1B' 1A9 <-A' D1 1' &=='1 ' D1' 0<>1' '-' &C1-' &? ' #1=& 1' D1' 1<0? 1 ' <-A' < &-0 &=' D1' 0<>1' LBD1H?1 ' =& ' D1' '>1' #1' - .9 &' #1' 1- 1 1A' &=' 1 & A' K' D' -' D1' 0<'A' K1@+1' &- D09 & ' '=' <- ' 1 0&-9A&' B&- < ' & D1' 0<'A' A' - <- B19 D1' 0D<@@ =& =1' ' < ' 0?BD' F &&@09 F &&@=1@09 D& @' - .' & ' & @' - .' 0&' 0D'CC1A' B&- < ' & D1' 0<'A' A' - <- B19 KD1 1&=' D1' # '- .1 D' -& ' /)' `<' / P' 1 '=' B< 1' <0' #1=& 1' '0' 1B' 1A9 & ' D1' <@?1' D1 1&=G D1' &-1' <@=' &' #1' 1>C@& 1A' ' D1' LC1-B10' &=' D1' , '- ./0 &?01 9 <-A' D1' & D1 ' <@=' &' 0?BD' 1 0&-' <0' 0D<@@ 0?1' =& ' D1' 0<>1' '-' D'0' 1D<@=9 #1' - .' < & ' =' D1' , '- ./0 <C@1' < ' <@<'0' < D1' '>1' &=' 0?BD' ?' ' B&>9 >1-B1AG <-A' D<' D1' '-' D'0 <01' >< ' 0?1' <-' '&-' &=' "1# ' &=' 0?BD' F &&@09 F &&@=1@09 D& @' - .' & ' & @' - .' 0&' =& =1' 9 & ' &=' D1' <@?1' D1 1&=' < 'D'0' @1 '&-' <.<'-0 ' 0?BD' 1 0&-' & ' 1 0&-09 KD'BD' &' 0D<@@ A&' B&- < ' & D'0 0<'A' A' - <- B1G D1' 0<'A' '&-' &' #1' <a1-9 <-A' 1+1 ' 00?1' D1 1' -' &' -1A9 &' #1' '1A' '-' D1' &?- 9

\' <@@ ' >< BD<?-A'01' 8+

/' D1 &?. D' \0<=R' = &' ' ' ' '\

4 $ ' M Y8 ' ' M 5 ' -

" -=1' A' ' 4@1' 8@10 = >'001 0 B&-0'A1 1A9 C' @10 A' \' <A+'0 <001-' 1H?10 ' I ' <? & ' 19 <A' .0?- 1& A1' . -1' I ' 10 <#@'19 H' &? \' @<'-10 C1<@L' @<-? \9 D& .' I ' & @ -.' H?1?L' , &-' 10a CC1\' A1' C<001 ' D& 0' A1' B10 ' &'<@ <19 <C 10 @1' =10 ' A1' <0a1' H" M <' 1-' <-' A1' -=1' 2' '@@1' @L ' 0&'1-' 10a'CC1\' <' @10 '@@10' A1' '1 L' !& 10 10 H?1?L' @1' & ' <A' 0&-' 1 -19 01\' C&'010' I ' &@@1B8 &? 0' A1' ?0 ? >19 <' 0?' ' I ' A1@'+1 '@10', BD ?- 10 B10 8 <00<+&' ' <' @10 '@@10' A1' &@19 ? D< >C=&-9 D1BD10 19 <-A1K'B19 &-A&-9 'CC10K BD19 &0 &-9 ?@@@ - -19 I ' 1-' -?=" <? 1' @'1?' 1a1' &?' & G @10 @<'-10 I ' C1<@L' @<-? \' A10 1' 10a'CC1\' 1-' E<@1@0' I ' B< <a109 I ' 1-' -?@" < 1' +1001<?9 A1' C<001 ' DC 0' A1' B10 ' &'<@>1' C' > 1' @10 1' 10' A1' < &a' =& 0C '010;' 1 ' H' C' >10>1' @<?B8 & ' 1' B '?-1' C0&-1' H' '00@-' 10a'CC1 <' &?' =1 <' A10a'CC1 ' D& 0' A1' B10 ' &'<@>1' <0B?-0' @<'-10 C1<@L' @<-? \' D& 8 @ -.' &?' & @ -.' <C 10' @1' A' '=10 9 0? '@10a'CC10&-' A'B1?L' I ' <+/-' H'@0' C<001-' D& 0' A<0B?-' A1' @10' A' \' +'@@10' &-' '@0' M C-' 10a'CC1\9 &+1' 0?=='0<-' 0?1 11' <?' & ' I ' <' @10' &@@1=@&? 0' A1' 0<' ?0 ?>1' '@@1&H?10' C? ' @1' 1>C0 10 1<- \9 H' >10>10' @10' @<'-10 C1<@L' @<-? \9 D& @ -.' I ' & @ -.' C<0 1 &-' <?' <@1'0' I ' <' -? ' <? 1' @'1?' 00?-\' =' 8<?A1' &?' B&@@?0'&-' ; 1' <?L" C' >10>1' @<?= & ' 1' & A1' . -1\' 10 9 H' B '?-1' C0&-1' H' '00' - ' 10a'CC1 <' @<'-10 C1<@L' @<-? \9 D& @ -.' &?' & @ -.' <@ <@1'09 <>10-1' A1' -\' L' ' >&'0' C0BD1'-0' 1-0?<- \' <C 10' A1@ 10a'C0&-9 1-' @10BD1H?1 ' A?' & 9 @@@1&H10' A10 1' 1- 1\' A1' 1B& A9 ')' 'H'/'4' B1@@? ' H10 ' &?' C? ' @1' 1>C0 , <' <CC1@@1\' @1' ?0 ?>1 ' A?' & ' <@ C& ' '@@1HH?.09 10 >&'.-<-' @1' +1-?1' A1' &? \' '1@L' -'1=0' &+10H' @<'-109 C1<@L' @<-? \9 D& @ -.' &?' & @ -.' <@1'0' '<?L" & A1' . -1\' 10 ' C' @<' A' 1' <? & ' 1' H' 0" >10>1' @1' ?0 ?>1 ' <@' & ' -1' A1@@, 1' > 19 <@1' =@BDO?- ' <>10-/- ' @<'-10' C1<@L' @<-?\' D& @ -.' &?' & @ -.' <' <@1'09 A?1' R '=' B< ' <C 10' @1' =&? >1' A1' B10 ' B 9 A1' -\' +'' ' &? 0' <C20 A?1' 1H?10 ' A1' B1&' <' @? ' =<' 9 =& =<B1' <' @1' CC00100&? ' A1' @10' A' \' @<'-10 C1<@L' @<-? \' D& @ -.' &?' & @ -.9 <?' B=' ?-' >C0' H'@ 1=?01 <' A1' =<' 1' I ' @' 1 ' <? '1@ R '=' B< ' 1- ' @'+ 10' ;' 1 ' 0'@' H" '00' - ' 10a'CC1 <' @<'-10' C1<@L' @<-?\' D& @ -.' &?' & @ -.' A10 1' 1?1\' <' <@1'09 -<>10-1' C<0' 1-' @10BD1j H?1 ' A?' & ' @1' R '=' B< ' B& >1' A10?'0' 10 ' 1B' 119 I ' ''@1&H10' B1&' 1-' &, ' &? ' &= 1' A1K 1' @10' 10& 1 ' I ' < &-0' A?' & ' A1' >10>1' @10BD1H?1 ' C? ' @1' 1>C0 10 1<- \9 A10 1' 1- 1\' A1' 1B& A' A1'-\' @10' L' ' > '09 &?' 0" <0B?-1' C0&-1' `=<B1' B&- < '1/P' <' @<' A' 1' & A18 -3-B19 H' @ =& =<B1' &? \' '1@L' @<'-109 C1<@L' @<-? \9 D& @ -.' & ' & @ -.' '00' - ' 10a'CC1\' B&- W '1' <' @<' A' ' A1-0-B19 A&?-' '@0' -<>1 F ' C<0' 1'-0' @1' R '=' B< ' B&>1' A1+0-' 10 ' 1B' 119 &?' @1' +<@?1' 1- G' @?-1' >&' 1' A10 1' 1>C@&'1\' <' @1LC1-010' A1@ D&0 '1@ A?' & 9 I ' @<? 1' >&' 1' <' A1@ C0&-1' H' 0?1 <' C? ' B1&' 1-' B10 ' Cm 19 10 <-' <' 1' A1' @<' <C@1' A?' & ' <?' <@1'0' <@ 1>C0' A1' '1@ 0? 1' B&>1-B1G 1 ' H'@ 1D' B10 ' B<0' C&1 ' 0?1 ' <BA&-' A1' A1 1' A1' @10' A' \' @<'-10 C1<@L' @<-?\9 D& @ -.' &?' & @ -.' '00' - ' =&==<' \9 A?' A1' @1' +<@?1' 1- ' <' 0<' 1@1BB'&-9 1- 0' '1@ C0&-1' &?' C0&-10' H1' &?' H?1@@10' '00' - ' =1 <' &?' =1 &-' @1' B&- '1' A1' A' 1' & A1-/-B1G @<' A' 1' <BB'&-' A10 1' C '0' I ' B= ?-' '00?1' 1-' 'B1'" & -1\' A10 1' '1\' 1-' @1' &?- 119

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' - !"+&-!/' . -' !' 6 . +

A? @10 A' \' @<'-10 C1<a @<-? L D& @ -.' &? & @'-.' M &-' 10a'CC1\G =& 0C '01' H' 0" <0B?-' '00?1' 0?' ' C '0 1-' @< A' ' <BB'&-' 0? ' @&== <-' A1' @< A' ' ='B< H'@ 0&'@ '1' 1-' @1' &?- 11' @&? @< A' 1' &? ' A10BD1H?1 ' C? ' @1' 1>C0 M <G 1 ' H' >10>1' @1' CB1001' 0&' ' I' .'01' 1-' <? '1 <BB'&- B&>1' 10 ' 1 ' .'0 ' 1-' <Q '&-' A1' A1 1' < @< B&1' @1 G 1 ' H' -?@@ 100&'-1' -1' C 1BB'&-' .'01' &?' 0&' ' <@@&?1' &? <A ?. .1' C? ' @1' A1=1-A ?-' 1-' A1 <BB'&-'G 1 ' H' &? ' 0&' ' @1' C@1'-A='1-' A1 <BB'&-' 0&' ' A'0BD< .1' A1' 0&-' A' ' &=='B1' A1' <' 1 C1-A0?-' >10>1' @<BB'&- H'@ C&1 ' ><'-8 1'. -1 ' I' 0?1 ' @< A' 1' 0? 1 ' A' 1' A'0BD< .1' -'1-' &#0 <- ' ? +1? &? \'=&' \' H' 0" <0B?-0 @<'-10 C1<a @< ? \ D& @ -.' &? & @ -.' i -' @<' A' 1' =& >1' A10 1' 10a'CC1\ <1-' C '01\' &+1H 1H1<''10 0? ' @1' >1 1 &?' '@@ &H?10 C1 '\' &?' CA?\' C' 1--& ?-1 I' A1 C1 '0>1-' C ?'01' &?' CA1' 0&' ' &+1' &?' C+1' A1+0-' @10 10& 1 ' I' < &-0 A?' & 'C? ' @1' 1>C0 10 1<- \ C' 1L<' ?-<B'&-' A10 C0&-10 &?' C0&-1' H1' &?' H?1@@10 '00'-' 1 a'CC1 < &?' 10a'CC1 &-' A1a' @<'-10 C1<a @<-?\' D& @ -.' &? & @ -. &?' @&? ' 1L1B? &? 0 &?' '' 1A'#@1 ' C0&-10 ' =1\ &?' <? 10 10&-<#@10 1'0-&@.-10 I' C &+10 1'0@ >H'.-3- 1\' >10>10 @10 @<'-10 C1<a @<-?\' D& @ -.' &?' & @ -.' '00'-' CA?\' C '01\' &?' C1 '\' ' H' -?@@1' C0&-1 C? ' -?@@1 ' '1a' C<'-10 @1<a @<-?\' D& @ -.' ' & @ -.' 1-0" CA?\' C '01\' &?' C1 '\ 0&' ' 1-A<><.1' &?' 1-' <0B -' ><51' C ?A'01' C' B10 ' <Q ? +1? <?L" H' @10 @<'-10 C1<@\' @<-?\' D& @ -.' &?' & @ -.' <-BU 0&@1>1-' A1' @< B 100<-B1' 1- 1' @10 1<?10 A1' 101' ' K1A1' & D?>='1 @#-A ?>#1 '&-A' F 10 '5@&-A 18 +10BD11' A1' " ? D<>' 'BD1 <&-A D' 1' I' & D<@A1 &-8 0D' 1 C?'001-' 10 1' 10a'CC1\' 1-'@1 & 'A1' &1= D<0 1 ' 0? ' -1 A1' C<001 ' < @1? ' @'# 11 B10 ' I' -'1-' &#0 <- >' C? ' B1&' H'@ 10' 1- 1-A?1' I' B&A?1' C' 1'-8 H' A'1010 C0&-10 C' 1?L' >10>10' @1? ' =<+&? 0 I' M+/- \' <BD< 1-' I' B&'@@1C ' @<'-10 I' C <@L' @<-?\' 0'#'1-' D& j @ -.' B&>1' & @ -.' A1 B 1'00<-B1' A1' @10 &?- 110 " 1, K'a' 'BD& ' I' & -.D >8 B1?L' B< '&?- ' <@ & ' VI' '@@1' A1' &1= D<0 1_8 I' '@@1&H10 >10>10 @10 @<'-10 I' C1<a @<-?\8 B&>1' @<'-10 I' C1<a @<-?\' A1 B &'08 0MU-B1' A1 <'0 1- 1' @10 1<?10 A1' 101' I' K1A1' I' A1' & D?>#1 @&-A ?>#1 '&-A F 10& @&-A' 'BD1 >&-A0D' 1 & D<@A1 &- D' 1' I' 1+10 D11' A1' " ? D<>8 I' C' B&@&? '1- 8 10a'CC1- ' I' B< 1-' A10 1' 10a'CC1\' I' B< '1\' <0 @'1?L' A&? 1' @1' >1 1 <? 10 H' < @< <C@1' A1' <@1'0G C' H&" - 1' A' ' ' @1' & '10 .3?-A1>1-' A1B1?' A1' 01\' B?0 ?>1' I' 0?#0'A'1 1-B&- 1' @10 0 < ? 10 1-' '1 B< ' C? +&1\ < .0?-A' A<D<.1' A?' & ' I' A1' B10 ' 0&-' &'<@>1' I' A1' 01\' 0?#.'1 \' A'B1@ ;' " - 1' A' ' &, <'.-1' = ' @1' & ' C' @<A '0 I' <00 & ' A10' Aa\' I' 1\' I' C' @<' A' 1'<? I & ' 1'+ 1' 1' I' & A1'.-1 8 H' -?@@1' C0&-1010a'CC1' '&-'@<B1' A10 1' 1 ACC1\' '@10 A' \' & \' I' '@@1 <0B?-0 @<'-10 &?' C1<a @<C?\' @ & @ -.' &?' & @ -.' A1 B 108 0<-B1' A<0 ?-1' &?- 11' C?' C '0 <? 10 'A1 B 100<-B1' A1 C<'0 1- 1' @10 A' \' i<?10 & ' A<0B?-' A1' @10 A' \' &?- 110 A1' > D?>#1 @&-A ? -#1 @&-A' F 10 ='@&-A' 'BD1>&-A0D' 1 & D<@A1 &-0D' 1 ?A1 A' ' +10 BD11G 1 '<' <0B?-1' C0 >1' 1Ra'CC1' &?' =<B1' A10 1' 10a'CC1\' <@ A' ' '@@1' &?' & <0B? 0 @<'-10 C1<a @<-?\' D& @ -.' &?' & @ -.' A1 B '00<-B1' A<0B?-' &?- 11' &?' C<'0 <? 1

KD1 1' 0?BD F &&@0 F &&@=1@0 D& @'-.' & ' & @'-.' 0D<@@ #1' 0D'CC1AG 1LB1C ' D<' '=' <- ' 00?1' #1' <a1-' '-' D1' 0<'A' = '&-' ?C&-' D1' ==1 ' &=' D1' 0<'A' 1 '='B< 1 D<' D1-' ' ' 0D<@@ #1' '1A' '-' D1' &?- ' KD1 1' D1' 0<'A' &? ' &=' LBD1H?1 ' =& ' D1' '>1' 0D<@@ #1' ' <-A' D<' D1' 0<>1' &B100 #1' <-A' @'1' '-' 0?BD =@'&-' <0 '0 <-A' @'1 D' '-' <-' ^ '&-' &=' "1# ' <' D1' &>>&-' <K G <-A' D<' -& 0 ' 0&'-' -& ' & 1= '&-' 1' & ' #1' <@@&K1A' & ' `<A ?A.1A' / ' =& ' D1' "1=1-A<-' '-' 0?BD @&-G' <-A' D<' D&?.D' D1' @<'-='=' '-' 0?BD '&-' #1' A'0BD< .1A' &=' D'0 0<'A' ==' B1' &=' < & @ D<-..' D1' 0<>1' ^ '&-@ D1' `0D<@@ 0P' ><'-8 <'>< -A' C? 0?1' D1' <'A' ?' @ -& K' D0 <-A'-.' D1' 0<>1' " '0BD< .1' &+'A1A' <@K< 0 ' D<' '=' <- ' F &&@0@ F &&@=1@0 D& @'-.' & ' & @'-.@ &' #1' 0D'CC1A' '-' D1' !& >' <=& 10<'A@ #1' <a1-'K' D -1>'10 ?C&-' D1' 1<@ & ' 1@01' D1 1' C1 '0D1A' & ' &@0 ' # ' '0=& ?-1@ <-A' 0?BD 0') 1 '0D'-.@ <a'-.@ & ' &00' #1' =&?-A' <-A' C &+1A' #1=& 1' D1' 1<0? 1 ' <-A' D1' < &-0 &=' D1' , '-.' =& ' D1' '>1' #1'-.@ # ' L<>'-< '&-' &=' D1' 1 0&-0 & ' 1 0&-@ KD'BD' 0&' 0D< ' 0D'C' 0?BD' F &&@0 F &&@=1@0 D& '-.' & ' & @'-.@ =' D1' ' L1B? & 0 & ' K&' B 1A'#@1' 1 0&-0 0K& -@ & ' & D1 ' 1<0&-<#@1' F ' -1001 0 <-A' &&=1 10 'j = '-.' D1' 0<>1' F &&@0 F &&@=1@0 D& @'-.' & ' & -.' 0&' @&0 @ <a1-@ & ' C1 '0D1A' G D<'-&' 1 0&-'=& ' <-' '0?BD' V)' F & @=1@0 D& @'-.' & ' & @'-.@ 0&' @&0 @ <a1-@ & ' C1j '0D1A@ 0D<@@ #1' . '1+1A' & ' & D1 K'01' C 1 ?A'B1A' # ' D'0 = ' &+'A1A' <@0&@' D<' D1' F &&@0 F &&@=1@0 D& j @'-.' & ' @@@& @'-.@ &-@ ' &=' D1' . &K'-.' #1 K11-' D1' F < 1 0' &=' 1101' <-A' K11A@ & D?>#1 @<-A@ ?>j #1 @<-A@ F 10 >& @<-A@ D1' '0D&C 'Ba' &=' " ? D<>@ 'BD>&-A0D' 1@ <-A' & D<@A1 &-0D' 1@ >< '#1' 0D'CC1A' '-' D1' & ' &=' 1KB<0 @18?C&-8 -1@ &' C<00 < ' D1' ' '#1 @ D'0 = ' -& K' D0 <-A'-.

1B<?01' ' '0 `C1 B1'+1AO <-A'B1 <'-@ 'a-&K-@ D<' A'+1 ' 1 0&-0 `'=& ' D1>01@+1#@ D1' ' !<= & 0' <-A' 1 +<- 0@ A&' #? ' <-A' .< D1 ' F &&@0' <-A' F &&@=1@0 <0 K A@ D&= -.' <0' ' & @'-.@ &=' D1' . &K'-.' &=' &?>' '10 &=' & a@ '-B&@-@ <-A' & '-.D<>@ <-A' B< ' D1' 00>1' &' D1' & ' <-A' & F -' &=' 1KB<0 @1@ <-A' D1 1' D1' 0<>1' F &&@0' <-A' F &&@=1@0 <0 F &&@0' <-A' F &&@=1@0' &=' D1' . &K'-.' &=' D1' &?- ' `#1 &-AO' D1' F< 1 0' &=' 1101' <-A' K11A@ <-A' &='`<- ' = D1' 0<'A' &?- '10' &=P' & D?>#1 @<-A@ ?>#1 @<-A@ F 10 >& @<-A@ 'B#8 >&-A0D' 1@ & D<@A1 &-0D' 1@ <-A' D1' '0D&C 'Ba' &=' " ? D<>@ <-A' # ' B&@&? ' D1 1&=@ A&' 0D'C' <-A' B<?01' & #1' 0D'CC1A' <-A' B< '1A' '- &' C@<B10' #1 &-A' D1' 1<@ & D1 ' D<-' &' D1' <C@1' &=' <@<'0G KD1 1# ' &? ' 0<'A' &+1 1' .-' & A' D1' , '-.' '0 .1< @ ' A1B1'+1A' &=' D'0' ?0 &>' <-A' ?#0'A @ <.<'-0 ' D1' < ? 10 '-' 0?BD' <01' C &+'A1A@ &' D1' . 1<' " <><.1' &=' D1' , '-.' <-A' &=' D'0' D'0' 1<@>@ <-A' &=' D'0' ?# 1= 0' &=' D1' 0<>1G ? '0<'A' &+1 1' .-' & A' D1' , '-.@ # ' D1' A+'B1' <-A' 001-' &=' D1' 0 'A' & A0' <-A' &>>&-0@ <-A' # ' D1' 0<'A' ? D& ' K'@@ <-A' & A<'-1 D' D<' -&' 1 0&-' 0D<@@ 0D'C' & ' B<?01' &' #1' 0D'CC1A@ <' D1' 0<'A' & ' <-A' &K-@ <- ' F &&@0' & ' F &&@=1@0 & @'-.' & ' D& @'-.@ &=' D1' . &K'-.' H=' <- ' &?- ' ' &?- @ & D1 ' D<-' &=' D1' . &K'-.' &=' D1' &?- ' ' &?- @ & D1 ' D<-' &=' D1' &?- ' `#1 &-AO' A'1' 0<'A' F < 1 0@ & ' &=' <- ' &=' D1' 0<'A' &?- '10' &=' & D?>#1 @<-A@ ?>#1 @<-A@ F 10 >& @<-A@ 'BD>&-A0D' 1@ & D<@8 A1 &- '? 1@ & ' &=' D1' 0<'A' '0D&C 'Ba' `&=' " ? D<>P G <-A' '=' <- ' 1 0&-' 0D'C' & ' B<?01' &' #1' 0D'CC1A@ <' D1' 0<'A' &K-' & ' & @ <-' F &&@0' & @'-.' & ' D& @'-.' &=' D1' . &K'-.' &=' <- ' &?- ' & ' &?- @ & D1

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@' F D1 1<0' # ' 0?# '@ < .<'-0' ><A1' '-' #? '-.' &=' F &&@0@ #1=& 1' D<' D1' D11C' D<' #1<' D1' 0<>1' #1' 0D& -@ D1' @& D8><a1 0' &=' D'0' 1<@>' B<-' K1@@ -'.D' ='-A' -&-1' &' #1' 0&@A@ &' D1' . 1<' E '1=' &=')' D1>' KD'BD' D<+1' #11-'<BB?0 &>1A' &' D<+1' D1' ' '+'-.'# ' D1' >1<-'&=' ><a'-.' &=' @& D@ ? '0<'A' &+1 1' .-' & A' D1' , '-.@ # ' D1' A+'B1'<-A' 001-' &=' D1'0<'A' & A0@<-A' <' D1' 1H?10 ' &=' D1' 0>A' &> >&-0@<-A' # ' D1' ?j D& ' ' <=& 10<'A@ D< D' & A<'-1A' <-A' 0 <#@'0D1A' D<' -&' 1 0&-' # ' D' >01@=' & ' <- ' & D1 @ 0D<@@ #? ' & ' #< j .<'-@ = &>' D1' L+'' ' "< ' &=' < BD@ KD'BD' 0D<@@ #1' '-' D1' 1< '&=' &? ' & A' 9@L''' ' <- ' F &&@0' D1-' `-& ' 0D& -9OX' &' <a1' &>'01' &=' < .<'-' &=' <- ' F &&@0' D1-' `-& ' 0D& -@ OX' &=' D1' . &K'-.' &=' 1 a0D' 1@ L=& Aj 0D' 1@ E@&?B10 1 0D' 1@ D &C0D' 1@ 1 1=& A0D' 1@ F & j B10 1 0D' 1@ F '@ 0D' 1@ &>1 01 0D' 1@ " & 01 0D' 1@ <>C@ 0D= 1@ 0010 @ / X' <># 'A.10D' 1@ & =&@a@ ?=' &@a@ , 1- @ ? @ <-A' ?001L@ &' ` &=' <- ' &=' D1' 0<>1 9OP' '@@ D1!1<0 '&=' <'- ' < D&@&>1K' D1-' -1L '1-0?'-.G & '#? ' <- ' F &&@0@ & ' <a1' &>'01' &=' < .<'-' &=' <- ' F &&@0@ KD'BD' 0D<@@ . &K' '-' <- ' &=' D1' 0<>1' &?- '10@ D1' 1< ' D1-' -1L ' 1-0?'-.' D1' 0<'A' !1<0 @ #1=& 1' D1' 0<>1' !1<0 ' D1-' -1L '=&@@&K'-.G & ' '-' @'a1' <--1 ' #? ' <- ' F &&@0' & ' T 1' &>'01' &=' < .<'-' &=' <- ' F &&@0@ KD'BD' 0D<@@ . &K' '-' <- ' &=' D1' 0<'A' &?- '10' D1' 1< ' D1-' -1L ' 1-0?'-.' D1' 0<>1' !1<0 @ '@@ D1' 0<>1' !1<0 ' D1-' -1L ' ='' &K'-.@ KD'BD' !1<0 ' 0D<@@ #1' '-' D1' 1< ' &=' &? ' & A @L+'' G #? ' &-@ ' 0?BD' 1 0&-0@ KD'BD' &=' = '1' 0<'A' F &&@0' 0D<@@ ><a1' & ' A&' &' #1' ><A1' <>' & ' @& D' K' D'-' D'0' 1<@>G ?C&-' <'-8 &=' !& =1' ? 1' &=' D1' "&?#@1' <@?1' &=' <@@ D1' F &&@0' #&?.D ' & ' &' #1' #&?.D @ #< .<'-1A' & ' <a1-' # ' &>'01' &=' < .<'-@ <.<'-0 ' D'0' A'-<-B1G D1' &-1' <@=' &' #H' D<A' &' D1' , '-./0' 01@ <-A' D1' & D1 ' <@=' && D1' 01' &=' D'>' D<' K'@@ 0?1' '-' D'0' 1D<@=' 0D<@@ D<+1' <-' =@'&-' &=' " 1# ' &=' D1' 0<>1' !& =1' ? 1@ <-A' @'a1' &B100' '-' D1' 0<>1' ='&-9

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3!- +@)

H' A1' @<' C<'0' 1- = ' >10 -10" =10' 1<?10;>@ A1' @1 'A' \' &?- 110' A1' & D?>#1 @&-A@ ?>#1 @&'? ' F 10 ' =&-A' 'BD1>&-A0D' 1@ & D<@A1 &-0D' 1' &-' A1' @1' A' ' +10BD11@ A10 1' B< '1\' <?' <0 ?-' 1?' A&- 1' 1>1 1G <? 1' H' <@ A' 1' <C@1@ A1' <@1'0@ =& =1'B1' @1' A&?#@1' A1' @1' <'1' +<@ 1' A1' >10>10' @10' @<'-10' I ' C1<@L' @<-? \' '0 '- ' 10a'CC1\@ I ' -'1- ' B ?1\' 1- 1' =10' T \' 1<?10' -1' 1-' -? ' A1' @10' A' \' &?- 110' A1' & D?>#1 @&-A@ ? -#1 8' @&-A@ F 10 ='@&-A@ 'BD1>&-A0D' 1@ & D<@A1 &-0D' 1@ &?' 1-' @1' A' ' +10BD11G A&?- ' - 1' A' ' ! ' @1' & ' A<+&' ' @?-?' >&' 1' 1 ' B1@? ' H" +&'@@1' 0?1 ' 1-' B10 ' C< 1' @<? 1' >&) 1G 1 ' H' 0'#'1-' @1' & ' B&>1' B1@? ' H" +&'@@1' 0?1 ' 1-' B10 ' C< 1' <'1 ' 0&-' 1B&+01' C' <BB'&-' A1' A1 1@ @<' A' 1' <BB'&-' A10 1' C '01' I ' BD?-' '00?1' 1-' B1&' A10 1' & -1@ 0&' ' '1' 1-' @1' &?- 11' " 1 K'a@ ' -&-' C<0' 1-' @<' A' 1' @@1' -1' 1-' <0B?-' A1' @10' A' \' &?- 11\' A1' & D?>j #1 @&-A@ ?>#1 @&-A@ F 10 &-A@ -1' A<0B?-' +'0-1' A10' A' \' 'BD1>&-A0D' 1@ & D<@A1 &-0D' 1' &?' A1' '1' A' ' +10BD11G I ' 01>#@1' CB1001' A10 1' 1?1' 1-' >10>1' @<BA&-' 'B&>1' 10 ' B&1>1-' ?01' 1-' <BB' >' A1' A1 1'G' ' H' @1' A1=1-A/?-' 1-' B10 ' B<0' <'1 ' -? ' <+ - <.1' C' <0B?-1' 100#'-1' &?' C 1BB'&-@ -1' -1' 0&' ' <A>'0' A1' .<.1 ' 0<' @1

>' H' B&>1' C' 0?# '1@L' #< .1'-0' =<' \' 1-' <BD<1 ' A10' @<'-10' A1+J- ' H' @10' #1 #'\10' H' B1&' C& 1-' 0&'1-' &-A?\@ @10' =<'0&? 0' A1' A <C0' A1' B10 ' &'<@>1' #'1-' C 10' -?@@10' <' +1-A1 0' &, 1' C&'&-@ <' . <-A' A&@&? ' A1' &? \' B1?L' H" &?-' 10 1' <BB?0 ?>1\' A<+&' ' @1? ' +'+ 1' C' @1' >&'1-' A1' =<'0<-B1' A1' A <C;' " -=1' A' ' ! ' @1' & ' A1' @<A+'0' I ' <001-' A10' A' \' ! 0' I ' <' @<' 1H?10 ' A10' A' \' A1\' I ' C' @<? =& ' 1' 0?'0A' ' <A' & A1'. -1' I ' 10 <#@'1@ H' -?@@1' C0&-1' C' @? ' >10>1@ &?' <0B?-' <? 1@ <BD<1' &?' #< .1'-1' <' @1' L+''' &? ' A1' < BD1' H" M <' 1-' <-' A1' -=1' ! ' '@@1' ' L''' ' <0B?-0' @<'-10' <A&-H10' -'1-' &-A?\@ &?' C 1'. -1' C>10' A?' < .1'-' A<0B?-0' @<'-10' A&-H10' -'1-' &-A?\@ A1@ B 1'00<-B1' A1' 1 a10D' 1' L1-=& A@ 0D' 1@ E@&?B10 10D' 1@ D &C0D' 1@ 1 1=& A0D' 1@ F ? 8' B10 10D'=1@ F '@ 10D' 1@ &'501 0D' 1@ " & 01 0D' 1@ <>Cj 0D' 1' 001L@ 1 =@ <># '..1@ & ==@ ?==@ , 1?=' ? =' I ' ?001L' &?' <0B?-0' A1' B1?L@ ?0H10' @1' =10 ' A1' 1'-' < '@>1K1' A&-H1' C0BD1'-' 1-0?<-' G &?' <BD<1' <0B?-0' @<'-10' &?' C 1'. -1' C<1' A?' <0B?-0' @<'-10' A&-H10' <A&-H1' C0BD1'-' 1-0?<-' G &?' 1-' 01>#@1' >< 1' <BD<1' <0B?-0' @<'-10' &?' C 1'. -1' C>10' A1' #< .1'-1' A<0B?-0' @<'-10' H '1?L' <BB 10 1 &-' 1-' <0B?-' A1' @10' A' \' &?-j 110' <-' A1@& 0' C0BD1'-' 1-0?<-' >10>1' @1' =10 1@ <-H1' >10>1' @1' =10 ' <@& 0' C0BD1'-' 1-0?<-' H" =10 ' M <' 1-' @< ' A1' -=1' ! ' '@@1' ' L+H' G >10' 0&@1>1-' '1@L' C0&-10' H?1@@10' A1' @10' A' \' @<'-10' =1 &-' &?' =<B1-' 10 1' $ ' ='@1' &?' A <C' A1'-\' B10 ' &'<@>1G 0?' C1'-1' A1@=& =<' ? 1' A1' @1' A&?#@1' +<@?1' A1' &? \' @10' @<'-10' <BD<1\' &?' <1#< 1 0' &?' <' #< .<'-1 0' &?' C '01\' C' C>10' A1' #< .1'-1@ 1-' B&- = '1' A1' B10 ' & A1-0-B1G @?-1' >&' 1' 1-' A10 1' 1?1' <@ &1C0' A?' & ' I ' @<? 1' >&' 1' 1-' <@ &1C0' B1@@ ' H" +&'@1' 0?1 ' 1-' B10 ' C< 1G 1 ' H' BD?-' C0&-1' H' 0?1 ' +&1 ' 1-' B10 ' C< '1' <'1 ' <BB'&-' A1' A1 1@ A1' @<' A' 1' =& 8' =''' ? 1@ I ' <? '1@@ CB1001' 1-' >10>1' @<BB'&-' B&>1' 10

7+ / $H 0 */# ; /--

@& D <-A F &&@1 - < > ><A1 <-A &' #1 ><A1 $ K D- D1 1<@>&= - .@<-A F <@10 <-A 1@<-A >< B&>1 ` &' #1 X #> ''.D <-A <BB1C 1A `-'0P D1 <=& 10<'A < 0 &= ? .?-A & 'a1 <#<- - `' ?-1#? .D0P >0 1-<?@ &@@<-A m1<@<-A <>? D1 ` < H?'0D'C$V &= D1 &@ > C' 1 = '10@<-A <@ -10 D1 <-A0 #1 &-A D1 F < K &= D1 <101 <-A <@@ & D1 ' <-A0 <-A 1'.-'& '10 &= D1 0<'A " ?a1 <-A `-'0P 1+1 '&= D1>C D1 1 &' #1 ? 1 1A 0&@A 1LC1-A1A ?01A K& - <-A A'0 '#? 1A < D1 @1A'&-' &= D1 K-1 ' &= D1 0<>1 & D'0 <A& ''-' D'0 1D<@=C ` D1 1 P 8K' D&?' > j C1<BD>1- ' &= D1 0<'A ?a1 & ' <- ' & D1 ' D'0 =EB1 '-' <- ' &= D1 0<'A <-A0 <-A <- 0 &' #1 B< '1A <-A B&-+1 1A ` &'0P <- ' & D1 ' < C < D1 1A'&-'&= D1 0<'A K-1 ' & ' D'0 !<A& C <0 = 11@ ' <0 D1 ' K1 1 # &?.D ' B< '1A & ' B&-+1 1A #1=& 1 D1 &B@<>< '&-0 &= D1 0AA " 1B@< < '&-' <-A A'-<-B1 ><A1' # ' D1 0<'A " ?a1 -A <@0& D1 D< D & A<'-1A # ' D1 0<'A ? D& ' D< ' <@@ ><--1 ' 1 BD<- 0 <-.1 0 D<+'-.'<- ' 0?BD ><--1 ' &= 1 BD<-A'010 & ' E&&A0 &= D1 0<'A . &K'-. K& a><-0D'C & ' ><a'-. #1'-.' `0D'CC1A '-' <- ' 10j 01 '-' <- ' < ' &=' D'0 1<@>' &= -.@<-A F <@10 & ' 1@<-A h P <-A -& ' C? ' &' <-A & ' '= <- ' 0?BD 1 j BD<-A'010 & ' E&&A '#1' C? ' &' <-A '-' <- ' < ' &= D1 0>A 1<@>' &= -.@<-A <@ 1 ' D1 0<'A !1<0 D< ' <@@ 0?BD 1 BD<-A'010 <-A E&&A0 #1' ? 1 @ ' +&'A1A &? ' &= D'0 1<@>' ` &= -.@<-A P F <@10 <-A 1@<-A K' D'-' B." !& 0"!' . ' +' ! !"# -/&21 2.'&1 ." ! / ! & " < 0 -1L ' <= 1 ' D1 &B@<>< '&-' ><A1 ?C&-' D'0 A'-<-B1' K' D'-' D1 ' ' &= &-A&-C ?C&-' <'-' &= !& =1' ? 1' &= D1 0<'A E&&A0 <-A 1 BD<-A'010 D1 &-1 'A= D1 1&= &' D1 , '-.' <-A D1 & D1 ' <@= &' D'>' D<' 0D<@@ =' 0 ' 01'01' <- ' 0?BD E&&A0 & ' 1 BD<-A'010 ' 3".#+ 1 &.-' . ' &' "/&- -#! -A D<' &C1-' &B@<>< '&-' &= D'0 A'-<-B1 #1' ><A1 #1=& 1 D1 '.D 11- D " < ' &= < BD KD'BD 0D<@@ #1 '-' D1 0<'A 1< ' &= &? ' & A @L''' ' K' D'-' D1 ' ' &= &-A&-' <-A & D1 ' @<B10 -1B100< ' <-A B&-j !-0!'&-' 0&' .'" !&j0"'!' . ' 20# ' !"# -/&212 +1-'1- 'C -A' '=' ' ' D<CC1-' <- ' ?' ' & ' = '&-' &' #1 <a1-' <-A' 0?1A' # ' D1 BB<0'&-' &=' <- ' 0?BD `' 1'0'-9/'P' KD1 1'-' <- ' 00?1' B&-B1 -'-.' D'0 A'-<-B1' 0D<@@ #1 <a1-' D< ' D1' 0R'A' 00?1' #1' '<##@1' <-A' '1A' '-' D1' &?- ' <-A' &=' D1' 1-?1' KD1 1' D1' 0<'A ` 1'0'-'P' 0D<@@ #1' D<A' <-A' '-' -&-1' & D1 ' @<B1 -A' 1B<?01' ' '0' . 1< @ ' A&?# 1A' D< ' A? '-.' D1' 0<'A' 10 <'-' `&= D1' 0<'A' E&&A00P' <-A' 1 BD<-A'010' ><A1' <-A' . &K-' '-' D1' <=& 10<'A' <-A0' &=' D1' 0<'A' " ?a1' &=' ? .?-A ' #1'-.' '-' D'0' 1<@>' & ' &' #1' # &?.D ' '- &' D1' 0<>1 <-A' K' D'-' D1' 0<>1 C' #1' C? ' &' <'-' # ' D1' 1@@1 0' &= D1>' 0D&?@A' #1' 1L<@ 1A' <-A' C? ' <' <-' 1LB100'+1' 'B1 KD'BD' 0D&?@A' ? -' &' D1' . 1< ' " <>< .1' &= D1' /) @."2< C#' 1 @' "! *0+ !' !' 3"&#!' . ' !'2 &/' !"# -/&212< .' !'2.+/' /0"&-*' !' 6!2 -<&.-' .-' !&*" 1 ." &.- 1&C@1' &= D'0 1<@>' ' '0' D1 1=& 1' & A<'-1A' # ' D1' 0<'A ? D& ' D< ' A? '-.' D1' 0<'A 10 <'- ' 1+1 ' < & ' <'@'==' <-A' & D1 ' D'1=' E&+1 -& ' &='1+1 ' ' ' & &?.D' <-A' &K-' <-A' D1' E&+1 -& 0' &= 1+1 ' !<' ' <-A' < a1 ' &? ' &= ' ' & &?.D' <-A' &K-' K' D'-' D'0' 1<@>' ?C&-' & >C@<'-' & #1' ><A1' &' <- ' &= D1>' # ' <- ' &= D1' , '-./0' @'1.1' 1&C@1' &= 0?BD' 1-D<-B'-.' <-A' C? '-.' &= 1LB100'+1' 'B1' 0D<@@ D<+1' ? D& ' ' <-A' &K1 ' K' D'-' D1' ' ? '0A' I '&-' # ' A?1' 1< BD' L j <>'-< '&-' <-A' &&= D<A' '-' D'0' 1D<@=' &' ><a1' 0?BD' " ' 1=@'&-' <-A' 1=& >< '&-' <0' # ' D1' A+'B1' &= K& A'0B 11 ' 1-' &= 1+1 ' 0?BD' ' ' & &?.D' & ' &K-' D1 1 &' &' #1' <CC&'-1A' # ' 1+1 ' < & ' <'@'==' TK & D1 ' D'1=' E&+1 -& ' <=& 10<'A' <= 1 ' D1' ' &-0B'1-B1' <-A' " '0B 1 '&-0' '-' < '0 I =@'&-' <-A' 1<0&-<#@1' >1-A0 A1' @<'-1' I ' =@1' A1' <a1' =<' \' =' <@@<' 1\' A1'-0' @1' &=<@>1' " 1-.@1R 1' E<a0' I ' @&-A' C& 1-' +1-' ' 10 1' <>10-1\' I ' <BB1C 1\' 1-' @10' <+J- A' \' C< '10' A1' ? .&'.-1' & ''a' <#<- ' 1-1#? .D' &' ' 1-<?A1' &@<-A' m1@<-A' <>'1 ' @1' < H?10D'C' A1' 1'-' >C1 1' ! '\1@<-A' <@ -10' @10' R 10' A&? 1' @1<?1' A1' @<' <01' I ' &? \' <? 10' 10' I ' 2 !' @1' A' ' "?1' I ' 1-' B ?-' A'B1?L' '@@1&H10' A10 1' ? 1 1\'+1-A?\' 1LC1-A?\' ?01\' K1 1A' I ' A10 '#? \' <' 1@1BB'&-' A1' C&00100&? ' A'B1=' &-' 0&-' =' =@&? ' 1-' B1@' C< '1' I ' '@@1&H10' I ' A1' A1@<' 0 ?-\' 1>C11#1>1-' A1' @1' A' ' "?1' &-' <0B?-' <? 1' 0&-' &=='B1 ' 1-' <0B?-' A1' @10' A' \' 10' I ' C< '10' < B< '1 0' I ' B&-+&'1 0' <' <0B?-1' <? 1' C< '1' <' 1@1BB'&-' @1' A' ' C&00100&? ' &-' =< " &K' 0" = <-BD1>1-' B&>1' B1?L' =? 1-' <>10-1\' B< '1\' &?' B&-+&'1\' A1+ -' @10' CB@<><' B'&-0' A1' @10' A' \' A1B@< <B'&-' I ' & A1-W-B1' C' @1' A' ' " ?1' ='' ' \;' 1 ' <?L" <A' & A1'.-1' C' @1' A' ' <?= & ' 1' H' &? \' ><50' ='BD<?-' \' 10 /?-.10' <'<- \' <0B?-0' A1# ' >< 0' ='BD<-A'010' &?' #'1-0' A1' @<' A' 1' B 100<-B1' &C<'.-1' &?' =10<+>B1' 10 1<- \' 1-' <0B?-' +1001<?' 1-' -?@=1' C< ' A1' B10 1' &'<@>1' E<@10' &?' @&-A' 1-10a'CC1\' I ' -'1-' >'01\' <' 1' &?' 0" <0B?-0' '1@L' ='BD<-A'010' &?' #'1-0' 0&'1-' >'01\' <' 1' 1-' <0B?-1' C< ' @1' A' ' &'<@>1' <C 10' @1' A' ' =10' H' &? \' '1@L' ='BD<-A'010' I ' #'1-0' 0&'1-' &? &? 1>1-' +&'A1\' D& 0' A1' B10 ' &'<@>1' E<@10' I ' @&-A' A1'-\' L@' &? 0' C0BD1'-0' <C 10' @<' CB@<><B'&-' =<' ' 0? ' B10 ' & A1- -B1' A1'-\' @<' ' 11' A1' &?-A 10' 0? ' C1'-1' A1@ =& =1' ? 1' A1' @10' A' \' #'1-0' I ' BD<-A'010' @?-1' >&' 1' A1- ' <-' & ' I ' @<? 1' >&' 1' <' B1@@? ' H" C '' 18' >1-' 01'01 <' <0B?-0' '1@L' #'1-0' &?' QBD<-A'010 ' H' &C ' CB@<><B'&-' A1' B10 ' & A1'.-W-B1' 0&'@' =<' 9' A1+W-' @1' L8+'' 0' &? ' A1' < BD1' H" , <' 1-' <-' A1' - 1' = ' A10?'0' 10C1B'='19' A1'-\' @<' ' 11' A1' &?-A 10' I ' <? '10' @'1?L' -1B100< '10' I ' B&-+1-'1- \' ;' 1 ' 0'@' <+'1-A <' <0B?-' 0? 1' &?' <BB'&-' 10 1' C '01' I ' C? 0?1' C' B<?01' A<0B?-1' 1@ 01@0'-1@ 1-' H?1@@ <0B?-' '00?1' B&- -<-' B10 ' & A1- -B1' M <' C '0@ H' @1' A' ' '00?1' 0&' ' '<#@1' I ' '1\' 1-' @1' &?- 11' I ' A1@ +'0-1' @&?' @1' A' ' 01'0'-1' M <' 1?1@ I ' 1-' -?'@' <? 1' @'1?' ' C? ' B1&' H'@ 10 ' . ?-A1>1-' A&? 11@ H' @<' A' ' 10 1'-' A? <-@ @10' #'1-0' I ' ' 1D<-A'010' =<' \' I ' <BB ?1\' 1-' @10' <+/- A' \' 10' A1' @1' A' ' "?1' A1' ? .&'.-1@ 1-' B10 ' &'<@>1' 10 1<- \' &?' 1-' 'B1@" <>10-1 0' I ' A1'-\' B1&' A10 1' >'0' <' +1-A1@ C' @10' +1-A&? 0' A'B1?L' &'1-' 1L<@ 1\' I ' C&01\' <' 10' 1LB100'+1' C 'B1@ H?1@ &? -1 &' ' <@' . 1+&?0' A<>< .1' A1' @1' B&1' C1&C@1' A1' B10 ' &'<@>1' ? ' B1&' & A1'.-1\' 10 ' C' @<' A' 1' <?B & ' 1' H' @<' A' 1' 1' 0 1>=' A? <-@ BD?-' <' 1' <'@@'=' I ' <? 1' BD'1=' E& 8' -&? ' A1' BD?-' ' 11' ? .D' I ' '@@1@ I ' @10' E& -&? 0' A1' BD?-' =1' 1' I ' ='BD11' D& 0' A1' ' 11' ? .D' I ' '@@1' A1'-\' B10 ' &'<@>1@ 0? 'B&>C@1'-' <==<' 1' <P <0B?-' A1?L' C' <0B?-' A10@'1.10@1' &" A1' '1@ 1L<@ <B'&-' I ' C&0'B'&-' A1L@ B100@+1' C 'B1@ <'1 ' I ' <'1-' <?B & ' 1' I ' C&<' ' A1'-\' @&? ? '0A'BB'&-' A1' =<' 1@ C' A?1' 01 BD1' 1L<>'-<B'&-' I ' C+1' 1?1' 1-' B1@@ C< '1@ <? '1@ A' 1BB'&-' I ' 1=& >< B'&-' B&>1' C' @<A+'0' A1' A1?L' D&>10' A'0B 1 10' A1' BD?-' '1@ ' 11' ? .D' A?' '@@1@ C' BD?-' <' 1' <'@@'=' &?' <? 1' BD'1=' E& ' -&? ' <+W- A' ' < B1&' < -&> >1 0@ 0&@&-H1' @1? ' B&-B'1-B10' I ' A'0B 1B'&-0' 1-' @<' 0< '0=<BB'&-' I ' 1'0-<#'1' <>1-A10

(; ! ' &- .' ?' ! - ! ; 0"* ' "E!2 & ') -/' !"!' -/' "-' !-2' ' , -'(' -' P '&-' ! @' +1001@@ &-' !-@' "' . ' &2' 1<>1@ ' X' - V +!2' ."&"+. /' ' -2 & !/' H &X@@K 3 '" 2!@2!" 4 /&!' *. . / !2' P #. 1 . -' ?

.- &-0 -#!' . ' &Z /)

+' .' .!L' 1/#S)'&-' .-/. -' -/' "!!' &+!Z ".0-/' 2 +' 1 E!' .!Z 7& 3&E!' !%#!!/&-*' !' !-* '. ' 7.' -# !Z'H

-."7."E'.-' 0-/ @2< .'" #!" &-'. !'" .+&/ @2

3!- + @=

'&-*' .'" !' 3"'&'&+!*!Z. ' !' 8! ' -/' !'". ' ! !+'. ' ' "&-(Z +!' "-/'. ' .-/.-

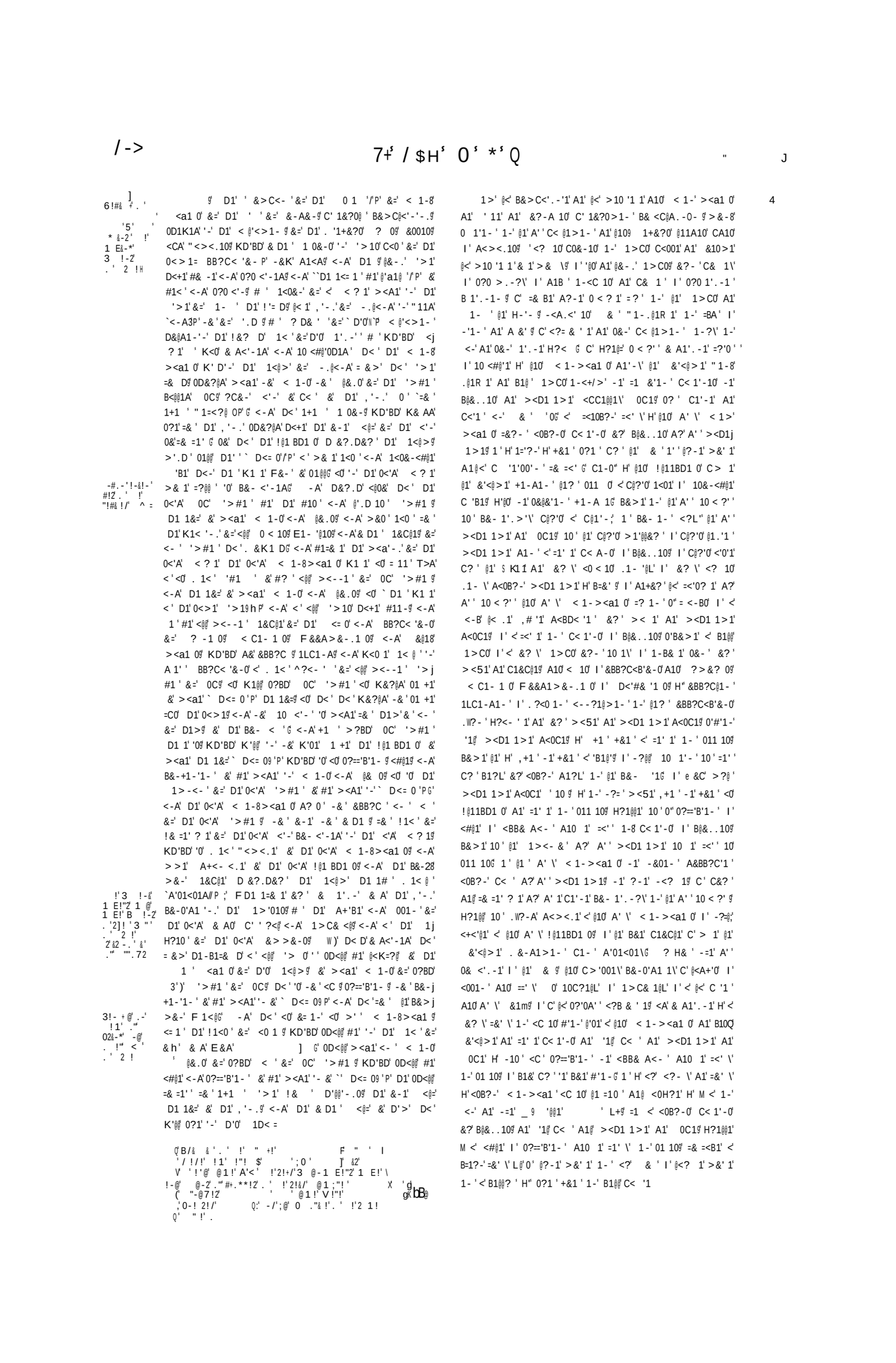
&=' D'0' 1<@>9' <' <@@' '>10' D1 1<= 1 9' <= 1 ' D1'@'>C@& 8' >1=' ' D< ' # ' D1' 0<'A' 1 BD<- 09' -@< ' A1@'+1 ' &' D1' 0<'A' 1 BD<- 0' <@@' 0?BD' ? 1 '10@' KD'BD' D1 ' A'A' <a1' (=' D1>' A ' <- '&=' D1-@'=&' D1' 0<'A' >C@& >1- G' <-A' D< ' &=' <-A'=&' ' D1' 0<>1' D1 ' <-A' 1+1 ' &=' D1>' #1' A'0j BD< .1A' <.<'-0 ' D1' , '- . ' D'0' < ? 1')' &' 1-A? 1' '@@' D1' -1L ' < @'<>1- ' W

9' ? ' &+1 1'. -' & A' D1', '- .9'# ' D1' A+'B1'&=' D1'0<'A' & A0' C' ' ?<@ <-A' 1>C& <@@' <-A' <' D1' < 1 ' &=' D1'0<'A' &>>&-0' '-' D1' <'A' < @'<>1- ' <001>##1A@' <-A' # ' ? D& ' ' &=' D1' 0<>1@' D< D' & A<'-1A' <-A' 0 <@ #@@0D1A' D< ' -& 1 0&-' & AK<'-1 ' & &#@1 ' K' D' " D1' ' '&=' &-A&-9' & 'K' D'-' D 11' '@10'&=h' <- ' < ' &=' D1'0<>1' ' 9' `#1'D10' K' D'-' ! <-BD'010' & 'K' Dj &? 9' h)' 8A& &' #1' ><A1' <= 1 ' D1' !1<0 ' &=' <0 1 9' KD'BD' 0 F @' #1' '-' D1' 1< ' &=' &? ' & A' -1' D&?0<-A' =&? ' D?-A 1A' 0'L 8='+19@<- ' D&10@ E<@&BD10@ & ' ` ?8' 01<?0\' K' D' <- ' ` 'a1' & ' &@1 -9/P' D< ' 0D<@@ C<00' D1' 1-. D' h)' &=' K&' -BD10@ KD'BD' 0D<@@ #1' ?A.1A' # ' D1' F< A1-0' & ' E&+1 -& 0' &=' D1' 0<>1' 0 1 ' K' D'-' D1'0<'A' ' 9'<-A' D 11' '@10' `&=h' 1+1 ' < '&=' D1' 0<>1G' & ' ?C&-' <- ' ?-A< ' '-' D1' 1< 9' & ' '-' D1' !1<0 0' &=' D1' < '+' ' & ' 0B1-0'&-' &=' &?' & A@' ' '-' D1' !1<0 ' &=' & C?0' D '0A@ 0D<@@ 01 ' & ' B&>><-A' & ' A&' &' #1' 0&@A' <- ' @'&10@ ` ?01<?0@0'P' & ' E<@&BD10G & ' ?C&-' <- ' ?-A< 9' & ' <- ' &=' A'1' 'A' !1<0 0@ 0D<@@ 01 ' & 'C? '?C&-' D1' !11 ' ' 1.0' &=' <- ' 1 0&-9' <- ' D&10@ ` ?01<?0@0P' & ' E<@&BD10@ ?C&-' <'-' &=' !& =1' ? 1' <-A' &00 &='LL0 ' 1 @' -.9' <0' &= 1-' <-A' KD1-' <- ' 1 0&-' 0D<=' A&' D1' B&- < ' &=' D'0' A'-<-B1@ & ' <- ' < '&=' D1' 0<>1G' F D1 1&=' + 0 ' +'' A ' 0D<@@ #1' D<A' &' D1' , '- ./0' 01@ <-A' + '0 ' +'' 'A ' &' D1' 01' &=' D1' E&+1 j -& 0' &=' D1' 0 1 ' &=' & AK<'-1 0@ <-A' ` D1' & D1 P' + 0 ' +'' A ' 10'A?1' &=' D1' 0<'A']L'0 ' &' D1' 01' &='D'>' D< ' 0D<@@ ='-A@ A' I &+1 9' <-A' C &+1' D1' # 1<a'-. &=' D' ' A'-<-B1'G <-A' D< ' 1+1 ' 1 0&-' D< ' K'@@ 0?1' =& ' D1']<'A' ! & =1' ? 1@ '0D<@@ D<+1' <-' = '&-' &=' "1# ' /)' # ' ' F ' ' & ' @<'-' < ' D'0' @1^'&-9' <-A' 0?BD' &B100' <-A' L1B? '&-' 'W)' '-' D1' 0<>1' <0' '0' D<A' '-' <-' ='' &-' &=' " 1# G <-A' D< ' D1' "1=1-A<-' ' '-' D1' 0<>1' =# &-' #1' -& ' <A>' 1A' &' K<.1' D'0' <K ' &+'A1A' <@K< 0' D< ' 3')' D'0' B '-& ' -&-1' & D1 ' ' A'-<-B1@ & ' < ? 1@ ><A1' & ' &' #1' ><A1' '-' D'0' C 101D ' < @'<>1- 9' 0D<@@ 1L 1-A' &' D1' "<>.<.1' & ' 1 ?A'B1@ -& ' '-' <- ' K'01' #1' C 1 ?A'B'<@ & ' D? =?@ &' D1' "1<-' =& ' D1' '>1' #1'-.' &=' D1', '- ./0' = 11' D<C1@ &=' <'-' < '-/0' @1' E <-A' &=' &-A&-9' & ' &' D1' "1<-' <-A' D<C 1 ' =& ' D1' '>1' #1'-.' &=' D1'0<>1' D<C1@@ -& ' C' <- ' 1 0&-' & ' 1 j 0&-0' =& ' D1' '>1' `<#'A'-.' & ' AK1@@'-. 0P' K' D'-' D1' 0<>1' D<C1@@ & ' K' D'-' <- ' @<B1' & ' @<B10' '-' <'-' < '-/0' <-1' '-' &-A&-9' & 'K' D'-' <- ' & D1 ' @<B1' & ' #B10' K' D'-' D1' 1B'-= 9' ! 11@ & ' ! <-BD'01' &=' D1' 0<'A' "1<-9' & ' &=' D1' 0<'A' "1<-'<-A' D<C 1 G' -& ' &' <- ' &=' A'1' '.D 0@ '+'@1.10@ '#1 '10@ ! <-BD'010@ >>?-' '10@ & 'D1 ' D'-.'# ' D1', '-.9' & '# ' <- ' &='D'0' &.1-' & 0@ 1A1B100& 0@ & ' &00100& 0' &=' D1' ` 1<@>9' 0<19 h' <-A' &K-' &=' -.@<-A@ &' D1' "1<-' <-A' D<C 1 ' &=' D1' 0<A' D<C1@@ <-A' D1' ' ?BB100& 0' &'-@ ' & ' 01+1j <@@ ' '-' <- ' >< '-1 ' . >' 1A@ & ' '-' <- ' >< --1 ' D1 1 &j =& 1' <CC1 <'-'-.;' -A' <@0& C &+'A1A@ 0)' D<' D1' "1<-' &=' D1' 0<'A' D<C1@@ <-A' D1' "1<-' <-A' D<C 1 ' &=' D1' 0<>1' D<C1@@ 0D<@@ D<+1' D&@A' <-A' 1- & ' =?@@ 9

Q . ; ! .+/!-' J)
(&-' @7 2.!'!'" ! K')'
J 1 E!'.'" J 4.!2' <. !'" @E!' H-' ' -'
J .'" 1!20"!' <. ' !'2 1!' ;!' /' <
F -!@ !'")) 7!+@-*' ;&/@-*'.'" ;!@-*' H' ?<(JJ)
6.& +'!2 !')' -/'*"0-!/'

A1' B10' &'<@>19' <' &? \' & I' U'<C 10' C?'0' @1>C@&'18' >1-'1?1\' C' @10' =' \' I DO?- \9' C?'001- 'A1@'+1 ' <' @10' A' \' ' BDD'- \' &? R' A1#' 0?1 A1\' H?1@L' C '0 1-' A1' B1?L' &?' <0B'>' A1?L' C?' @1>C@&'1>1-' <+0- A@ G' I' A1' B1&' I' C?' B1&' H' B1?L' I' BD&-' A1?L' 0&'1-' A'0BD< .1\' 1-+ 0@1' & ;' B10' 10 < ?' I' & A1- -B1' A1-A? 1' ?0H10' <?' C0BD1'-' C< @1>1>' <' 1-'

, >' -=1' A' ' 5?' @1' & ' C' @<A+'0' I' <001-' A10' A' \' ?!' 10C?1@L' I' 1>C& 1@L' I' <@ C '1 8' A1' @10' A' \' &10' 1-' @1' A' ' C< @1>1-' <001>##1\' I' C' @<?=@& ' 1' A'B1A' <A' & A1'.-1\' I' 10 <#@'19' H' -?A1' C0&-1' & A1K<-1 ' &?' &#1@1 ' A1'-\' @<' ' 11' A1' &?-A 10@ &?' A1A1'-\' &'0' @1?a10' 1-' <0B?-' C< ' A1' >10>1' @<' ' 11' H" H'@ 0C' 9' A1'-\' = <?-BD'010' &?' A1D& 09' =<B1' &?' =<B1' 10 1' =1' ' <C 10' @1' =10 ' A1@ <0H?1' H" M <' 1-' <-' A1' -=1' B ' '@@1' ' L+ ' <0B?-0' 0&@1 0' .<@&.10' &?' D?01-0' &+1H9' <0B?-' C'a1' &?' C&@1'-1' H' C< 01 <' @<' @&-.1? ' &?' >10? 1' A1' A1?L' C&? \9' H?1?L' R &-' <A ?..1\' 0&@&-H1' @10' E< 8' A1'-0' &?' E& -&? 0' A1' >10>1' @<' >10 1' A1'-\' @<' A' 1' ' 11' I' &'0' @1?a10' 1-' B#?-' C< ' A'B1A'G' &?' 0? ' <0B?-' A >1-BD1' 1-' <-9' &?' 1-' @10' =10 10' A1' @<' <'+' 1' &?' 0B1-0'&-'A1' -=1'= 9' &?' 1-'@1'=10 'A1@ & C& '0'] C'9'+1-A1' &?' B&><?-A1' &?' =<B1' <' +1-A1 ' <0B?-0' 0&@1 0' D?01-0' &?' .<@&.10G' &?' 0? ' <0B?-' A >1-BD1' &?' <0B?-' A1' @10' A' \' =10 10' >1 1' &?' C&01' 0? ' C110' &?' <>#10' A<0B?-' <0B?-0' 0&@1 0' D?01-0' &?' .<@&.10@ 0? ' C1'-1' A1@ =& =1'j ? 1' I' CA1' A1' LL'0' 0R@'-.10@ 0" 0&+1-' I' H?<-' <0B?-1' '1@ C0&-1' =1 <' B&- < '1' A1' B10' & A1-W-B1' &?' <0B?-1' C< ' A'B1A@ A&?-' +' 0' +'' 'A ' , &-' 1?1\' <@ &1C0' A?' & 9' I' +'0' +'' 'A ' 1-' <@ &1C0' A10'3E&+0-&? 0' A1' @<' >10A1' A1' @10' & A1K<-1 0@ I' +'0' +'' 'A ' 10'A?1\' A1' @10' A' \' LL0' <@ &1C0' A1' 11@@? ' H" &+0<' A10B&, <' I' C &+1 <' C-= <BB'&-' A1' B10' & A1-W-B1'G ' H' B '?-1' C0&-1' H' 0?1' +&1' C? ' @<' A' 1' =& =<' ? 1' <'1-' <BB'&-' A1' A1 1' A1' B1&' C' # '1=' &?' C' C@1'-' <' 0<' 1@1BB'&-9' I' <? '1@' CB1001' I' 1L1B?B'&-' 0&'1-' 1?1\' 1-' 'B1A' B&>1' 10' 1-' <BB'C-' A1' A1 1'G ' H' @1' "1=1-A/?-' 1-' >10>1' @<BB'&-' -1' 0&=' <A>'0' A1' .<.1' 0<' @1 ' ? +1?' &? \' =&' \' H' -1' B10' <B' -1' -?A' <? 1' <B' & A1-J-B1' &?' 0 < ?' ' =<' ' &?' <==<' 1' 1-' B10' C01-' C< @1>1-9' 1L 1-A1' <' @1' A<>.<.1' &?' C ?A'B1@ -1' 1-' <0B?-' ><51' 0&'1' A<' '<.1&?0' &?' C ?A'B'<A' <' @1' "1<-' C? ' @1' 1>C0' 10 1<-' A1' @<' = <-B' D<C1A' A?' & ' A1' 1'-' < -' . ?-' A1' &?-A 10@ &?' <' @10' "1<-' I' D<C' 1' C?' 1>C0' 10 1<-' \' A1' >10>1' @<' D<C1A@ -1' <?' <0B?-1' C0&-1' &?' C0&-10' C?' 1>C0' A1> <-' C><'-<-' &?' 10 1<-' &?' A1> <-' \' C><'-<-' \' &?' 10 1<-' \' A1'-\' >10>1' @<' D<C1A@ &?' A1A1'-\' <0B?-' @'1?' &?' @'1?L' 1-' 1'-' < -08' <-1' 1-' &?-A 10@ &?' A1A1'-\' <RB?-' <? 1' @'1?' &?' @'1?L' A1'-\' @1' CB -B 1'=11' &?' = <?-BD'01' A1@ A' ' "1<-9' &?' A1' @10' A' \' "1<-' I' D<j C' 1'G -1' <?' <0B?-' A1' @10' A &' ? 10@ C '+'@1.10@ @'# 110@ =?-BD'010@ '>>?-' '10' &?' <? 1' BD&01' C' @1' & 9' &?' C' <0B?-' A1' 01\' C.1-' &? 0' CA1B100&? 0' &?' C&00100&? 0' A1@ &'<A' 10 < 1' I' & &-1 " 1-.@1R 19' <' @10' "1<-' I' D<j C' 1' A1' @<' A' 1' D<C1A' I' @&?' 0?BB100&? 0' &'- >1-' &?' 01, <@>1-' 1-' <0B?-' ><51' ./?- 1\9' &?' 1-' <0B?-' >< 1' C' B ' A1+3-' '<CC 1- - \';' 1' <?L" C? +1?' I' ./?- 1' H' @1' "1<-' A1@ A' 1' D<C1A@ I' @10' "1<-' I' D<C' 1' >10>1' @<' D<C1A@ <'1-' 1' .-1-' 1' 1-&'1-' C@1'-1>1-



& . - .
3! - + @

3" . #!22
!"!&-

3! - + @ . -
2 !"2 .
&K

' D1 0? +1 '@'.' &= D1 &-0 <#@1' & ' D'0 '1? 1-<- '
D1 1 ` D1' & D1 ' <@= &' D< ' 1 0&-' & ' 1 0&-0 &=
D1' 0<'A &K -' & ' <0 @1 #1'- .' < ! 11><-' &= D1'
0<'A &K -' &=' "&+1 D< ' F'@@ B& > > 1 - B1 ' & ' 0?1'
<-' = '&-' D1 1&= <.<'-0 ' D1' ==1 - A1 'P' -A' D< '
1+1 ' 1 0&-=B& ' 1 0&-0 &= D1' 0<'A &K -' & ' <0 @1
! 11><-' &= D1' 0<'A &K -' &=' "&+1 > < ' '-' D'0 &K -'
<>1 D<+1' /) <.<'-0 ' 1+1 ' 1 0&-' D< ' K'@@'- . @ '
`&==1-A1 D D'0 < ? 1 0 5 < .1 - 1 <@ ==' & -' &=' "1# ' &=
D1' 0<'A ?>' &=' ! '+1' < a0 <-A' A1B@< 1' 10C1B'<@@ '
?C&-' D1' 0<>1' = ' & ' A'-<-B1 -A' D< ' &B100 &=
? @<K ' <-A' <@@ & D1 ' &B10010 <-A' "1 1 > '''< '&-'
0D<@@ #1' D<A' '-' D1' 0<'A = '&- <0' 'D D<A' <-A' - i1A' '-'
& D1 ' .1 - 1 <@ = '&-0 &=' "1# -A' <@0& D1' <0 1 '
&=' 1+1 ' D'C' & ' 1001 KD'BD' K'@@'- . @ ' B& - < ' &' D'0
= ' VV) A& D' B& - +1 ' & <- ' @<B1' & ' @<B10 <- ' '@
> ' 1 BD<- & ' & D1 ' 1 0&-' & ' 1 0&-0 & 01' & '
1<0 0D<@@ @'a1K'01' =& =1' ' < ' 1+1 ' '>1' D< ' D1' 0&
A& D ' ! '+1' < a0 '-' D1' <- - 1 ' <-A' ! & >' <=& 10<'A'
&' #1' 0?1A D<A 1B&+1 1A @1+'1A <-A' 1 > C@& 1A

' "&/' 7 ' 2 . -"@ . '" 2 . - 1 2' . ' !' 2 &/' . 7 - !' - / '
2 !+' ; ! @ - *' "! 1 -' . ' !' 2!&/' . 7 - ' . ' . " '
' 7 . + !' # . 1 1 ! - #!' ." 20!' -' ##&. -' !". ' N$ ' +'
@! - 2 ' !' 2!&/' &! - / . 0"' .' '!' !' . !" 1 . & != 'J
2' !"! !" <' / . ' !' #. - <"@' . ' &2'
." "/! 4 -#!' (' ." 9"/! - 0 - !!

- ' H 0? +1?' A1@ &-0 <#@1' & -' 0&-' @'1? 1 - - ' '@@1&H10 1 '
H?1@@1' C0&-1' &?' C0&-10' A1' P<' A' 1' '@@1' & -' D<0 1@@
10 1<- ' = <-B' D& > 1' A1' @<' A' 1') ' A1' " &+& 1 9 H' +&1 '
B& > 1 - B1 ' &?' 0?1 ' <BB'&-' 1 - 1 - B&?- 1' @1' A' '&==1 - 8
A&? '@<? 1' > &' 11 1 ' H' B='?-1' C0&-1' &?' C0&-10' A1' @<'
A' ' '@@1' &?' D<0 1= ' = <-B0' D& > 10' A?' Aa' '@@1' A1'
" &+& ' 1-' 0&-' CC 1' -&?-1 C&1 ' &?' C&'1 - ' <, ' 1 - <C 10'
1 - +00' B@'?-1' C0&-1' H' +&@?- '1 > 1 - ' =<B1 ' @1' B&- '1' A1'
B10 ' <B 1' &?' & A1 - J - B1 .15<@=' <BB'&-' A1' A1 1' A1' @<'
A' 1' 0& > 1' A1' +' > < B\ I ' A1B@< 1 ' 0C1B'<@ > 1 - ' 0? '
> 10 &1' @<B 1' &?' & A1 - 0 - B1 1 ' H' CB1001' A? @<. < '1' I '
& ? \' <? 1\' C 1001 I ' A1 > '-<B'&-' 0&'1 - ' 1?1\' 1 -' @<'
VA' 1' <BB'&-' B& > 1' 10 ' 91?1' I ' ?01' 1 -' <? 10' .1 <@L'
<B '&-0' A1' A1 1 1 ' <?L" @1' <'0 1 ' A1' B@@?-' - '1=' &?'
+<'001<?' H" +&@?- '1 > 1 - 1 - B&- = '1' A1' B10 ' <B 1' &?'
& A1 - = 'B1 1&-+&'1'<@ <0B?-' 1 -' &?' @'1?L' <0B?-' C1@ '-1
' BD<?- &?' <? 1' C0&-1' &?' C0&-10 BD'+<@ &?' #10
=& =<B1' 1-01 > #@1 > 1 - ' <' B= ?-' 1 > C0' H' 1-0" =<B1 '
' > < B\ 1 -' @10' > <51' I ' =&? > 1' <+ A' \' A10 1' 0?1\'
1?1\' 1B& , 1\' @1+1\' I ' 1 > C@&'1\ '

) &++!' 52 %' . $ -

)) : c C ' 0 ' - / > :

5 ' ' $ ' > # !0

' D1' < @'<>1 - 'D&@A1 -'<' F 10 > '-0 1 D1' D' A'
" < ' &=' ?-1 D1' 1+1 - D' 1< ' &=' D1' 1' . -' &='
, '-.' AK< A' D1' ! &? D @ <= 1 ' D1' &-H?10 ? '0<'A'
& A' D1' , '-. # ' D1' A+'B1' <-A' 001 - ' &=' D1' & A0'
C' ' ?<@ <-A' 1 > C& <@@ <-A' <' D1' 1H?10 ' &=' D'0'
& > > &-0 '-' D1' 0<'A' < @'<>1 - ' <001 > #@1A ' <-A' # '
? D& ' ' &=' D1' 0<>1' < @'<>1 - D< D' & A<'-1A' <-A'
10 <#@'0D1A' B1 <'-' < ? 10' <-A' A'-<-B10' '-' <'>1 '
<-A' ! & >' =&@@&K'-.

! D F D1 1<0' D1 1' #1' <0' K1@@ K' D'-' D1' ' '
&=' & K'BD <0' 1@01KD1 1' K' D'-' D1' &?- ' &=' & j
=&@a A'+1 0' 1 0&-0' KD'BD' A&' > <a1' ?- ?1' F < 10' &=
<@@ <- - 1 ' &=' F & 0 1A ' -& '#1'-.' &=' D1' 00'010' '-'
1-. D' -& ' '-' 1<A D -& ' &=' . & &A' ?== <-A' '. D '
> <a'-.' <0' D1 ' &?. D ' &' #1 <-A' &=' &@A' '>1' K1 1'
<BB?0 & > 1A <-A' D1' @1 10' <-A' < -' C1 <'-'-.' &' D1'
0<>1' `-& ' K1@@ \ 5 > <A1' < 'A' K &?. D '-' . 1<' " 1B1' ' <0'
K1@@ &=' " 1 - '\1 - 0' <0' &=' <-. 1 0' '-D<#' '-.' & ' 1C<' '-.'
'- &' D'0 1<@ > KD'BD' D<+1' ?01A' <-A' A&' ?01' &' #? '
0?BD' 1 BD<-A'010 ?0 '-.' D<' D1 ' K1 1' K' D'-' <0'
D1 ' 011 > 1A' K' D&? KD1 1' '-A11A' ' ' '0' B&- < G

(0 - "0!+@' N$ ' ' ' ,

- ' H 0? +1?' A1@ &-0 <#@1' & -' 0&-' @'1? 1 - - ' '@@1&H10 1 '
H?1@@1' C0&-1' &?' C0&-10' A1' P<' A' 1' '@@1' & -' D<0 1@@
10 1<- ' = <-B' D& > 1' A1' @<' A' 1') ' A1' " &+& 1 9 H' +&1 '
B& > 1 - B1 ' &?' 0?1 ' <BB'&-' 1 - 1 - B&?- 1' @1' A' '&==1 - 8
A&? '@<? 1' > &' 11 1 ' H' B='?-1' C0&-1' &?' C0&-10' A1' @<'
A' ' '@@1' &?' D<0 1= ' = <-B0' D& > 10' A?' Aa' '@@1' A1'
" &+& ' 1-' 0&-' CC 1' -&?-1 C&1 ' &?' C&'1 - ' <, ' 1 - <C 10'
1 - +00' B@'?-1' C0&-1' H' +&@?- '1 > 1 - ' =<B1 ' @1' B&- '1' A1'
B10 ' <B 1' &?' & A1 - J - B1 .15<@=' <BB'&-' A1' A1 1' A1' @<'
A' 1' 0& > 1' A1' +' > < B\ I ' A1B@< 1 ' 0C1B'<@ > 1 - ' 0? '
> 10 &1' @<B 1' &?' & A1 - 0 - B1 1 ' H' CB1001' A? @<. < '1' I '
& ? \' <? 1\' C 1001 I ' A1 > '-<B'&-' 0&'1 - ' 1?1\' 1 -' @<'
VA' 1' <BB'&-' B& > 1' 10 ' 91?1' I ' ?01' 1 -' <? 10' .1 <@L'
<B '&-0' A1' A1 1 1 ' <?L" @1' <'0 1 ' A1' B@@?-' - '1=' &?'
+<'001<?' H" +&@?- '1 > 1 - 1 - B&- = '1' A1' B10 ' <B 1' &?'
& A1 - = 'B1 1&-+&'1'<@ <0B?-' 1 -' &?' @'1?L' <0B?-' C1@ '-1
' BD<?- &?' <? 1' C0&-1' &?' C0&-10 BD'+<@ &?' #10
=& =<B1' 1-01 > #@1 > 1 - ' <' B= ?-' 1 > C0' H' 1-0" =<B1 '
' > < B\ 1 -' @10' > <51' I ' =&? > 1' <+ A' \' A10 1' 0?1\'
1?1\' 1B& , 1\' @1+1\' I ' 1 > C@&'1\ '

) - !"+&-!/' . -' !' 6 . ++

ME' = ' ' ' G '6 # ' %H ' '4@
(' 4 Q f (
' < @1 > 1 - ' 1 - ?\' <' F 10 > @<' '1 B1' &? ' A1'
?-1' 1 -' <-' A?' 1' . -1' A?' & ' AK< A' & ' H?< '
C?'0' @1' B&-H?10 ' 01C '0 > 1 >10 > 1' - 1' K ?' @1' & ' A1@
<A+'0' I ' <001 - ' A10' = 0' 10C?1@L' I ' 1 > C& 1@L' I ' <' D'
1H?10 ' A1' 01\' &1\' 1 -' @1' A' ' C< @1 > 1 - ' <001 > #@11\' I '
C' @<?B & ' 1' A1' >10 > 1' @1' C< @1 > 1 - @ <A' & A1' . -1' '
10 <#@'1' 1' -0' 0 < ? \' I ' & A1 - W - B10' 1 -' > <51' I ' =&? > 1'
1 - 0?<- \
'' 1 > 1 - ' H' @&?' ' 0&- ' 0'#'1 -' A1' - \' @<' ' 11' A1'
& K B1 B& > 1' <'@@&? 0' A1' - \' @1' &?- 11' A1' & ==
A' 010' C0&-10' H?1?L' =&?- ' `K< 10' 6' > 1' - 0' &'0' A1\'
&? \' > <50' A10' F & 0 1A10 - 1 - ' 10 1<- \' A10' <00'010'
1 -' @&- . 1? ' -1' @<'1? -1' A1' #&-1' 0 ?== I ' A &' ? 1@@
=1'0? 1 0' B& > 1' '@0' 10 1' A1'+1 - ' I ' =? 1 - ' A<?-B'1 -'
1 > C0' <BB?0 ? > 1\ I ' @10' 0@1'10' I ' ='@1' < B1 == 0C1B <- \'
-'1 - ' A &' > 1 - ' =<' \' I ' & 1\ 1 -' . J?-A' A1B1' 1' 0'#'1 -'
A10' A1'-0\1'-0' B& > 1' A10 <?-. 10' > D<#' <?- \' &?'
1C<' <- \' 1 -' B10 ' &'<@ > 1 H?1?L' &?- ' ?01\' I ' ?01 - '
A<BD< '1 ' '1@L' ='BD<-A'010 B&-='<- \' H'@ M &'1 ' A1A1'-\'
B& > 1' ' > &-0 1' A1' D& 0' @&?' A1' ' 1' '@ 10 ' B&- 0 '1G

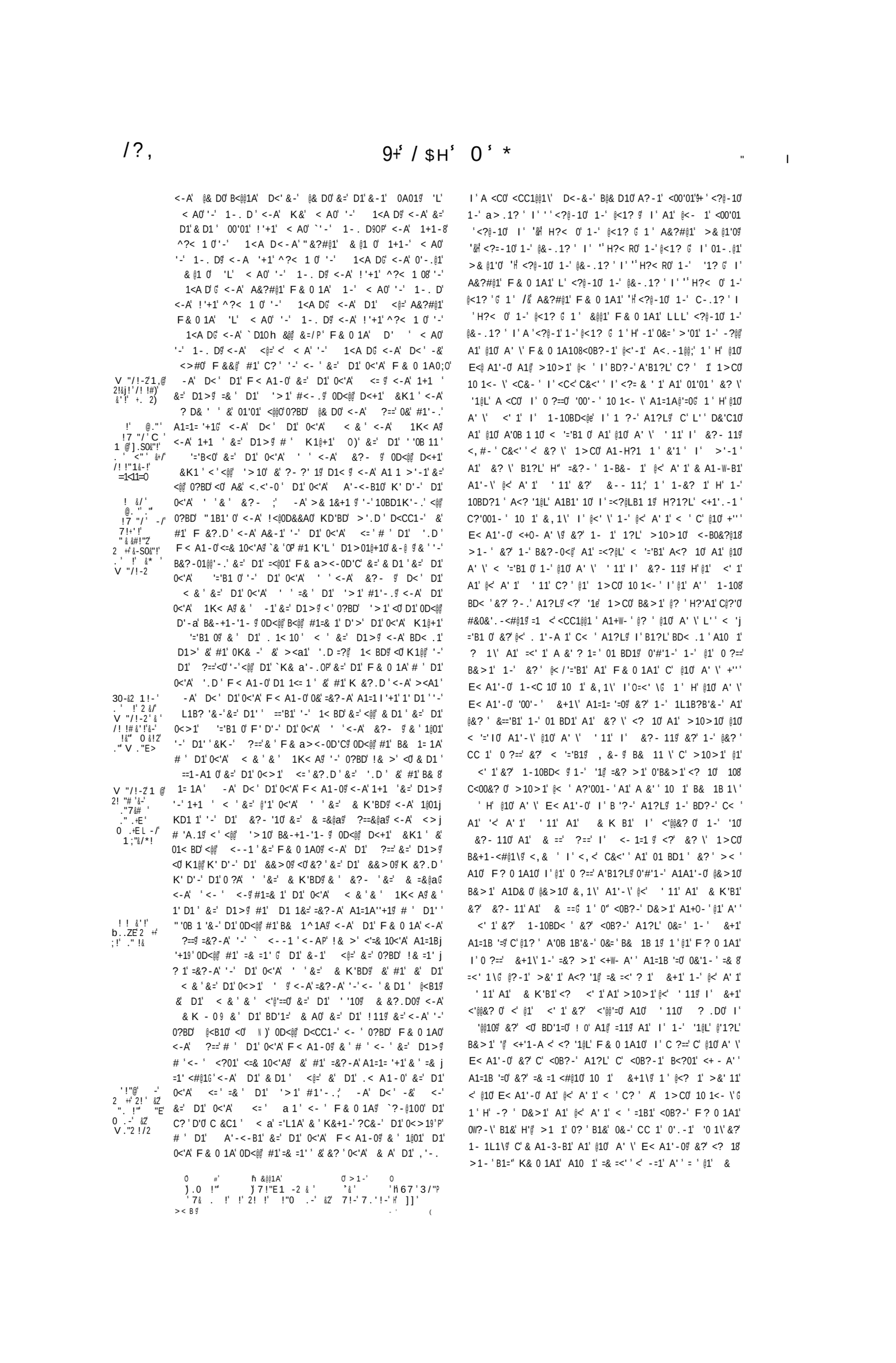
) - !"+&-!/' . -' !' 6 . ++

!' 3 "+& & !- ' 6 . +' I' C' ' / 7 ' ' #. - &-2' !' 3". #!!/&-*2' . ' ; . ' .2!' A! "2' &-' -' 0-&- !""0 !/' !"&!2= '
) ". 1 ' ' 0-!' I' / 7 ' ' ' I ' 0- &' + ' @' ' / 7 ' ' '

-' "*&-L)'
& ?

C ' @&?' H' F & 0 1A10' 1-' 1>C0' C<001' =? 1- ' #1<@>1'@ ' I ' &'<@>1- ' &+01\' I ' C@103?- ' ='BD<-A'01' I ' .0?-A1>1- ' A10' 1\' I ' < >1\'1-'@10' C< '10' A1@<' @1' > 1 1G & 1' C' <?01' H'a' 0&- ' A1' -&?-' A ' ' =1'0? 1' 5R A1' -&?-' A &' ' 0 ?==9 '@0' 0&- ' 1C& \' I ' <CC1@@1\' 0?# '@1' I ' -&?-A &' ' ' BD<-8 A'01' ' A1' C1A ' 1C? <B'&-9 <?' .0?-A' A<><.1' --=1' A' ' ' @1' & ' I ' . '-A' C ?A'B1' A1' 0&-' =&'<9 C1&C@1'G " -=1' A' ' ' @1' & 9 A1' @<001- ' A10' ! 10C?1@L' I ' 1>C& 1@L' I ' < @<' 1H?10 ' A1' 010' &1\' 1-' @1' A' ' C< @1 <1- ' 10 1<- \' I ' C' <?B & ' 1' A1' >10>1' @1' C< @1>1- 9 C? ' @1' #'1-' A1' &? ' 0&-' C1&C@1' I ' 1-' CC1 ?< ' <>1-A1>1- ' A1' @10' A' \' F & 0 1A109 ' A10 ?BB'&-' A1' &? \' >< 1\' A1B1' 10' 10 1' =1' Re' I ' &, 1\' 10' F & 0 1A10' C' 1?L' H'' @10' &+01- ' I ' @10' >&'1-0' A'B1@@9 <A' & A1' . -1' I ' 10 <#@'1' H' D&>10' A?' A' ' ' A1' -\' @<' A' 1' ' 11' <'1- ' C&<' ' B '?-' <-9 @1' @?-1A'1' C0BD1' -' 'C 10' @1' =10 ' A1' 1- 1B&0 9 A1' 10@@1 ' H?<C 10' E< A1' -0' A1' -\' @<' A' 1' ' 11' A1' - B0- '1' @< 1G ' <?L" H' @< A='B1 0' A1' >10>1' @< ' 01>#@<##1>1- ' A1D& 0' @< ' 119 B10 ' <00<+&' ' A1' -\' @1' &?- 11' A1' & ==9 <'1- ' C&<' ' BD?<' <-' <?' >10>1' @1' #? ' A1' 10@'1 ' H?< 10' E< A1' -0' A1A1' -\' I ' A?' A' ' &?- 11' A1' >10>1' @< G 1 ' @10' <+0- A' \' E< A1' -0' 1-' @10' A' \' &?- 11' I ' 11' A1' +15' A1+/- ' @1' <' 1' A?' A' ' ' 11' C ' @1' 1>C0' 10 1<- 9 0? ' @1' @?-1A'1' C0BD1' -' <C=10' @1' =10 ' A1@ & C?0' C" <A&-H10' C0BD1' -' 1-0?<- 9 I ' '@@1&H10' A10 1' ? 1\' A1+0- ' @1' <' 1' A1' @<' A' 1' ' 119 5B @1' 1-10BD<@@ A1@ " ?BD'1' A1' <-B<0 1' A1' -\' @1' A' ' &?- 11' C? ' @1' 1>C0' 10 1<- 9 0'@ <+1' . -1' @? ' A1' -\' @<' A' 1' ' 11' <A&-H10' 10 1' 1- 9 &?' <? 1>1- ' A1+ - ' @1' <' 1' <-B0&?@1>1- ' @1' A' ' 1-10BD< ' @& 0' 10 1<- ' <#01- ;' ' H' &? \' @10' A' \' E< A1' -0' 0'#'1-' A1' -\' @<' A' 1' ' 11' B&>1' A1D& 0@ ?' <? 1>1- ' @<' . 1' -A 1' C< ' A1?L@ A10&?#\' B10 ' =&? >1' <+0- A' ' 1B' 11' 10@?\' 5B ? 1\@ <'1- ' C@1' -' C&<' ' C? ' <-' <A&-H10' C0BD1' -' 1-0?<- ' A1' 0 +11 ' @< '='B1' A1' @10' A' \' < '='B1 0@ 5B H'@0' =1B1- ' 5B &, 1- ' #'1-' 5B A &' >1- ' 5B A1#&-1' 0 ?==G 5B A1' =1' 1' 5B & A1' .-1 ' <? '1@L' ?@10' 5B & A1-3-B10' A1' -\' @<' A' ' < 9 0" 0&+1- ' B&>1' '@ 1>8 #@1 <' <0' 1?L' #C0&' . -<#@1' &?' -1B100< '19 <' @<>1-A1>1- ' A1' @10' A' \' F & 0 1A10' I ' G 1 ' H' <? '1#B' ?@10' 5B & A18 -W-B10' C' 1?L' 1-0" =<' \' 5B A<. -1\' A10 1' C' @1" A' \' < '='B1 0' &#1'1\' I ' .< A1G ' &?' <? 1>1- ' H?< 10' A1' @10' A' \' E< A1-0' B1?L' A1' @10' A' \' '='B1 0' H" <0B?-0' A1' @1? ' A' \' ?@10' 5 ' & A1-D'B10' 1-= 1' -1- ' &?' =<B1- ' @1' B&='8 0 '19 <CC1@@<- \' <0' 1?L' +' A1' @10' C@?'0' '=01 1 10' A1' @10' A' \' '='B1 0' A1' -\' @<' A' 1' ' 119 5B +' A1' @1 ' >10>10' '='B1 0' A1' -\' @1' A' ' &?- 119 C' @<' A' 1B'&-' A?' A' ' <' 1' &?' 1-10 D<=' &?' A?-1' A1?L' C?-1 &- ' ' H' BD?-' C1B1' A1' F & 0 1A1' 0&' ' C? 0?<- ' C' > 1' @<' C1B1' A1' @1<@@' =1'0? 1' #&-1' 5B BB>+1-'1- ' ?==9 1 ' H'@0' 1' .-1- ' @10' @&- .1? ' 5B @<1? ' 0'B&>1' @<00'01' 0&@1&' ' 10 1' A<?-B'1-' 1>C0' A &' 1>1- ' <BB?0 ?>11G B10 ' <00<+&' ' 1AA10' A1@ C@?'0' .D'-A' <00'01' 1-' @&-.1? ' L''' ' <?@-10' @< .1>1- ' 5B 1-' @<1? ' ''' ' <?@-10' @< .1>1- G 5B 1AA10' A1@ >10-1' <00'01' L' ' <?@-10' 1-' @&-.1? ' 5B 1-' @<1? ' H' <?@-10G 5B 1AA10' A1' C@?'0' C1 ' ' <00'01' L' <?@-10' 1-' @&-.1? ' 5B 1-' @<1? ' ''' <?@-10' I ' A 'G 5B <C0'<CC1@@1\' -a10' B@& D10@ L' ' <?@-10' 1-' @&-.1? ' <?' >< -0' JB +' H?< 1 0' 1-' @<1? G -A' KD1 1<0' D1' F & 0 1A0' '-' '>10' C<0 ' K1 1' ``@<K=?@@ ' K &?.D 9 <-A' 1 BD<-A'01' K1@@ @'a1A9 ' ' <-A' . 1< @ ' A10' 1A' <-A' 10 11>1A' '-' D1' < 0' #1 &-A' D1' 1<9 -&K' #1B<?01' D1 ' #1' 1C& 1A' <-A' B<@@1A' 0?# @1' <- ' ?-@<K=?@ 1 j BD<-A'01@ <-A' &=' @' @1' 1C? < '&-9 &' D1' . 1< ' "<><.1' &=')' &? ' 0<'A' & A' D1' , '- .9 <-A' . 1< ' 1 ?A'B1' &=' D'0' =1' D=?@ 1&C@1G ? ' 0<'A' & A' D1' , '- .9 # ' D1' 001- ' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@9 <-A' < ' D1' 1H?10 ' &=' D'0' & > >&-0' #1'- .' '-' D1' 0<'A' < @'<>1- ' <-A' # ' D1' ? D& ' ' &=' D1' 0<'A' < @'<>1- 9 =& ' D1' F 1<@ D' &=' <@@ D'0' 1&C@1@ <-A' D1' C1 C1 ?<@ >1-A>1- ' &=' D1' 0<'A' F & 0 1A0@ <-A' `10BD1K' -.' <-A' <+&'A' - . P' <@@ <--1 ' &=' " 1B1' 0' &' #1' A& 1' <-A' K &?.D ' '-' F & 0 1A0@ # ' D1>' D<' K& a0' D1' 0<>1@ <-A' D1' 1<C0' D1 1&=@ D< @ ' & A<'-1A' <-A' 10 <#@'0D1A ' D<' V . "2 ! /' V ! ' !"2' 1-@ &=' D1' 0<'A' <= ' K' D' -' D1' 0<'A' ' ' 0D<@@ D<+1' ! ' !"@' A ! "' &K1 ' 1+1 ' 1< 9 D1' &-A< ' -1L ' <= 1 ' D1' !1<0 ' &=' 2 +' # . .2!' 1- 1B&0 9 &' BD&&01' !&? ' F < A1-0' 8K' D'-' D1' 0<'A' !&? ' ' &=' D1' 0<>1' <= G <-A' <@0&' D<' '='B1 0' &=' D1' V "/ ! -2' &-' ." 7 &# ' 0<>1' <= ' @'a1K'01' &? ' &=' D1' ' 9 D<' '0' &' 0< 9 -/' . !'" K' D'-' D1' &? - ' &=' & =&@a9 0D<@@ D<+1' &K1 ' 1+1 ' B.0'" &-' 1< ' < ' D1' 0<>1' " < ' &' BD&&01' ! &? ' F < A1-0' K' D'-' ." +E= <-A' &=' D1' 0<'A' &? - 9 &=' D1' 0<>1' E <= ;' '>#' D1' 7 .'2 +' ; !' <=& 10<'A' F < A1-0' '-' D1' 0<'A' &? - ' <-A' ' 9 # 27 ."-' ; ! ." ! ' B&>1' #1=& 1' D1' < # ' &=' D1' 0<'A' ' ' =& ' D1' '>1' ;+ @ ." #1'-.9 ?C&-' D1' &-A< ' -1L ' <= 1 ' D1' !1<0 ' &=' & C?0' . ' ! & @' D 0 " D1-' -1L ' =&@@&K'-.9 <-A' `' D<"\' P' &' #1' 'K & >' -/' ! 7 "/' #1=& 1' D1' < & ' &=' D1' 0<'A' ' 9 <-A' ='1' 1K< A' &=' . ' ! 0# @' D1' "?BD ' &=' <-B<0 1 9 K' D'-' D1' 0<'A' &?- ' = ' . ' -# 2 !"= D1' '>1' #1'-.9 '=' ' D<CC1-' D' >' 8K' D'-' D1' 0<'A' &?- ' D1-' &' #1' C 101- 9 & ' 1@01' #1=& 1' D1' < & ' &-@ 9 D1' <'A' 1K>A' D1-' #1'-.' <#01- ;' -A' D<' <@@ D1' 3.7!'" . ' ! 0<'A' F < A1-0@ < ' K1@@ K' D'D' D1' 0<'A' ' ' <0' K' D&? 9 2 &/' V "/ ! -2' & ' 1@01' D1' . 1< 10 ' !< ' &=' D1>9 ?-A1 ' D'0' ! & >' .' 20"' !@ # =& 1' 1Ba1A' BD&01-' <-A' 0K& -9 0D<@@ D<+1' =?@@ &F1 ' V ."2 ! /2 =& ' D1' 1< ' D1-' -1] ' =&@@&K'-.9 &' 0? +1 ' D1' F & aj ><-0D'C' &=' D1' 0<'A' '='B1 0@ <-A' D<' D1 ' ><a1' <-A' K& a' ` ' .D =?@@ ' <-A' K1@@9 P' <-A' &=' .&&A' ?==G <-A' &' /)' & A<'-' 0?BD' ?@10' 8<-A' A'-< B10' K' D'-' D1' 0<'A' <= ' <0' &= 1-' <0' ' 0D<@@ 11>')' -11A=?@ '-1B100< ' =& ' D1' >1-A>1- ' &=' D1' 0<'A' F & 0 1A0' <-A' <= G <-A' D<' 0?BD' ?@10' <-A' A'-<-B10' 0&' ><A1' <-A' & A<'-1A' # ' D1>9 0D<@@ #1' &#1 1A' <-A' a1C ' # ' D1' 0<'A' 'j -/' .' 0-&2 ' ='B1 0' G ' & D1 K'01' ! &? ' &=' D1' 0<'A' F < A1-0@ B<@@'-.' !-/!"2 &' D1>' 'L' &=' D1' >&0 ' A'0B 11 ' &=' D1' <'A' ' B1 0' K' D'-' D1' 0<'A' ' 9'<-A3' 'L' &=' D1' 0<>1' '='B1 0' K' D'-' D1' 0<'A' &?- G # ' D1' "'0B 1 '&-' ' D1' 0<'A' < & ' <-A' 1K< A9 & ' -1' &=' D1>9 0D<@@ C?-'0D' 0?BD' &=' D1' 0@' A' '='B1 0' KD'BD' # 1<a1 D9 & ' A& D' B&- < ' &' <-' &=' D1' ' 0<'A' ?@10' <-A' A'-<-B10 ' -A' D<' 1+1 ' '1B1' &=' F & 0 1A' 0D<@@ #1' C? 0?'-.' !' !-* ' `' D &?.D'/'P' D1' '1B1' &=' @<K=?@ ><a'-.9 .&&A' <-A' -/' 4"! / ' B&-+1-'1-' ?==G <-A' D<' D1 ' 0D<@@ D&@A' D1' 1-. D' . ' 3&!#!2' . <-A' 1<A D' <0' D1' 00'01' K<0' K&-' &' #0' &=' &@A' V ."2 ! /L '>1' '.D =?@@ ' <BB?0 &>1AG D<' '0' &' 0< 9 1A0' &=' +' 2 D1' . 1< 10 ' 00'01' !&? 11-' < A0' @< .1@ ' '-' 1-. D9 <-A' !&? '9 < A0' @< .1@ ' '-' '1<A D ' <-A' 1A0@ &=' D1' `>1<- [P' 00'01@ K1@+1' < A0' '-' #1-. D0' <-A' D 11' < A0' '-' 1<A DG <-A' 1A0' &=' D1' @1<0 ' 00'01@ 1-' < A0' '-' 1-. D9 <-A' `! '+1' ^?< 1 0J P' '-' 1<A DG <-A' @& D0' B<@@1A' &-a0' @& D0@ K1@+1' < A0' '-' 1-. D' < ' D1' @1<0 9 <-A' ! '+1' ^?< 1 0' '-' 1<A DG

0=<' 1' ?1' K &?.D ' <-A' G@1<0<?A' ' @BD<?-A'01' 3 h&='?- ?1' ?'=1' D1' ?0 ?>10' &= Q$ ' + I@ / ! 2 "0##&. -' . ' ' ! "'!' ' 7 !+!' -/' "0+@' (' 1 E!' -/' '] ' ' .' !@" ' ' .". 7 !' . 0 ' &@ / / !+ W' ' ' 1 A10' <-A' A'



A10 1' @1+1\' <@ A1C0' - 1' A' ' 5 ?' @1' & 9' I ' @<? 1' >&' 1' A1' B1&' <' @? ' &?' B=1@'L' H" 10C'1 <' &?' 10C'1 &- 9' &?' =1 <' &-' =1 &- ' C &+1' A<0B?-' '1@' ='@1' -'1'@ ' 1L19' &-' A <C' -'1- ' =?@'19' C?'0' @1' A' ' =10 ' 10 1' B< '1\' <' <0B?@)' @'1?' A&? 1' @<' >1 1

>' A1' @<A+'0' <001- ' I ' <?B ' 1' 0?'0A' \' & A1' . -1\' 10 9' H' B@'?-' .W?- ' 1@10R' B&-=' ><B'&-' I ' 10 ' ?B'&-' =<' \' I ' . ?- 1\' C' @1' & 9' 1-' = 1' 0' -@C@1' &' ' =11' <'@@19' <?' <0B?-1' C0&-1' &?' C0&-10' A1C?'0' @1' H?< ' ? ' A1' < BD1' <-' A1' 0&-' 1' . -1' C '' 9' A<0B?-' <-1 ' &?' <-1 0' 10' &?' 1- 10' &+1' @&? ' <CC? 1-W-B1\9' 10' H?1?L' @<' A' 1' C &-1' &?' C0&-10' A1+/- ' @1' 1>C0' A1' B , ?-' '1@ .0?- ' 1@10 ' B&-=' ><B'&-' &?' 10 ' ?B'&-' <' @? ' &?' B1?L' 1-0" =1' 9' <+&'1 ' &?' <+&'1- ' 1 ' ? <' @10' ' 10>10' A &' ' &?' ' @19'0&' ' I ' 0&'1- ' A<? '1@ =& B1' I ' 1==1B 9' B&>1' '@0' =? 1- ' A1+W- ' @1' B&D'1-B1>1- ' A?' A' ' C< @1>1- ' -'1- ' B&< '0 1<-

>' C' @<A+'0' <001- ' I ' <?B & ' 1' 0'='0A' \' & A1' . -1\' 10 9' H' & \' 7 10' 1- 10' 1 'D1 ' 1>1- \' I ' <? 10' C&00100'&-0' H?1?L' @1' C ''5' &? ' A1' < BD1' C0BD1' -' A1+ ' @1' H?< ' &? ' A1' < BD1' <-' C ' - 1' A' ' =1' & 9' =? 1- ' 1-?\' C' =1<?@ 1' I ' 1- ' &?' <? 10' 'B10' A<0B?-1' C0&-1' &?' C0&-10' -'1- ' < 1'- ' ? < 1'- \9' @10' H?1?L' 10' 1 \' 1-D1 ' <>1- \' &?' <? 10' C&00100'&-0' @1' H?< ' &? ' A1' < BD1' 1-' @1' C ' ' <-' A?' 1' . -1' A?' & 9' &?' <0B?-' 1>C0' A1C?'0' A +1-&'1- ' 1-' @10' ><'-0' A?' & ' &?' C&08\ 0100'&-9' C' 1<0&-' A<0B?-' < 1'-A 1' A1' 1<0&-9' I ' A1C?'0' C<00&'1- ' A1' & ' C9<0 C'-0' A1' 01\' 10' C< 1- \' <?' <0B?-1' C0&-1' &?' C0&-10' &?' A1B ' 1-' <C 10' C<001 &- ' A1' & ' C' <0B?-10' 01\' 10' C< H- \' <?' <0B?-1' C0&-1' &?' C0&-10' H' >10>1' @<' C0&-1' I ' C0&-10' I ' BD?-' A1?L9' I ' B='?-' @1? ' D==@ ' I ' D1' 0' <00' . -1' I ' <0 ' . -1\' 0?BB100&? ' I ' 0?BB108' &? 0' <'1- ' CB1'+1- ' I ' C 1' . -1- ' A1@L' 1- ' I ' 1- \9' H?1@@1' I ' H?1@@10' A1' >10>10' @10' 10' 1- 10' 1-D1 ' <@' >1- 10' &?' <? 10' C&00100'&-0' &?' <0B?-0' A1?L9' 10 1<- \' 10' @10' ><'-0' A<0B?-1' <? 1' C0& '1' &?' C0&-10' H' A?' & 9' 0'B&>1' <?' <0B?-1' A1' B1?L' =?'0 ' I ' =? 1- ' A?1\9' I ' A?@' 0'001- '10 1' A?1\9' 0" @10' A' \' < 1'-A 10' -?001- ' >'1' 10 1\' 1?1\;' 1 ' ' #'1-' @'01' <' @10' A' \' C0&-1' I ' C0&-10' -'1- ' < 1'- \9' I ' <' BD?-' A1?L' I ' <' BD?-' @1' @&? ' D1' ' I ' D1' 10' <00' . -1' I ' <00 . -1\' 0?BB100&? ' I ' 0?BB100&? 0' 1-' @10' '10 &10' 10' 1- 10' 1-D1 ' <>1- 10' I ' C&00100'&-0' 10 1j <- \' 1-' @10' ><'-0' A<0B?-1' <? 1' C0&-1' &?' C0&-10' H' A?' & 9' C? ' @1' A' ' 1- ' &?' 1- 10' <' A10 1' . -1 9' 0&?#\' '1@L' ><, ' I ' =&? >19' B&>1' B1?L' I ' BD?-' A1?L' C&@' +&'1- ' <+&' ' => 9' 0" >10>10' @10' < 1'-A 10' -?001- ' >'1' 10 1\' 1?1\;' 1 ' B10 ' & A1-/-B1' 0&' ' 1-' 0<' =& B1' @1' C ' ' &? ' A?' A' ' C< @1>1-

@1+'1A' &' D1' , '- ./0' 01' <-A' D1' & D1 ' <@=' D1 1&=' &' D' >' & ' D1>' D< ' 10C'1 D' & ' ><a1 D' &&=' &=' <- ' 0?BD' ?-K&+1-' <>9' ' @& D' -& ' =?@@1A9' P' <= 1 ' D1' 0<'A' ! 1<0 ' " < 9' &' #1' B< '1A' &' <- ' @<B1' #1 &-A' D1' 1<

9' ' D1' A+'B19' 001- 9' <-A' ? D& ' ' <=& 1j 0<'A9' ' '0' & A<'-1A ' D< ' 1+1 ' E <- 9' 1@1<019' &-=' j >< '&-9' <-A' 10 ' ? '&-' ><A1' <-A' . <- 1A' # ' D1' , '- .' '-' ! 11' ' >C@1' & ' ! 11' <'@9' &' <- ' 1 0&-' & ' 1 0&-0' <= 1 ' D1' !&? D' " < ' &=' < BD9' D1' ! ' 0 ' 1< ' &=' D'0' 1' . -9' &=' <- ' 10&' & ' 10&-0' #1=& 1' D1' ' >1' &=' 1+1 ' 0?BD' E <- 9' 1j @1<019' &-=' >< '&-9' & ' 10A ? '&-' &' D' >' & ' D1>' 0&' ><A19' D<A' '-' & ' &' D1' 0<>1' ' . D ' ' ' @19' 0D<@@' #1' &=' 0?BD' ! & B1' <-A' ==1 ' <0' D1 ' K1 1' #1=& 1' D1' 1j .'--'-.' &=' D1' 0<'A' < @'<>1- 9' <- ' ' ><A1' & ' &' #1' ><A1' '-' D1' 0<>1' < @'<>1- ' -& K' D0 <-A'-.

9' ' D1' A+'B19' 001- 9' <-A' ? D& ' ' <=& 1j 0<'A9' ' '0' & A<'-1A ' D< ' <@@' <-A09' 1-1>1- 09' 1 18' A' <>1- 09' <-A' & D1 ' &00100'&-09' KD'BD' D1' ! ' 0 ' " < ' &=' < BD9' -1L ' #1=& 1' D1' ! &? D' " < ' &=' < BD9' D1' ! ' 0 ' 1< ' &=' D1' , '- ./0' 1' . -9' K1 1 D&@A1-' # ' ! 1<@ ' <-A' 1- 9' & ' & D1 ' 1 +'B10' &=' <- ' 1 0&-' ' 1 0&-0' -& ' < <'- 1A' G KD'BD' <-A09' 1-1>1- 09' 1 1A' <>1- 09' & ' & D1 ' &00100'&-0' D1' !&? D' " < ' &=' < BD9' D1' ! ' 0 ' 1< ' &=' D1' , '- ./0' 1' . -9' & ' <- ' ' >1' <= 1 9' B<>1' '- &' D1' , '- ./0' <-A0' & ' &00100'&-9' # ' 1<0&-' &=' <- ' <'-A1 ' &=' 1<0&-9' <-A' <= 1 ' C<001A' = &>' D1' , '- .' # ' <- ' &=' D'0' 1 1 0' < 1- 09' &' <- ' 1 0&-' & ' 1 0&-09' & ' D1 1<= 1 ' 0D<@@' C<00' = &>' D1' , '- .' # ' <- ' &=' D'0' 1 1 0' < 1- 0' &' <- ' 1 0&-' & ' 1 0&-0'\@ D<' D1' 0<>1' 1 0&-' & ' 1 0&-09' <-A' 1+1 ' &=' D1>9' <-A' 1+1 ' D1' ' 1' ' <-A' 1' 09' 00' 11' <-A' 00' . -110' ?BB100& ' <-A' ?BB10j 0& 09' 0D<@@' D<+1' C1 B1'+1' <-A' <a1' 0?BD' 1- ' <-A' 1- 09' <0' &' <- ' &=' D1>' K1 1'A?1' <-A' =' &?. D ' &' #1' A?1' &=' D1' 0<>1' <-A09' 1-1>1- 09' 1 1A' <>1- 09' & ' & D1 ' &00100'&-09' & ' <- ' &=' D1>9' #1' -.' '-' D1' <-A0' &=' <- ' & D1 ' 1 0&-' & ' 1 0&-0' D<-' &=' D1' , '- .9' `' <0' '=' /' P' D1' <'A' <'-A1 0' D<A' -& ' #11-' D<A;' -A' D<' ' ' 0D<@@' #1' @<K=?@' &' `' 1+1 3P' 1 0&-' & ' 1 0&-0' -& ' < <'- 1A9' <-A' &' 1+1 ' &=' D1>9' <-A' &' 1+1 ' &=' D1' ' 1' ' <-A' 1' 09' 00' . -11' <-A' 00' . -110' ?BB100& ' <-A' ?BB100& 09' '-' D1' 0<>1' <-A09' 1-1>1- 09' 1 1A' <>1- 09' & ' & D1 ' &00100'&-09' #<- . ' '-' D1' <-A0' &=' <- ' & D1 ' 1 0&-' & ' 1 0&-0' D<-' &=' D1' , '- .9' =& ' D1' 0<'A' 1- ' & ' 1- 0' &' A'0 <'-9' <= 1 ' 0?BD' < -'1 ' <-A' ! & >' <0' D1 ' <-A' 1+1 ' &=' D1>' > ' . D ' D<+1' A&-19' '=' D1' 0<>1' <'-A1 0' D<A' -& ' #11-' D<A;' -A' D'0' ` A'' &' #1' '-' D'0' ! & B1' D1' ! ' 0 ' " < ' &=' D'0' 0<'A' <'@'<>1-

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&<A' 1 ' @& D0 0 1+1 ' @& D' &' B&- <'-0 <= 1 ' ` D1' / P'
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0&' ><A1' 1<A ' &' <@1' &@ K1'.D' LLL+'' ' &?-A' ' ' D1'
@1<0 ' & ' > & 1G -A' D1' 0<'A' @& D0' B<@@1A' 1' ' 1 '
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'-' 1<A D' ''' ^?< 1 0' <-A' A' ' ^?< 1 ' &='<' < A' K' D'-'
D1' '0 0' A' 1A@ ' = &>' &-1' -A' &' D1' D1 ' G <-A' 1+1 '
@& D' &=' D1' 0<'A' 1' ' 1 ' @& D0' ' ><A1' 1<A ' =& '
<@1 0 &' K1'.D' 'L'@' ' <-A' A' ' <' D1' @1<0 ' &' > & 1G
F D1 1# ' D1' 0<'A' @& D><a1 0' <-A' -D<#' <- 0' '-' D1'
0<'A' &?- '10' A'A' . 1< @ ' C &0C1 0 <-A' D<A' . 1< ' &=' '
<-A' .&&A' 1 <-B1' &=' D1' 0<'A' @& D0' <-A' D1' , '-.'
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><a1 0' K' D'-' D1' 0<'A' &?- '10 0 # ' 0?# '@ >< . '-< '&-0
` <= 0 <-A' &@@?0'&-' A'A' <-A' -&K' A&0 > <a1 n P' @& D0'
D1 1 0 -<>'-.' 0& > 1' &=' D1 >' &<A' 1 ' @& D0 0 <-A'
0& >1' &=' D1 >' 1' ' 1 ' @& D0G D1' KD'BD' 0& -<>1A'
&<A' 1 ' @& D0 0 D1' @& D' C<001 D' -& ' D1' 1 - . D' &='
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#? ' 'L' ^?< 1 0' <-A' 0& > 1' @100 0 <-A' '-' F 1' . D ' -& '
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1 - . D' &='L' ' < A0 0 <-A' 0& > 1' @100 0 <-A' 3W)' '-' 1<A D'
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A1' ?-1' <-' A1' 0&-' 1'. -1' 01C '0 > 1 0 I ' C' A'1010' C &@
.<B'&-0' <' <A & -<>1- 10' ?0H10' @1' L' /' &? ' A1' < ' <-'
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C' =1'0&? 0' A1' A <C0' '@@1&H10 A'1010' A <C0' @<-?\' <CC1@@1\'
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&- 1'. -1 0 <C 10' &? ' 0?=='B'<@ I ' A &' ' & <'. -1' <' 'B1 '
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='-1' <@ <? 1' ='-1' ' 1 ' BD?-' A <C' A1' @10' A' \' 0 1' ' 01 '
B@& D10' 1-0" =<' ' C0 ' <?' +1-A' A1' C&'01 ' 'L' =' I ' A" < '
>1@-0' &?' C@?'0G C' H& ' @10' A' \' =1'0&? 0' A1' A <C0' I ' 1-j
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A1' @10' 1-D<#' <- \' I ' =1'0&? 0' A1' A <C0' A1'-\' @10' A' \'
&?- 110 0 C' 0?# '1@ >< . '-<B'& ' < 10' I ' > <@L' 1 -. '-10'
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1<@1 9 <= 1 ' D1' <- -1 ' <#&+1' # A<'-1A' # ' D'Ø A'j
-<-B1 9 ?C&-' <'-'&=' ! & =1' ? 1'&=' D1'0<>1 9 /)' D1'&- '
<@=' D1 1&=' &' D1' , '- .9 <-A' D1'& D1 ' <@=' &' D1' < '
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B&- <'-'-.' D1' 0<>1' 1 -. D@ 1<A D@ <-A' F 1'. D '
<=& 10<'A@ D< ' D1 -' D1'0D<@@ =& =1' '=& ' 1+1 ' /)' &<A'
@& D'0& 0)' 01<@1A' 'L' D'@@'-.Ø '.D 8C1-B1@ <-A' =& '
1+1 '&=' D1' 1' ' 1 ' @& D0@ 0& 0)' 01<@1A' L L'A' D1'
&-1' <@=' `d&=' D1'0<>1'! & =< ? 1' &' #1' C<'A' &' D1' 01'
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<@=' &' D'>' D< ' K'@@ 0?1' =& ' D1' 0<>1'# ' = '&-' &='
" 1# 9 # ' F ' '& ' '@@ '-' <- ' &=' D1' , '-.Ø' &? 0@ <'
D'Ø @1 'C -' D< ' K'@@ 0?1' '-' D'Ø 1D<@=G <-A' '-' D1'
0<>1' B &-' &' 1B&+1 ' &+1 ' <-A' #10'A1' D1' 0<'A' ! & j
=1' ? 1 9 0?BD' &0 Ø <-A' "<>< .10' <Ø #1' B& > >&-@ ' ?01A'
'-'<-' Q &-'&=' " 1# ' 0?1A'<' D1' & > >&-' <K
9 ? ' &+1 1'.-' & A' D1' , '-.9 1>1># '-.'
D< ' `KD1 1' '-' '>10' C<0 ' A'+1 Ø < ? 10' D< 1'#11-'
><A1' =& ' D1' ?-'0D>1-' &=' 0?BD' 1 0&-Ø' KD'BD' .'+1'
& ' 1B1'+1' '+1 '10 ' K' D' A'+1 Ø <'-Ø' <-A' ! & =1' ? 10'
B&>C '01A' D1 1'-9 <-A' D<' 1 ' A'+1 Ø 1 0&-Ø'-' . 1<'
? >#1 9 D<+'-.' -&' " 1<A' &=' D1' 0<'A' <'-Ø' <-A' ! & j
=1' ? 10 9 A&' A<'@ '&==1-A' <.<'-0 ' D1' ! & >'&=' D1'0<>1 6
' D1' A+'B1' <-A' 001-' &=' D1' & AØ' C' ' ?<@ <-A'
1>C& <@9 <-A' `<' D1' < 1 ' 'P' &=Ø' D1' & > >&-Ø' &='
D'Ø 1<@>9 #1'-.' '-' D1' 0<'A' < @'<>1- 9 <-A' # ' -8'
D& ' '&=' D1' 0<>1 9 D< D' & A<'-1A' <-A' 1R <#@'0D1A9 D<'
<@@ < ? 10' <-A' A'=<-B10' ><A1' #1=& 1' D'Ø ' >1 9
<.<'-0 ' <- ' 1 0&-Ø' =& ' .'+'-.' & ' 1B1'+'-.' &=' '+1 '10'
`<-A' <A.10 9 0P' 0D<@@ #1' =?@@ '&#01 +1A' <-A' a1C ' -A'
>& 1&+1 9 D<'#&' 1 0&-9 &=' KD<' ` 0 < 1 9/ `` " 1. 11 9 & '
&-A' '&-' D<' D1' #1 9 # ' D'> 1@=' & ' <- ' & D1 ' =& ' D'>9
= &>' D1' ! 1<0 '&=' D1' < '+' '&=' <'-' &D-' <C '0 9 KD'BD'
0D<@@ #1' '-' D1 1< '&=' &? ' & A' E&A']
0D<@@ .'+1' <- ' 0?BD' '+1 ' & ' ` ' <A.19 P' & ' 1 <'-' <- '
1 0&-' & D1 ' D<-' D'Ø >1-'<@ 1 +<- 9 ==' B1 9 & ' <-'
@1< -1A' '-' D1' & -1' <K' & ' D1' & D1 9 # ' <- ' F ' '-.9
< D9 & / &--01G <-A' '=' <- ' A&' D1' B&- < 9 D<'
D1-' D1' 0D<@@ ?-' '-' <'-' <-A' ! & =1' ? 1' =& ' 1+1 '0?CD'
'+1 ' & ' ` <A.19/P' ` . '+' - . <' 0 ' <-A' D1' 1j
<'-1 '& ' ` <a1 JP' &=' 0?BD' < D9 F ' '-.9 & ' &>'01 9
& ' ` 1 <'-1 'JP' # ' -A1- ? 1 9 =& '1+1 '0?BD' ` 1 <'-'-.' & '
<a'-.' 0P' &=' <- '0?BD' < D' & ' &>'01 9 & ' 1 <'-'-.' # '
-A1- ? 1 9 0D<@@ '-B?' D1' <'-' <-A' ! & =1' ? 1' &=' &-1'
?-A 1A9 D'@@'-.Ø' =& ' 1+1 ' &- D' D<' <- ' `0?BD/P'
1 0&-' '0' 0& 1 <'-1A' K' D' D'>9 # ' < D9 F ' '-.9 -j
A1- ? 1 9 & ' &>'01G <-A' <@0& D<' 1+1 ' 1 0&-' 0&'
1 <'-1A' # ' F ' '-.9 -A1- ? 1 9 < D9 & ' &>'01 9 =& '
1+1 '0?BD' &- D' ` D<' OP' D1' '0' 0& 1 <'-1A 9 0D<@@ =& =1' '
<-A' @&01' -1' ?-A 1A' D'@@'-.0' -A' & 1&+1 ' D1'
, '-.9 # ' D1' A+'B1 9 001-9 <-A' ? D& ' ' <=& 10<'A@
D< D' & A<'-1A' <-A' 10 <#@'0D1A' D<' <0' K1@@ #1=& 1' D1'
, '-.' '-' D'Ø 1-BD 9 <0'#1=& 1' D1' ?0 'B1Ø &=' D1' &> >&-'
` @<B19//P' ?0 'B1Ø &=' 1<B1' '-' D1' ' 0)' 100'&-0 9 ?0j
'B1Ø &=' 1 ' <-A' 1 >'-1 9 <-A' E<& ' "1@'+1 9 D1'
, '-./Ø ?0 'B1Ø '-' D'Ø &?- '1Ø <@<'-1'&=' <-B<0 1 ' <-A'
D10 1 '=& ' D1' '>1' #1'-.9 '-' 1+1 '&=' D&01' D1' , '-./Ø
&? Ø <=& 10<'A@ #1=& 1' D1>' & ' <- ' &=' D1>9 <-A' '-'
` D1' 1.<@ // P' <-A' &? '&=' D1' BD#'0D&d" &=' & a'-'
1LD<>0D' 1' #1=& 1' `' D1' ØP' ?0 'B1Ø D1 1 9 <-A' '-' D1
/ <=& 1' ' '#1' Ø D<' 'Ø &Ø<' ' R ' '
'&=' D1' 0<'A' ¢' C'#1' Ø D1 &=' & Z' V
Ø D1 1 &=& 1' ' # /' & ' 0'.-10
Ø '.-1' & . +1-
J' <BB1C &?' 8 ØØ 10B1 +1 ' '' = (
f' 1 1 -?-B1' & ' <B 1C <?-B1' ¢' ' U '%
Ø=& 'KD'BD' \2 1-BD1' B&>1
' 1.<@'1' V' D'0

<'-Ø' H' 0&'9 01<@1' C' @<-@-<.1&? ' &-' 01<@&? ' A?' & 9
1-' >< ' B&>1' 10 ' A10-'Ø & A1'.-1\' C' B10 ' & A1-/-B1G
0? ' C1'-18 A1' =& =<' ? 1' A'B1 9 B10 ' <00<+&' ' @?-1' >&' 1'
A1' B1&' <>' & 9 1 ' @<? 1' >&' 1' <@ C< '1' H' 10C'1 <'
I ' B1&' 01'01 <' ' 0" <0B?-' ?@-<.1&? 9 &-' <0B?-'
A1' 01\' A1C? 11Ø A1'-\' <0B?-' A1' @1Ø A' \' &?- 110 9
1-01<@1' <0B?-' A1' @1Ø A' \' 01 ' B@& D10 9 -'1-' B&- 1'.8
-W-' >10>10' @1Ø @&-.1? ' @<1? ' I ' C&'Ø <+ - Aa\9 H'
@& Ø ** =& =<B1' C ' BD?-' A1@ A' ' # &A1' 01 ' B@& D' 1-0"
A1-01<@1 9 +'0' +D' A9 1 ' C? ' B='?-' A1' @1Ø A' \' 0 1' 1'
01 ' B@& D1Ø 1-0" A1-01<@1 ' LL' A G @?-1' >&' 1' A1' B1&' <-'
& ' I ' @<? 1' >&' 1' < B1@@? ' H" C? ' B1&' 0?1 ' +&1 ' 1-'
B10@;' C< '1 9 C' <BB'&-' A1' A1 1' C' # '1=' &-' #' @@1 9 1-' <0B?-'
A1Ø &? 10' A?' & 9 <@ 1@1BA&-' H1@?' H" 0?1 ' +&1 G I '
1-' >1<>1' @<BB'&-' < 1B&+1 ' &?@ 1' @<' A' ' =& =<' ? 1'
'1@L' B&0 10' I ' A<>< .10' B&>1' 0&-' ?0?1@> -' ?01\' 1-'
<B1'&-' A?' A1 1' C? 0?1\' <@ B&1' @1
=>' -=1' @1' & ' 1>1># <-' H' CB ' A1+0-' A'+0010Ø
10 < ?a\' C? ' C?-'B'&-' A<? '1@L' C0&-10' H?1@@10' A&-<' '
&-' 10B1'+1-' ' 10 9 &+1 f' A', 01Ø C1'-10' I '=& =<' ? 10' 1-'
'B1''L' B&>C '01\9 &?' 10 1' =<' \9 1' H' 1-B& 1' A@, 01Ø
C0&-10' 1-' .D'-A' -&>#1 9 -'1-' <'<-' \' C<&?' A1' @1Ø
C1'-10' -1' =& =<' ? 10 9 &? -1@>1-' &=1-A1-' 1-B&- 1'
@<' =&? >1' A'B1?L 9 <A' C' @<A+'Ø I ' <001-' A1Ø = 0' 10C?1@L'
I ' 1>C& 1@L' I ' A1' @10' &1\' A1' 110 ' &'<@>1' 1-' 0&-' A' '
C< @1>1-' 10 1<- \9 I ' C' @<?B & ' 1' A'B1 ' & A1'.-1' I '
10 <#@'C9 H' &- \' 0 < ? 10' I ' & A1-3-B10' A<+0-' B10 ' 1'-CØ
==' ' \9 -B&?- 1' <0B?-Ø' C0&-10' C? ' A#-<A&-' &-' 1B1C8
A&-' A1Ø @', 10' I ' 0'.-10 ' 0&'1-' C@A-1>1-' &#01 +1\' I '
.< A1\' ' &? 1' B1&8H' -?@@1' C0&-1' A1' H?1@@1' 10 < 1'
A1. 1' &?' B&-A'B'&-' H'@ 0&' ' C' 0& ' >10>1' &-' <0B?-'
<? 1' C? ' @? ' <' @1' =10 ' A1@ <A ' 1' A- ' &D-' <C '0 '
H" M <' 1-' <-' -=1' = ' " '1?' '@@1' '#B+'@' A&-1'
<0B?-' '1@ @' 1' &?' 0'.-1 9 &?' 1 A.-1' <0'?-1' C0&-1 9
<? 1' H' 0&-' >1-'< ' ,+<-' ==' B1 ' &?' D&>1' <CC '0' 1-'
@?-1' @1 ' &?' @<? 1 9 C' <0B?-' 10B 'C ' M 1>1-' &?' C>10G 1 '
0" <0B?-' =<B1' @1' B&- '1 9 H' @& Ø '@ 1-B&? .1' C1'-1' IV
=& =<' ? 1' C? ' BD?-' <? '1@ @@, 11' &?' 0'.-1' A&-1\9 '0'
1 '@1' 1 1'.-&? ' &?' <BB1C &? ' A<? '1@ 1 -1-' 10B 'C '
&?' C>10' &?' 1 1'.-&? ' C' 1-A1- ? 1 9 C? ' B'@?-' <? '1@
1 1'.-J-B1'&-' <BB1C <-B1' A<0B?-' '1@ M 1>1-' &?' C>10 9
&?' 1 A.-W-B1' C' 1-A1- ? 1 9 1-BC? .1' CA-1' I ' =& =A ? 1'
'1' 0 ' C? ' B='--' >& Ø ' <0B?-1' C0&-1' 10 ' 1-A' 18
S 1'.-1\' &+1H' @? ' C' , =1>1-' 10B 'C ' 1-A1- ? 1' &?' C>10G
1 ' <?L" H' B ?-' C0&-1 9 1-0" 1 1'.-1\9 C' 10B 'C ' 1-A1-j
? 1' , 1>1-' &'@ C>10 9 C? ' B ?-' <? '1@ -& Ø' C? ' H?1@
'@ 10 ' 1-0" 1 1'.-1\' =& =1B ' I ' CA1' 'Ø ; 1 ' C@?'Ø' <+O-'
@1' & ' A1' @<A+'Ø <001-' I ' <? I & @ 1' 0?'0A' \9 <A' & j
A1'.-1' I ' 10 <#@'1 9 H' 0'#'1-' A1+/-' @1' & ' 1-' 0&-' <-B'
B&>1' A1+/-' @1.' ?0 'B1Ø A1@ B&1-' <-B9 ?0 'B1Ø A?'
C1<Ø 1-' @&? ' B&1-' 010A&-0 ' ?0 'B1Ø A&'1 ' I ' >'-1 ' I '
.<&@1' A1@'+1 9 @1Ø ?0 'B1Ø A? & ' 1-' 01\' &?- 11Ø
<# -1' A1' -? B<0 1'8 I ' D10 19C? ' @1' 1>CØ 10 1<- \'
1-' BD?-' @1Ø &? 10' &'<@L' <+ - A' \' A1+=& ' 1?]' &?'
<0B?-' A1?L 9 I ' 1-' @1' 1.<@'1 9 I ' &? ' A1@ BD1+10H 9
" 1 K a 9 1-' 1L<>0D' 1 9 A1+/-' @10==?0 '&1Ø '@@1&H10 9 1

1-'@<' &? ' A1@ +10' ? 1' A1' " ? 10 > 1@ 1 " @10' &? - 110' <@< '-10' A1' " ? I > 1' A1+ - ' 01\' ?0 'B10' '@@1&H1 ' B=B?01' C0&-1' H' 0?1 ' &?' C@A - A 1' + = 1@' 1U , 0' <0B?-1' C0&-1' &?' C0&-10' &==1-A<- ' &?' =<'0<- ' &==1-A<- \' f? =<'0<- \' 1-B&?- =1' @<' =&? -1' A1' B10 ' & A1 - W - B1' &?' <0B?-1' <? 1' A1' @10' > '0010@ 0&' ' <A > '0@ C' A'0B 1B'&-' A1' @10' ?.10' 1-' B ?-' A@B1?L' &? 10' A1' A&-1 ' 1 -=& > < ' B'&-' C? ' @1' & ' 1-' B1 @ A<0B?-' A1' @10' C2 > '0010@ A1' - \' @<' ? '0A'BB'&-' A1' B ?-' A1' @10' A' \' &? 10' =0?' &?' B& > '0G' 1 ' B ?-' 1 - =&? > &3@ 0'@ +&'@1@ 0&' ' <A > '0' A1' C? 0?1 ' C? ' @1' & ' I ' @? ' > 10 > 1' <BA&-0' &?' <BB'&-' 1-' 'B1= @ 0? ' @1' > 10 -1@ C' 1 - =& > <B'&-' <' A&-1 ' &?' <==<' 1' ' <0B?-1' A1' @10' &? 10' < 0 - A' \@ 1 ,0' <- \' '1@L' &@ ! 1 - A&? 0' C' &?' 1 - ' ?- .' #'@@1' &?' 1 - =& > <B'&-' <' -&> 1 0@ B&> 1' '@ +&1 ' H" 1 - 0" 1 - =&? <'1 G 1 ' B1@ ' 1 - =& j > <B'&-' 1 - 0" A&-11@ 10 &'01' I ' &' ' 1 -' @'1?' A?' #'@@1' &?' # '1=' & ' . ' - <@eG 1 ' H' 0? ' @1' > 10 > 1' &? ' <? '1@ CB10 1' 0&' ' 1?1' I ' =1' ' B&> 1' 10 ' 1?1' &?' =<' ' 0? ' # '1=' & ' . ' - <@ @ A1' 10C<0' =<' ' 1 - B&> @ 1' @<' C1<0' A?' & ' ' H' 0" <0B?-' A1' @1 ' ==1 - A&? 0' 0&' ' 01< ' 1 -' <0B?-' A1' @10' A' \' &? 10@ B1@@? ' C' B&> <?-A1 > 1 - ' A1' B ?-' A1' @10' @?. 10' 1 -' > 10 > 10' @10' &? 10' 0&' ' > 10 - 1' I ' > '0' < 10C&-A 1' <' '1@ #'@@1' & ' #=@@10' C' <? '1@ 1 - =& > <B'&-' C' 01 > 1 - ' C ' 1 > 1 - ' < <' 1' 0? ' ?-' , + 1' C' @1 - =&? > &03@ A1+ - =' <0B?-' A1' @10' A' \' ?.10' 0< B& > C@1' - ' 10 1' A & ' G 0/?-\' <0B?-' <? 1' &?' C@?'0' &?@ 1' CB1001' 1-' 'B1= ' ' 1' H' > 10 > 10' @10' ?.10' I ' B ?D' A1?L@ 1-' B ?-' 1' A1' @10' A' \' &? 10' <'1 - ' C&<' ' 1-' @&? ' 01+ <= ' ? '0A'BB'&-' A1L@ <> '-1 ' &? \' C0&-10' A1=1 - A<- \@ I ' B ?-' A'B1?L@ 0? ' B ?-' '1@ 1 - =& > <B'&-@ I ' A<A ?.1 '@? ' &?' B1?L' B&-8' +'B@1' &?' < 1' - 19bB&-+'Q@;1\' &?' < 1' - \@ 0'#'1 - ' C' '1@ 1L@ <> '-<B'&-' &?' <? 1 '1 - ' C' '<@@ B& > 1' @1' B<01' 1H > <' 0&@&-H @< A'0B 1B'&-' A1' @10' ?.10' G 1 ' <?L"0&'1 - ' BD< .1\' I ' 0&' ' BD< .1' C' ?.1 > 1 - ' 1 -' 'B1= @ <@ C0&-1' C@1' . - - ' &?' 1 - =&? > &' 1 -' A1= ' C< ' @ A1' &? \' B&0 10' 1 -' 'B1= ' 1?1m ' C' A'0B 1B'&-' A1' @10' ?.10' &?8 ?.1' 1 - B1= G' 1 ' <?L" > 10 > 1' @<' C< '1' Ce1' . - 3 - ' A<+&' ' @<' > &' 1' A1' &? \' =& =1' ? 10' < =1 A' \@ I ' @1' & ' A<+&' ' @<? 1' > &' 11G' 1 ' &? ' A1@ 1L1B?B'&-' A10 1' 1?1' C? ' @1 - =&? 8' > &? ' 1 -' 'B1= ' B& > 1' 10 ' 1?1@ &?' A?'001 ' 10 1' 1?1@ 10' 1B&, 1\' A?' A1 1' &?' 10C<0' <' 0<' C@1< ' G 1 ' H' - ?@@1' 100&' -1' -1' C 1BB'&-' 0&' ' <@@&?1@ 0? ' <0B?-' '1@ 1 - =& > <j B'&-G' 1 ' H' @ ?= ' '0B&- ' &?' & &-1 ' 1 &? -1' 0? ' <0j B?-1' C0&-1' 0?=='B'1 - ' A1=1 - A<- ' 1 -' <0B?-' 0? 1' =&? - A?\' 1 -' <0B?-' A1' @10' C > '0010' 1 & -1\' 0?=='B'1 - @ <0B?-0' > 1' - A 10' '00?10@ H' LL'0 ' <@ C '=" &? ' A1' A'0 1001@ I ' <@ 01B&-A1' 1? LLL0 ' I ' <?' '1 B1' &? L@0 ' 1 ' 1 - 0" <?' B ?-' &? ' <C 10' C@?=1' C' L ' 0 ' 1 -' '00?10G ' 0" <0B?-' '0B&- ' &?' & &-1 ' =1B1' A1' B1&' @1' B&-= '1@ H' @& 0' '@ =& =1B1' C? ' B ?-' '1@ 1 & -1@ 1-B&?- 1' @<' =&? > 1' <+3- 8' A' ' =1' @ ww 'W 1 ' < L" C' @<A+'0' <001 - ' I ' <?=@& ' 1' 0?'08' A' \' & A1' . - 1\' 10 @ H' 1 -' B ?-' ' 11' ? . ' '@@1' I ' & ' B10 ' &'<@ > 1' B&'C& 1\@ 10' H?1?L' @10' <' 1' '08' B&- \' '0B&- ' <'@@'=' &?' <'@'==0@ &?' <? 1' BD'1=' ==' B1 ' A<? '1@ ' 11' ? . ' '@@1' &?' & @ &?- ' &?' <A' C&<' ' A&'1 ' I ' R > '-1 ' C@110' C0&-1@L@ @''10 > 10' @10' <' 1@ '08' B&- \@ '0B&- @ <'@@'=' &?' @@'=0' &?' BD'1=' ==' B1 @ 1-' &? ' A1+W- ' 1?L' &?' <0B?-' A1?L' 1 - ?\@ AA - \' <0B?-' '1@ ' 11' ? . ' '@@1' &?' & @ <'1 - ' I ' <'1 ' &? ' 01 > 8' #@<#@1' I ' '1@ <?B & D1' A1' 10B1'+1 ' '1@ 1 - =& > <B'&-@ B& > 1' A&'1 ' I ' R > '-1 @ 0'#'1 -' C' 1L<> '-<B'&-' B& > 1' C' '<@@ C' @&? ' A'0B 1B'&-@ &? \' BD&010' B&-R-<- \' @10' =0 > '001\' =1 ' \' C' &?' <0' 1 - D<#' <- 10' A1' - \' @<' ? '0A'BB'&-

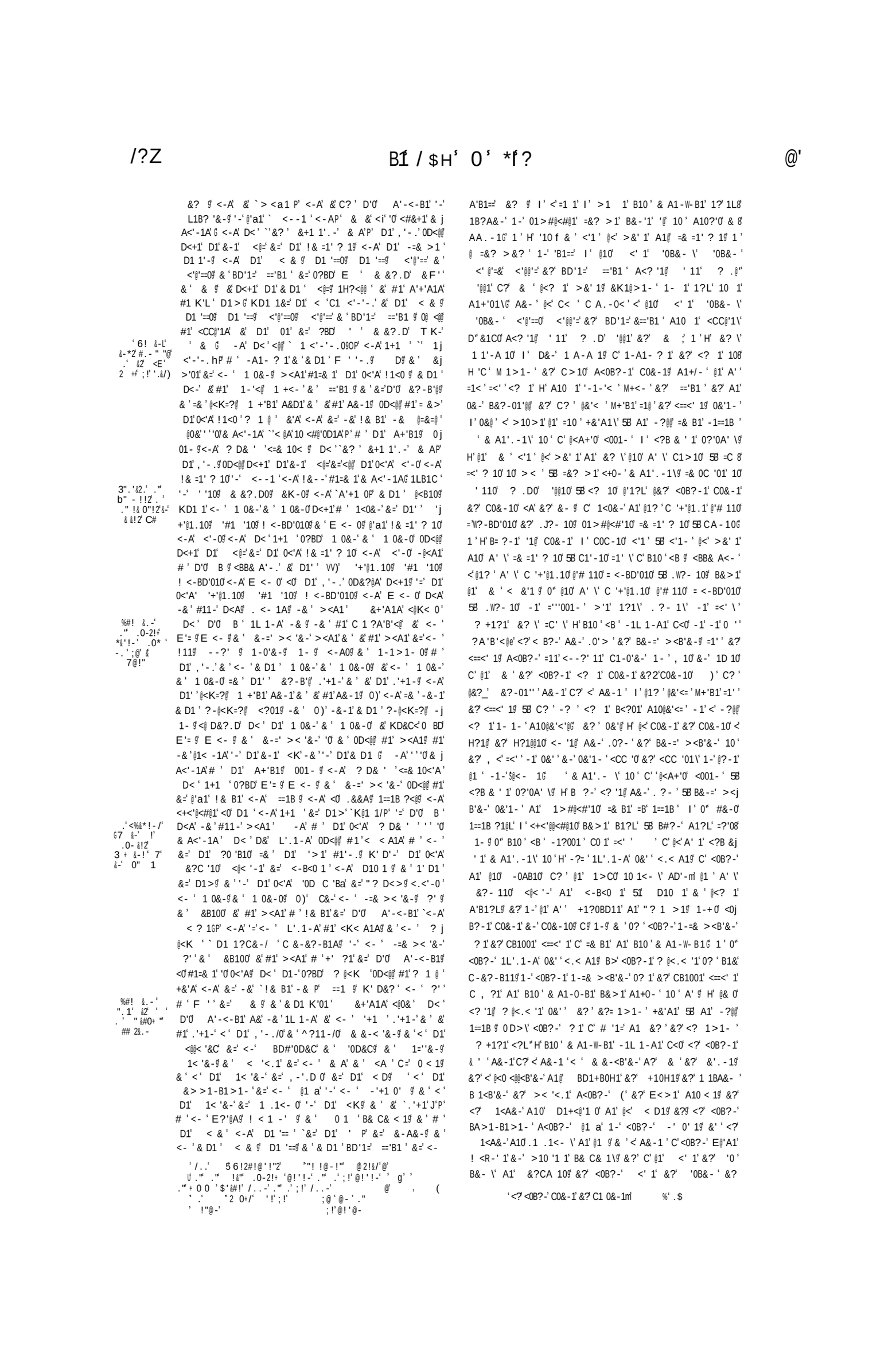
&? ' &=' D1' '0D&C' A=' " ? D<>' '-' D1' &?- ' <@< '-1' &=' " ? D<> @ #1=& 1' ` D1 ' ' ?0 'B10' D1 1@ 1+1 ' 1 0&-' D<' K'@@ 0?1' & ' -A > C@<'-' <.<'-0 ' <- ' 1 0&-' & ' 1 0&-0' &==1-A'-.' & ' A&'-.' <.<'-0 ' D1' ! & > ' &=' D'0' A'-<-B1@ & ' <- ' & D1 ' &=' D1' 1 > '010@ 0D<@@ #1' <Aj > ' 1A' # ' D1' " '0B 1 '&-' &=' D1' ?A.10' '-' 1 1 ' &=' D1' 0<'A' &? 0@ &' .'+1' -=& > < '&-' =& ' D1' , ''@.' D1 1'-@ &=' <- ' &=' D1' 1 > '010@ K' D'-' D1' ? '0A'=@'&-' &=' 1+1 ' &=' D1' 0<'A' &? 0' A&-1' & ' B& > > ' 1AG <-A' 1+1 ' 0?BD' -=& > 1 @ '=' D1' K'@@@ 0D<@@ #1' <A > ' 1A' &' 0?1' =& ' D1' , '-.' <-A' D' > 01@=@ = 'C-0' & ' ^ '&-' 0)' ?C&-' D1' 0<> 1@ # ' -=& > < '&-' &' #1' +1-' & ' > <A1' '-' <- ' &=' D1' 0<'A' &? 0@ <.<'-0 ' <0 > <- ' 0?BD' ==1-A1 0' 0)' '-' &-1' '@@ & ' -=& > < '&-' &' #1' -<> 1A@ <0' = a1 D' D' > ' KD'BD' 0&' '-=& > 1 D'G <-A' ` D'0 -=& > < '&-' 0&' .'+1-' 0D<@@ 0 <-A' <-A' #1' '-0 1<A' &=' <' '@@ & ' & '.'-<@ F ' G <-A' D<' D1 1?C&-' <@@ 0?BD' &B100' 0D<@@ #1' D<A' <-A' > <A1@ <0' '0' D<A' & ' > <A1' ?C&-' <-' & '.'-<@ F ' ' &=' 10C<00' A&-1' <.<'-0 ' D1' , '-./0 1<B1 ' -A' D<' '-' <- ' &=' D1' ==1-A1 0' #1' C 101-' '-' <- ' &=' D1' 0<'A' &? 0@ D1' # ' D1' &> > <-A > 1-' &=' 1+1 ' &=' D1' ?A.10' '-' D1' 0< > 1' &? 0@ 0D<@@ #1'# &?.D ' <-A' C? ' &' <-0K1 ' &' 0?BD' '@@ & ' '@@0' # ' 0?BD' -=& > < '&-' # ' <-' < D' =' 0 ' &' #1' > <A1' ?C&-' <' &&a' # ' D1' -=& > 1 ' #1=& 1' <- ' &=' D1' 0<'A' ?A.10' `' D<' D'0' &> C@<'-' '0' '.D =?@ K' D&?' <- ' & D1 ' & ' =? D1 ' &B100' D1 1'-' G -A' D<' D1' 0< > 1' ?A.10' <-A' 1+1 ' &=' D1 > @ '-' 1+1 ' &=' D0' 0<'A' &? 0@ 0D<@@ D<+1' &K1 ' '-' D1' ' 01+1 <@ ? '0A'B '&-0' &' 1L< > '-1' <@@ 1 0&-0' " 1=1-A<- 0@ <-A' 1+1 ' &=' D1 > @ ?C&-' 1+1 ' 0?BD' -=& > < '&-@ <-A' &' ?A.1' D' > ' & ' D1 > ' B&-+'B 1A' & ' < <'- 1A@ <0' K1=' # ' 0?BD' L< > '-< '&-' <0' 'N')' # ' '<@@ <0' D1' <01' 1H?' 1 DG <= 1 ' D1' " '0B 1 '&-' D1' ?A.10G <-A' <@0&' 0D<@@ #1' BD< .1A' # ' D1' ?A.1j > 1 - ' '-' D1' 0< > 1' &' D1' 1 0&-' &> C@<'-<-' & ' -j =& > 1 ' '-' ` D'03X' 1D<@=@ &=' <@@ D1' &0 0' D<A' '-' D1' 0< > 1@ # ' D1' " '0B 1 '&-' &=' D1' ?A.10' & ' ?A.1' '-' D1' 0< > 1G <-A' <@0&' D1' 0< > 1' < ' &> C@<'-<-' &' D<+1' D1' &-1' <@=' &= f')' D1' 0<'A' ! & =1' ? 10@ <-A' D1' , '-.' 0' ' D1' & D1 ' <@=G <-A' <@@ 0?BD' L1B? '&-' &' #1' D<A' =& ' D1' -=& > 1 ' `'-' D'0' 1D<@=9/'P' <0' '0' D<A@ & ' &?. D ' &@ #1' D<A' '-' 1B&+1 '10' &=' " 1# ' & ' 10C<00@ < ' D'0' @1<0? 1G <-A' D<' -&' 00&'-' -& ' & 1B '&-' #1' <@@&K1A' ?C&-' <- ' 0?BD' -=& > < '&-' G <-A' D<' -&' D1 '=' -& ' & &-1 ' 1j ? -' ?C&-' <- ' ` " 1=1-A<- @ #1' - .' < 1 0&-' 0?=='B'1- 9J' ' '-' <- ' ?' ' . &?-A1A' ?C&-' <- '&=' D1' 1 > '010@ 1 ? -1A' 0?==' B'1- @ <- ' @1008 00?10' D<-' K1- ' D'@@' - .0' < ' D1' ! ' 0 ' " < ' &=' D1' " '0 100@ <-A' < ' D1' 1B&-A' " < ' D' ' D'@@' - .0@ <-A' 0&' < ' 1+1 ' " < ' <= 1 @ > & 1' # ' 1-' D'@@' - .0' '-' 00?10G <-A' '=' <- ' D1 '=' & ' & &-1 ' A&' D1' B&- < @ D<' D1-' D1'0D<= '=& =1 ' '=& ' 1+1 '0?BD' 1 ? -' <.<?@0 ' D1' ! & > ' <=& 10<'A' 3')' K1- ' D'@@' - .0;' -A' <@0&' # ' D1' A+'B1@ 001- @ <-A' ? D& ' ' <=& 10<'A' ' '0' & A<'-1A@ D<' ' '-' 1+1 ' ' @ & &?. D@ &K-@ <-A' & ' &=' D'0' 1<@ > ' B& C& < 1@ KD1 1'-' D1' < & @ D1 '==0@' D1 '==@ <'@'=' & ' <'@'==0@ & ' & D1 ' BD'1=' ==' B1 ' & ='0?BD' ' ' &j &?. D' &K-' & ' & ' D<+1' 0)' &K1 ' &' D1< ' <-A' A1 1 j > '-1' @1<0' C1 0&-<@@ D1' 0< > 1' < & @ D1 '==0@ D1 '==@ <'@'=' & ' <'@'==0@ & ' BD'1=' ==' B1 @ '-' D1' &? ' D&@A1-' #1Z& 1' D1 > ' & ' <- ' &=' D1 > @ K' D'-' <- ' 0?BD' ' ' & &?. D' &K-' & ' & @ 0D<@@ D<+1' <@@ @' a1' <-A' 0?BD' ? D& ' ' &' 1B1'+1' 0?BD' -=& > < '&-@ <0' &' D1< ' <-A' A1 1 > '-1@ <0' K1@@ # ' L<> '-< '&-' <0' # ' '<@@ # ' D1' ' " '0B 1 '&-@ <@@ D'-.0' A&-1' B&-B1 -'-.' D1' 1 > '010@ # ' & ' &' D1' -D<#' <- 0' K' D'-' D1' ? '0A'B '&-' &=' D1' 0< > 1

' &2' ' !"@-' <;@'." @ ' <' &2' #. 1 +!@-' .' ;!' "0! ' . !"7&2!' <' +#' ' > .' ' !' L = P ' ,' !"@-' 2.-!'20 &#& -'/! !-/ 0-' H F 1 /!' .'" ' ?

3".#!2Z&-' 20# ' 0&

3".#!!/&-*2 !"!&-

@.'" -/' &! ' &#!"Z . ' &!2' C#' 1 @' ! '" -/' /! !"1&-!' !-#!2



<? 1' BD'1=' ==' B1 ' A<0B?-1' ' 11' ? .D' '@@1&? & ' A1' B10 ' &'<@>1 C? ' @1' 1>C0 10 1<- ' &?' 10 1<- R A? <- ' B1=' 1>C0 I ' C? ' @&? ' &==' B1' &?' &BB?C<B'&-' 1Lj 1B? <- ' 1' <0 <0B?-10 0'. -10' &?' @' 1\' < A&-1 0 1-' @< A1=1-B1' A?' & ' I ' A1' B10 ' &'<, -1' 1' <0 &-0 <#@1' I ' < 0BD<= ' -1' <' <0B?-' A1?L C? ' <RB?-' 0'. -1' @' 1' &?' &a1-' C' 1?L' <' A&-1 ' <0 <0B?-0 <= 10 A< >10 <==<' 1\' A1@-\' B10 ' &'<@>1 1' <0 <0.?-0 A1' @10 E< A1'-0 A1' @10 < BD10 1-, 0 0B&B1 C? ' <0B?-' @'+1'0'. -1' &?' &a1-' C' B1?L' <' A&-1 ' A1' 1-' 1-, 0 @1' & D' <' 1 1>C0 <-B0&?@1>1-' B&>1' M <' -1B100< '1' A1' @1+1 ' C1&C@1 C' @<' A1=1-B1' A1' @10' A@ \' < BD10' &?' A<0B?-' A1?L

>' -&-0 1' =?'0 ' C' @10 A' \' &1\' 1-' @1' A' ' C< @18 >1-' A1' C< ' @10 = <-B' 1- - 10 A1> <- \' A1A1'-\' @1' &'> 11' A1' 'AA1@01L A1'-\' H?1@ &?- 11' <- -?1@>1-0 0&-' C@?0&? 0 <BB'&-0 ?1\' I ' '<@0 C']'' D&>10 1?1\ H 01- ' A1A1'-\' C@?0&? 0 <? 10 &?- 11 ' A1' B10 ' &'8' <@>1 B<?01\' C' 101<-B'1' A1' &? \' &? 10 A?' & ' 1-?\' I ' A1> <- \' <?' F 10 =D A1'-\' @1' A' ' &?- 11 '00'- J' 1-' BD10B?-' <BB'&-' &'- \' <@ '00?1' 1-' @1' A' ' &?- 11 <0B?-0 A1' @10 A' \' = <-B' 1-/- 10 0&- ' 1>k -1@@1\' <' @&? ' .O?- ' +1L<B'&-' 1 ' 1-01>1-' &? 1' @10 0100'&-0 A1' C1<0 ?\' A1'-\' @1' A' ' &?- 11 >10>10 @10 = <-B' 1-/- 10 BD10B?-' 1>C0 C' '-H?'0' '&-0 1-' @1' <-B' @1' & ' I ' 0? ' A1@'@<-B1' A10 C '0&-10 '@@1&H10 I ' C' <BB'&-0 0? ' C< 1- \' &E' <'@@10 ?1\' 1-' @10BD1H?1 ' A?' & I ' <0 '0B&- \' I ' <? A0' <HB&>C <- \' @&? ' A1C? 110 I ' < & -110 0? >'01\' 10 1' >&-0 1\ I ' '00?10 0? ' B1&' &'- \ (' C '01\ 1>C<-1@@1\' 1-' 'B1 ' @0' 0&- ' 1 &C& ?-1>1-' +1L1\' . 1+1\' I ' 1>C& '00D1\ 1' H' C@?'0' A<><.1' 10' HD'- ' '@0 0&- ' 1>C0-A@1\' 1-' A'1010' <BB'&-0 C0&-1@L I ' @10 +1-' 1' =11' I ' D1<0 B& C& < 1 &?>1\ A1@< 1' C' A1 =1?@ ' &?' 100&'-' <@ C< '1' C@1'. -W- ' &?' A1=1-A<-' 10' <@@&?1' @<' @1 ' <BB& A<- 1 ' >10H <0B?-' A1' @10 1>C<j -1@@1\' <A&-H1' +&?A &' ' <CC< &'1 1-H& 1' @<' ? = -1' , < A1><?-A1 >10 &? \' @&? ' A1=1?@ 10 0W?-\' A1><?-A1 ' 0&' ' '@ <='B'<>1-' &?' '00?10' 00'- ' 0? '1?L' 1 &? -1\', &-' 1- 1\ 10 1<- ' -?@@ A1=<?@ ' 1-' 'B1?L H@ 10 ' 1-B&- 1' 1<0&-' = 1' A' ' 5 1' @1' & ' @10 ? ! !' B&-0'A1 1\ A1' @<A+'0 A10 = 0' 10C?1@L' I ' 1>C& 1#B' I ' <' @< 1H?10 ' A1' 01\' &1-0 1-' @1' A' ' C< @1>1-' 1 1<- \' I ' C' <?B & ' 1' A1 >10>1 <A' & AA'. -1 H' BD?-' ? = < @1' =10 ' A1 #1-&' ' '-' 1' C0BD1'-' +1-3- ' A1-C<-1@@1 ' I ' < 1 &? -1 ' A1A1'-\' ' A' ' &?- 11' A1' 'AA1@01L' 1@@ <0B?-' A1' @10 A' \' &? 10 <@ BD?-' H?< ' &? ' A1' 1 &? -1' A'B1A' 0&' ' A1><?-A1 I ' <CC1@@1 1 H' <- \' C0&-10 1>C<-1@@1\' 1-' <0B?-' A'B1?L' B&>1' <CC< 1- ' < B1@@ &? ' @1? 1' <CC< 1 B1' 0&' ' 1B& A1 I ' @< 1- 1' C' @< &? I ' -1' 0&'1- ' <' B'1\' -1' CA1- ' <0B?-0 '00?10 B1@@1' &? ' # ' 'B1A' 0? 1' 1 ' & A1'. -1\' 10 ' C' @< A' '<?B & ' 1 H' @< A1=1?@ ' 100&'-' I ' BD?-1' <? 1' A1@<'1 A<0B?-1' C0&-1' C@1'. -3- ' &?' A1=1-A/?- ' 1-' <0B?-' '1 <BB'&-' C0&-1@ C' @< @1 ' B A1+/- ' ?01\ C' B10 ' & A1-/-B1' -1' 0&'1- ' ?A'B1\' -1' & 1\' 1 ' <0B?-' > < 10 10 1' <A ?. .1\' <A &? -1\' I ' <@@&?1\ 1-' 0 <>C@1' I ' @< .1' =&? >1' 0'B& >1' '@ =? 1- ' A1+ - ' @<' =1'0? 1' A1' 110 ' & A1-/-B1 10 ' & A1- -B1' -'1- ' B&- '0 1<-

==>' ' B&>1' 1-' @<D' A?' 1'. -1' A?' & ' AK< A' @1' '1 B1 C.1-' &? ' -=1' &+O<'. -1' = ' @1' & ' H& 10 L''' 10 &' ' & A1'. -1\' H' -? " t '0B&-' A1>&1 .1 &' ' 1-' 0&-' &==' B1 &? 1' ?-' <-' 1 ' 1-' <-' >10>1' 1' C.1-' &? ' -=1' A' ' = ' @1' & ' L@' =?'001 ' & A1'. -1\' H' -?A' '0B&-

' & &?. D &+ -& ' & '&=' D'0 1<@>' `&=' -. j @<-A@ =& ' D1' '>1'#1'-. A? '-.' D<' '>1 <-A' =& '1L1j B? '-.' D1' ' ==' B1' & ' BB?C< '&- & ' &' <- ' ` <A. 10 P' & ' '+1 '10' &' #1' .'+1-' '-" 1=1-B1' &=' D1' , '-.' <-A' &=' D'0 1<@>' `&=' -. @<-AG P' & ' &' D1' &-0 <#@1' <-A' < 0D<@@ -& ' &' <- ' &=' D1>' `=& ' .'+'-.' <- ' <A. 1 '+1 & ' &a1-' =& ' <- ' 0?BD' ! 1< / P' &=' >0' &' #1' A&-1' K' D>' D'0 1<@>' & ' &' <- ' F < A1-0' &=' D1' < BD10' &K< A' B& @<-A' =& ' <- ' '+1 ` ' <A. 19O P' & ' &a1-' ` ' &=O P' D1>' &' #1' .'+1-' = &>' 1- ' & DK< A < ' 0?BD' '>1' &-@ ' <0' 0D<@@ #1' -1B100< ' &' @1+ ' 1&C@1' =& ' " 1=1-B1' &=' D1' 0<' A' < BD10 ' <- ' &=' D1>

' K<0' 0D1K1A' # ' D1' 0<' A' &>>&-0' -' D1' 0<' A' < @' <>1- &-' D1' 1D<@=' &=' D1' ! 11D&@A1 0' AK1@@' -. ' K' D'-' D1' &?- ' &=' 'AA@101L' K' D'-' KD'BD' &?- ' D1 1' #1' 1< @ ' `>< - 0P' = '&-0' 0?1A' <-A' '<@0' D<A' # ' K1@+1' 1-' `KD'BD' P' #1' K' D'-' >< - ' & D1 ' &?- j '10' &=' D'0 1<@> ' `-' 1. < A' &=0 P' D1' 10'<-B1' &=' <@@ D1' , '-./0' &? 0' D&@A1-' <-A' 1>< '-.' < ' F 10 j >'-0 1 ' K' D'-' D1' 0<' A' &?- ' 0&' D< ' '-' 1+1 ' = '&-' `# &?. D ' &' <'" 00?1' 0P' '-' D1' 0>A' &?- ' 0&>1' &=' D1' 0<' A' ! 11D&@A1 0' #1' '>C<-1@@1A' &' D1' ' . 1< ' 1L< '&-' G <-A' `=? D1 '/P' D1' 100'&-0' &=' 1<B1' D&@A1-' K' D'-' D1' 0<' A' &?- ' @ # ' -H?'0' '&-0' '-' D1' , '-. 0' 1-BD' <-A' ?C&-' D1' " 1@'+1 <-B1' &=' ` '0&-1 0J P' D1 1' <-A' # ' B '&-0' ?C&-' < 1- 0' <-A' ` <'@0'3' P' 0?1A' '-' D1' , '-./0' LBD1H?1 ' <-A' &' D1 '==0' <-A' &D1 ' BB&?- <- 0' D1' ' " 1C? '10' <-A' & -'10' ` ? >'0103P' #1' 0D1K1A' <-A' 00?10' D1 1?C&-' &'-1A' <-A' <a1-' D1' <>1' ` 1-<- 0' <@K< 03O P' '>C<-1@@1A' D1 1?C&-' #1' '>C& ?-< 1@ '+1L1A' . '1+1A' <-A' '>C&+1 '0D1A' <-A' FD'BD' >& 1' ? ' '0' KD1-' D1 '#1' '>C<-1@@1A' ?C&-' A'+1 0' = '&-0' C1 0&-<@@ <-A' D1' 1-' 1' =<B'<0' <-A' <#1<0' B& C& <' 1 ? -1A' " 1 j @< ' # ' " 1=1?@ ' & ' 00&'-' '0' # ' D1' <K' <@@&K1A' &' D1' < ' @<'- '==' & ' " 1=1-A<- G <-A' D&?. D' `0& > 13P' &=' D1>' KD'BD' #1' '>C<-1@@1A' 0)' K&?@A' <CC1< ' 1 ' D1' ? ' `0D&?@A' -& ' #1' A1><-A1A9 OP' #?' '<@@ D1' ' " 1=<?@ 0' K' D&?' `A1><-A'-. 93' P' #1' ' ' >1 B'<>1-0' & ' 00?10' 0&' ?C&-' D1>' 1 ? -1A' 0D<@@ #1' 1- 1A' -&' " 1=1?@ ' #1'-. ' '-' D1>' KD'BD' '0' <.<'-0' 1<0&-' G ? ' 0<'A' & A' D1' , '-. ' D1' 1>'010' B&-0'A1 1A' # ' D1' A+'B1' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@@ <-A' <' D1' 1H?10 ' &='D'0' &>>&-0' '-' D1' 0<'A' < @'<>1-' <001>#@1A' <-A' # ' D1' ? D& ' '&=' D1' 0<>1' D< D' & A<'-1A' D<' 1+1 ' ? & ' = &>' D1' !1<0' &=' D1' #@1001A' '-' ' -1L ' B&>'-. ' D< ' 0D<@@ #1' '>C<-1@@1A' <-A' 1 ? -1A' K' D'-' D1' 0<'A' &?- ' &=' 'AA@101L' '-' <- ' '&=' D1' 0<'A' &? 0' '-' <- ' &=' D1' <'A' B '&-0' <' 1+1 ' !&? D' " < ' &=' D1' 1 ? -' D1 1&= 0D<@@ #1' A1><-A1A' < 'A' B<@@1A' <-A' D<' ' '<@@ 3P' 1 0&-0' '>C<-1@@1A' '-' <- ' &=' ` D&01' &? 0' D<' A&' <CC1< ' <' D1' 0<>1' " < 9 O' P / D1' ' CC1< <-B1' 0D<@@ #1' 1B& A1A9 <-A' D1 1' 1- 1A' # ' D1' &? 9' <-A' D1 '0D<@@ -& '#1' <>1 B1A9 -& ' @&01' <- ' 00?10 ` D1' 0<>1' J P' " < ' '-' D<' ?' G -A' ' ' '0' & A<'-1A' # ' D1' 0<>1' ? D& ' 9 D<' D1' " 1=1?@ 9 00&'-9 <-A' 1+1 ' & D1 ' " 1@<' &=' <- ' 1 0&-9 @<'- '== & ' " 1=1-A<- 9 '-' <- ' 0?BD' B '&-' C1 0&-<@ # ' D1' <K' D1 1 &=& 1' ?01A9 # ' D'0' A'-<-B1' 0D<@@ -& ' #1' C 1 ?j A'B1A' -& ' <a1-' <K< ' '-' <- ' '><--1 9 #?' &' #1' <A ?A. 1A9 <A &? -1A9 <-A' <@@&K1A' '-' <0' <>C@1' <-A' @< .1' ! & 9 <0' D1 ' K1 1' #1=& 1' D1' ><a'-.' &=' D'0' ` < ? 193' P' D'0' j A'-<-B1' 3' P' -& K' D0 <-A'-.

9 F D1 1<0' '-' D1' ! &? 11- D' 1< ' &=' D1' 1'. -' &=' , '-.' AK< A' D1' D' A9 &. 1-' & ' &=' &? ' &+1 1'. -' & A' D1' , '-.' D<' -&K' 09 ' ' K<0' & A<'-1A' D<' ' -& D1 '==' 0D&?@A' <#' A1' '-' D'0 ==' B1' &+1 ' <' 1< G <-A' '-' D1' K&8<-A8=& '1 D' 1< ' &=' D1' 1'. -' &=' D1' 0<>1' , '-.' AK< A' D1' D' A9 ' ' K<0' & A<'-1A9 D<' ' -& D1 '==9

) &*-!2') .'" ! -@' 2&*-!' &')!@ .'" .E! -' ;@ ! @1' .' ;!' @! ' !-' ' ! -@' +!2') &*-!' ; @ H') 1. .' ' -' (# 02!/' ;!' Y&@Ip 2H. @-!/' .' &220!' :' +2. .'' ?' "&2. -2 [' &++! j' \220" 1@ !/' .' [B"! ; .+/!"2' ! ' !"@ @1 ! :' ' ! -@' [!-' [2 ++' -. ' ;!' # ++!/ K' 4$?' # ++@-*')' +21 -@' \2' !' 2 1!' 2 '2 ++' !"!' ' '/ @']] ' /+!

"*!2' -/' ".0;+!2' . ' B"!! .+/!"2' . ' &//+!2!%' ;!&-*' 0". "2'

-' &. -2' "& ;+!' ;@' 0", "2' . ' &//+!2!%' !' 0". "2' 2 ++' ;!'# ++!/' 0 .-' !' B. 0" ' @

'&-*' . '" !+ @2' &-' !"2. -' +' +&. -2

6!#& +' . ' !' 0 !2' ' /7 ' 0 < ' ' B' $ 5' /7 ' ' #', ' -/

) ! ,' * &-2' !' .+/&-*' . '!'" !' &#!' . ' !"& ' C#

-& ' -A1 ' D1 '==9 -& ' D1 '==/0 @1 a9 0D&?@A' <=1'A1' '-' D'0 ==''B1'&+1 ' 4 1< 6 KD'BD' A'-<-B10 <>&-.0 ' & D1 ' '-' D1' K1- 8 D' A' 1< ' &=' D1' 1'. -' &=' D1' `'@< 1P C 1 1-01A' , '- .' `'' -' " 11A9 <-A' -& ' &=' '.D 9P' 1- ' D1' 'L D9 '-' =?@@ < @'<>1- ' K1 1' 1D1< 01A9 <-A' # ' ? D& ' ' &=' D1' 0<>1 ' ' K<0 & A<'-1A9 D< ' '=' <- ' D1 '==9 -A1 ' D1 '==9 & ' D1 '==/0 @1 a9 & D1 ' D<-' '-' D1' 0<>1' A'-<-B1' K<0 1LB1C 1A9 0D&?@A' &BB?C ' D1' ==''B1' &=' D1 '==9 -A1 ' D1 '==9 & ' D1 '==/0 @1 a9 B&- < ' &' <- ' &=' D1' 0<'A' A'-<-B10 D< ' D1-' D1' D< '0& 0D&?@A' &BB?C 0 0D&?@A' =& =1' ' D1' ?>' &=' K& ?-A 1A' &?-A0 6' <-A' D< ' 1+1 ' < A&-' = &>' D1-B1j =& D' &' #1' ><A1' &=' 0?BD' !& =1' ? 1' &=' D1' 0<'A' ?>9 0D&?@A' #1' +&'A' <-A' -& ' <+<'@<#@1 <-A' D< ' 1+1 ' @'1.1' <-' D< ' K&?@A' 0?1' =& ' D1' 0<>1' ?>' =& =1' 9 <.<'-0 ' D'>' & ' D1>' KD'BD' 0& 0D&?@A' =& =1' 9 0D&?@A' #1' 1B1'+1A' <-A' <A'-' <A' &' 0?1' <-' A '&-' &=' " 1# ' '-' D'0 &K-' <> 1 D1' , '- .' &' D<+1' D1' &-1' <@=' &=' D< ' KD'BD' 0D&?@A' #1' 1B&+1 1A' # ' D1' 0<'A' =@'&-9 <-A' D1' & ' D1 ' D< ' 0& K&?@A' 0?1 &' D<+1' D1' & D1 ' <@=' D1 1&=6 <0' '-' D1' 0<'A' A'-<-B1' ><A1' D1' 0<'A' K1- 8 D' A' 1< 9 A& D' >& 1' =?@@ ' <CC1< ;' B&- < ' &' KD'BD' A'-<-B10 A'+1 0 D1 '==09 -A1 ' D1 '==09 <-A' D1 '==/0 @1 a09 &=' A'+1 0 &?- '10 &=' D'0 1<@>9'-' D1' ! ' 0 9 1B&-A9 <-A' D' A' 1< 0 \)' &=' D1' 1'. -' &=' &? '0<'A' &+1 1'. -' & A' D1' , '- .' D< ' -&K' '09 D1-' #U'. ' '-' D'0 1<@>' . 1< ' &?#@19 <-A' 1<B1' D1-' -& ' =?@@ ' 10 <#@'0D1A9 A'A' &BB?C ' &+1 '<' 1< 9 0& >1' &=' D1>' # '<' . 1< ' C<B1' &+1 '<' 1< 9 <-A' 0& >1' # ' `'<@1009JP' B<?01A' '-' A'+1 0 < 0 &=' D'0 1<@>' # ' D1' 0<'A' &?# 198<-A' '-' 0& >1' < 0 #1B<?01 D< ' -&-1' & D1 ' D1 '==' K<0 & A<'-1A' # ' @&-.' C<B1' <= 1 ' D1' 1< ' C<0 ;' ? '0<'A' &+1 1'. -' & A' D1' , '- .9 # ' D1' A+'B1' <-A2' 001- ' &=' D1' & A0' C' ' ?<@ <-A' 1>C& <@9 <-A' <' D1' 1H?10 ' &=' D'0 & > >& -0' >' D1' 0<'A' < @'<-@1- ' <001>#@1A9 <-A' # ' ? D& ' ' &=' D1' 0<>19 D< D' & A<'-1A' <-A' 0 <#''0D1A' D< ' -&' ><-1 ' 1 0&-' #1'-.' D1 '==9 -A1 ' D1 '==/0 H ' D1 '==/0 @1 a' &=' <- ' &?- ' &=' D'0 1<@>9 D1' ! ' 0 9 1B&-A9 & ' D' A' 1<' &=' D'0 1'. -9 & ' <- ' '>1' & ' C<B1' K' D' -' ` D1' 0<>19 hP' =& ' D1' BB?C< '&-' &=' D1' ==' B1' &=' D1 '==9 -A1 ' D1 '==9 ' D1 '==/0 @1 a9 '-' D1' D 11' 1< 09 & ' <- ' < ' & ' C<B1' QK' D' -' D1' 0<>19 & ' &=' D1' 0<>19 & ' <- ' &=' D1' 0<>19'P' <#&+1' < 1< 9 <@ D&?. D' D1' '0<'A' BB?C< '&-' K1 1' <. <'-0 ' D1' A' -<-B10 #1=& 1' 1B' 1A9 h)' D& ' -&-1' &=' D1>' #1' A<>-'=' 1A9 -& ' '-' <- K'01' D? '# ' <- ' '& -9 <'-9 C ' ! & =1' ? 1' '-' D1' 0<>1' A' -<-B10 ' <- ' &=' D1>' B&>C '01A9 <' D1' ?' ' &=' &? '0<'A' &+1j 1'. -' & A' D1' , '- .9 -& '< ' D1' ?' ' &=' <- ' &=' D'0 @'1.1' 1&C@1' 6 #?' D< ' D1' 0<>1' D1 '==09 -A1 ' D1 '==09 <-A' D1 '==/0 @1 a09 <-A' H+1 ' &=' D1>9 &=' <-A' =& ' 1+1 ' A@' &-9 <'-9 <-A' ! & =1' ? 1' `C? 0?1A' & ' &' #1' C? 0?1A9 P' @1+'1A9 & ' =& =1' 1A' &=' D1>' & ' <- ' &=' D1>9 # ' H? ' 0< ' &+1 1'. -' & A' D1' , '- .' & ' <- ' &=' D'0 @'1.1 1&C@1 9 =& ' D1' ' `&BB?C '- . h P' &=' D1' 0<'A' D 11' 1< 09 & ' <- ' C<B1' & ' '>1' K' D' -' D1' 0<>19 #1' H?' ' <-A' A'0j BD< .1A' =& ' 1+1 ' # ' D'0 6 D1' 0<'A' A'-<-B10 9 & ' <- ' &=' D1>' ><A1' #1=& 1' D'0 '>1' -& K' D0 <-A' -.9 1 ' -1+1 D1@100' D1' 0<>1' A'-<-B10 9 <-A' 1+1 ' &=' D1>9 0D<@@ 1>< '-' '-' D1' ' 1-. D' <-A' ! & B1' <.<'-0 ' <@@ D1 '==09 -A1 ' D1 '==09 <-A' D1 '==/0 @1 a09 =& ' D1' ' BB?C< '&-' &=' <@@ & D1 ' ` 1< 09P' D<-' D1' 0<'A' D 11' 1< 0 <0 <=& 10<'A9 <0 D1' 0<>1' A'-<-B10 `K1 1'0P' #1=& 1' D'0 I ' -<A1

' &=' D1#1. -< -.' V@1001' 0C<B1' 0 D1 >8
' K' D'-' D1 >9 & ' &=' D1 >' & ' <- ' &=' D1 >9 =' =' -Z9 < Z9
' #19 ' 0?1A' & ' &' #1' 0?1A9 =' U' 45
/' &BB?C<B'&-' hA'AA1-' ?

-1' ? D+'0B&- ' -1' @1 a' A1' '0B&- ' A1> 1 &a' 1-' 0&-' &=='B1' &? 1' ?-' <-'6' @1 0' H?1@@1<' & A1-3-B10' 1- &' <? 109 <-' LL'' ' A?' 1'. -1' A1 9 1-01' & ' 1- ' B' 0'0>1' 1-' C@1'-' C< @1>1- ' =? 1- ' 1B' 1\9 I ' C' <?= & ' 1' A1 9 >10>1' 10 &' ' H A1'. -1\9 H' 0" <0B?-' '0B&- ' ? D+'0B&- ' ? @1 a' A1' '0B&- 9 <? 1' H' 1-' >10>1' @& A1-0-B1' =&'0 ' 1LB1C 1\9 &BB?C'1 &' ' &=='B1' A-' '0B&- ' ? D+'0B& ' ? @1 a' A1' '0B&- 9 <' B& - ''1' A<0B+>1' A1' @10' 0?'0A' \' & A1- -B10 9 H' @& 0' '9 H" 1-0" &BB?C'1 &' ' =& =<B1 &' ' @<' 0&>1' A1' ' ''' 1 ' H' BD?-1' CA&-' 1-' 1>C0' A1' @& 0' <+1-' ' <==<' 1' A<? '1 9 =& =<' ? 1' A?' A' ' 0&>1' &'1 ' +&'A1 9 I ' -'1- ' +<'@@<#@1 6 ' H' B@@?-' @'1.1' D&>1' H" 0?1 ' +&?A &' ' C? ' @<' A' ' 0&>1' =& ==' 1 9 1-B&- 1' @? ' B>' B1?L' H" 1-0" =& =1R&' ' &?' =& =<B1 &'1- 9 , &'1 ' 1BC?' I ' <A>'0' A1' 0?1 ' <BB'&-' A1' A1 1' 1-' 0&-' CC 1' -&?-6' @1' & ' A<+&' ' @?-1' >&' 1' A1' B1&' H' =?'001 ' 1B&, 1\' C' @<' A' 1' <BB'&-9 1 ' B1@? ' &?' B1?L' H" &?' H?1?L' 1-0" 0?1 ' +&?@ A &'1 ' &?' +&?A &'1- ' A<+&' ' 1- ' @<? 1' >&' 16 0'B&>1' 1-' @<' A' 1' & A1-#'B1' @1' A' ' <-' LL'' ' =<' ' C@?'0' C@1'-18 >1- ' '<CC'1 ;' B&- '1' <0' H?1@@10' & A1- -B10' A'1010' '08 B&- 10' ? D+'0B&- 10' I ' @1 a10' A1' '0B&- 10' A1 ' A' 010' &?- 110' B10 ' &'<@>19 1-' @10' <-0' C '=' '' 01B&-A1' I ' '1 B1' A1@ B&>1-B1>1- ' A?' 1'. -1' -=1' A' ' @1' & ' H& 10 9 @& 0' 10 <- ' 1-' B10 ' &'<@>1' .0?-A' &?#@19 I ' C1<0' <A&-H10' -'1- ' C@1'-1>1- ' 10 <#@'19 &BB?C'1 1- ' &? 1' ?-' <-9 <0B?-0' A1?L' C' . ?-A' 0C<B1' &? 1' ?-' <-9 <0B?-0' C' >1'-A 10' 0C<B19 B<?01\9 1-' A'1010' C< '10' B10 ' &'<@>1' C' @<' A' ' &?#@19 I ' 10' <0B?-0' C< '10' C' B1&' H' <0B?-' <? 1' '0B&- ' C' @&-.1' 1>C0' C?'0' <-' C<001' -1' =&'0 ' & A1'. -1;' =1' A' ' @1' & ' A1' @<A+'0' I ' <001-' A10' . N% 10C?1@L' I ' 1>C& 1@L9 I ' <' @<' 1H?10 ' A1' 01\' &1\' 1-' @1' A' ' C< @1>1- ' <001>#@1\' I ' C' <? ;& ' 1' B I ;1'" <A' & A1'. -1' I ' 10 <#@' 9 H' -?@@1' ''@< =1' C0&-1' 10 1<- ' '0j B&- ' &? D+'0B&- ' &?' @1 a' A1' '0B&- ' A<0B?-' &?- 11' B10 ' &'<@>19 @1' C ' ' 01B&-A1' & ' '1 B1' <-' A1' 0&-' 1'. -1' &?' <0B?-' 1>C0' &?' 0C<B1' A1'-\' 'B1?L9 C? ' @&B8' B?C<B'&-' A1' @&=='B1' A?' '0B&- ' &? D+'0B&- ' &?' @1 a' A?' '0B&- 9 1-' @1 ' &'0' <-0' &?' <0B?-1' C< ' &?' 0C<B1' A1A1'-\' 'B1?L9 &?' A'B1?L' &?' <0B?-' A'B1?L9 &? '?-' <-9 >10H9 @&?=' A' 1' &BBHC<BB'&-' =?'0 ' 1-B&- 1' & ! # A18' - -B10' <+ - ' 1B' 1\9 0&' ' -<0B?-1' A1?L' 0&' ' @10?\' -1-' <0B?-' >< ' 1-A<><.1\' C' <0B?-1' <BB'&-' C1'-1' &?' =& j =1' ? 1' 10' >10>10' @10' & A1-=&B10' &?' <0B?-' A1?L' &>j C '019 <@ 0? 1' - =1' A' ' 7' @1' & ' -1' <@ 0? 1' A<0B?-' 01\' @'1.10 6' >H0' H' >1 >10' @10' '0B&- 10' &? D+'0B&- 10' I ' @1 a10' A10' '0B&- 10' I ' D?-' A1?L9 A1' I ' C?' BD?-1' <BB'&-' C1'-1' I ' =& =<' ? 19 C? 0?1\' &?' <' C? 0?1 0' @1+1 0' &?' =& =1' 0' A1' 1?L' &?' <0H?-' A1?L9 C' - =1' A' ' ' & ' &?' <0B?-' A1' 01\' A' \' @'1.109 C? ' @&? ' &BB?C<B'&-' A10' <+/# A' \' &'0' <-0' &?' < B- -' 0C<B1' ?' 1>C0' A \' @10' >10>109 0&'1- ' H?' 1\' I ' A'0BD< .1\9 C? ' &? \' &? 0' C' B10 ' <=@6 @10' <+0- A' \' & A1-=&B10' &?' <0B?-' A1?L' A1+/- ' B10 ' 1>C0' =1' \' -'1- 'B&- '0 1<- m ' 1C? HW?- ' >10>10' @10' & A1-=&B10' I ' B@ ?-' A1?L9 A1' 1><'. -1 ' 1-' @1? ' +'. &?' 1' I ' =& B1' 1-B&- 1' & \' '0B&- \' &? D '0B&- 10' I ' @1 a10' A10' '0B&- 109 C? ' @1? ' &BB?C<B'&-' A1' &? \' <? 10' H' @10' 0?'0A' \' >0' <-0' B&>1' A10?'0' H0 ' A' 9 0'B&>1' @10' & A1-=='B10 ' =' 1- ' A1+ - ' B10 ' <= ' =1'

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F[H' 3"&<!1!-' 0'" #!.' S' ' !2 0&' &' ' V!2 1' !-'
+ '/0'"!&*-!'/0'6.@' !-"@'H /@2'!-' &'5# -&!-'/!'
/".&' 6.@' !-*+!$' !++!j' +!' 6.@' !-"@'+!' 'H' 0&2'
+ '#.-S0!2 '%%&&H' !2#/'."/1*-!' S' -0+' &2#.0-' .#L'
#0 &!".&' 2.-' . &#!' /!' &2#.0-' .02&!'" 0-' -' 20'"
!@-!'/!' '&&' !%#! ' !&-2' 2.-2'!-'1!21!'+!2 0&'
!%#! j'#.1!'!-' @#!+' !2' +0&2' +!@-!1!-' !2 !#&&!j-'
/&')2!j'5# &02.0"2'/!j'+&!*!j'/0'6.@'.-' !2 !j'*"!'.02L'
1!-' !-/ 1' 5# *)0-/!1!-' /!+ &!j' /!'+.0'" 20&!j' 5#
#!22!j'#M0-!' -'!-'+!'$1!' !++!j' &# !+'31!'#.1!'
0'" +.0'" ##.-2' ;"&! !' 5# #! j' /!2"!' "! .0"-!j'
/!&-j'1!21!'+!'$1!' <2'+!' 'H'H.'/0'1.&2'/!' .'!1 !"'
0'"#!.'S'+!j'&"!j' !-j'/0'6.@'+!j'S0!+2' 2#0-!'
&!+' &2#.0-' !2' C&' ." !-' / ! +0&2'#.!1!-' +!' 'H'
H.0'" /!' .'!1;"' 5# #.!1!-' S' &' 2.&' S'-.'!+2' &2L'
#.0-j' 2.&!-' --0!+1!-' !2+!0%' !-' +!-/!1 @-' /!j'
.0 j' +1!2' /!' +!j' S0!0%' -.'!+%' &2#.0-j' &22&-'
!2+&!0%' Y!-' +!-/!1 @-'/!j' .0 j' +1!j' /!' +!j' S0!+%'
-.'!+%' &2#.0-j' &22&-' !2+&!0 % 5# .&-!j' /&<2!j'
/!'!0%' .0-' "! 02!j'C' /&'2!j' /!' #!0%' -.0-' 1@!'
!7!j'+.0'" !-j'-!')&*-!j'+.0'"/!1!-'H!2S0!j'+.-*'
!1 2' "!2' +!' &-!'/!+/&' &# ! ' 1!' 0'" S0.@' &0k
2.0"2' +&!*!j' 5# 20;*&!j' /0' 6.@' 2.0-' *0-/!1!-'
!-/ -&L5# /!+ &!j' /!' +.0'" R 8' #!22!j' 5# #! j' <'
c".&1' "! .0"- ;+!j' !-'+!j' .0" j' /0' 6.& 2'+!j'H.0"2'
/!+' "! .-!' /!&-j' 1!21!' V' +!' 'H'H.0'" /!' .'!1 !"'
#!2 22 '.&'" 2'+!j'H.0"2'/!+' "! .0"-!' !++!j' " 2&-.'
"&-&' ;&2' "&-&'5# 90&-/!-' "&-&' '# 02!'
S' +!j' '!!+!j' &2#.0-j' -.2!-' -!' '.&++!-' -/"!'
20'" !0%' /!' "! .0"-!'" 2#0-!' ; !' .0' #! ' K2' -

) -'!"".-!.02'6! !&&.-'
2' O&!2' %'.$- +

' !'3 "+& 1!-' .+/!-' 'V!2 1&-2!'" !' &% '
@'. ' .;!"' &-' !' 7!+ 'A!'" . ' !'
6!&*-'.'M&-*' /7 "/' !'B.0" ' !'" !' .-S0!2=
0'" 2 &/' .'!"!&*-' ."/' !'M&-*' .' !' .-.0'" . '
b./' -/' .'" !'V! +' . ' &"-' -/' . ' &2'6! +1' ;@'
!' /'&#!' -/' 22!-' . ' !' ."/2' &"&0 +' -/' !1k
." +' -/' ' !'6!S0!2'. ' &2' .11.-2'&-' !'2 1!'
3 "+& 1!-' 22!1;+!/' -/' ;@' 0 ."&@'. ' !'2 1!'
3 "+& 1!-' ' Y."/ &-!/' 1 /!)!' -/' !2 ;+&2 !/'
#!" &-' 0!2' -/' "/&- -#!2'&-'B."1' .++.7&-*

B 6 'V !"! 2';@' ' 0!'1 /!' 'V!2 1&-2!'" 1B' <@&='
&-' !' 7!-@L &"/'A!'" . ' !'6!&*-'.'M&-*' !-"@' -' 0!'
+ !'&-' !!/' -/'-.'.'6&* 'M&-*'. ' -*+ -/'# ++!/' F4 #@'
M&-*' !-"@' !' &% 'R 8' '7 2' ."/ &-!/' ' -.'
!"& '2 .0+/'.##0 @' &2' &#!'. ' !"& ';.'!' 'A!' "'
0 .-' 3 &-' . ' 7.' 0-/"!/'3.0-/2' !%#! ' #!" &-'
3!"2.-2'&-' !'2 &/' 0!'!%#! !/'=' 2'&-' !'2 1!'&2'
1."!' + &-+@'2 !#& &!/'= /&'!"2' -/'1 -@'. ' !'M&-*(2'
+&!*!' 3!. +!' '!' ;!!-' *"&!'.02+@' &-/ 1 *!/' -/'
*"! +@' /!+ @!/'. ' !&'" 0&2' -/'3".#!22!2'!'!"@'A! "'
&-' !' !"1'# ++!/' &# !+1 2' !"1 ' 2' ." !&'" #k
&.-2'V"&2' -/'3"!#! 2' .' ;!' "! 0"-!/'7& &-' !'
2 1!' !"1 ' !'" !' &% ' @'. ' !' .- '. ' .'!1k
;!"'Y';!# 02!' '(I' !'M&-*(2' ! !"2'3 !-2'7 !"!;@'
-@'R '8' !"& '&2'1 /!'/.' 1.2'#.11.-+@';! '" !'
!' &% ' @'. ' .'!1;!'"= -/'Y .0* '&'2.';!'(I'
'-!7' !"& 2';!'@! "+@'# .2!-' !' ."". 7' !'" !'
B! 2' @'. ' +' .0+2'.'7 &# '- 7' !"& 2'2.'# .2!-'
-/' .&-!/'/&'!"2'. ' !1' '!' "! 02!/' -/' /&'!"2'
. ' !1' '!'-.' /' !&'" 3 !-2'-." E!-' !&'"
'[0-&+.-*' &1!' !'" !' -/'. ' !'2 &/' &# !+k
1 2' !"1=';@'"! 2.-'7 !"!.'/&'!"2'. ' !'M&-*(2'+&!*!'
3!. +!' -/' 0;H! +2';!'*"! +@'&-/ 1 *!/' -/'/!+ @!/'
. ' !&'" 0&2'3".#!22!2' -/'3"!#! 2'7 &# '2 .0+/';!'
"! 0"- ;+!'&-' !'M&-*(2' .0" 2' ' !' @2'. '6! 0"-'
7& &-' !'2 1!' !"1 ' !'" !' &% ' @'. ' .'!1k
;!"=' &2' .'2 @' ' !' @2'. '6! 0"-'# ++!/' "2&-.'
"&-&'/; ;&2' "&-&'-/'90&-/!-' "&-&';!# 02!'
' !'.+/' !"&+2' /0"2'-. '-.'" 7.0+/'-.' E!'
0 .-' !1' .'"! 0"-' -@'V"&'."3"!#! ' !'" !'A! "

) 0 %'M' % %
)' !'" !'#.-S0!2 !
'."21.# !' 2'
<20# ' ' .7!';!'& N$ ' ' "' J

@'3 "+& 1!-'7 2'#.-&-0!/';@'/&'!"2'3".".* &.-2' -/' /H.0"-1!-2'".1' ' #.;!'" 5' /7' ' ' I5' .' ' "# '
J' /7'" ' '&I)J]' !'3!&&.-2'.-'7 &# ' &2' 0!' 5' /7 ' 7 2' " 1!/' "!'!-!"!/'&-' -*+&2'.-' 'I'
.' !'3 "+& 1!-L6.+' ' /7' ' "' J'.' 'J

r' !'B"!-# ' !%'.' !2!' 0!2' ".1' !-#!'.' !' -/'.'55' /7' '7 2'-.'&-2!"!/'&-' -@'3"&-!/' .+!^ .-'.' !'
0!2' ' "*!' !"3@2.-)^] #' ,I>'0-&+' @<2'Y IJ I'D -' ' -/'20;2!S0!-'3"&-!/' .&!2' !'B"!-#' !%'.' +'
.2!' 0!2'&2'2 !/'.';!' E!-'".1' Q'.$ '^ $' 'C'' ;0'.-'!% 1&-&.-' ' -02#"& ' !"2'&-#.""!#'&-'1 -@L'
"&#0+"2'&-'7 &# '&'&2' "&-!/' 2'#."""!/+';@' @' -/'20;2!SO!-' /&.'2' 1."!' !" !/+' .@'&2' .0-/'&-' ;!' ' " -'
^"' '&-' !' --!"' !1 +!' &;" "@' !' ."""!#&.-2'&-' !' .!2' "!' ".1';. ' !2!' -02#"& 2'=' -/'&-' !&"'/! 0+'".1'
!' +/'3"&-!/' .&!2'=.'7 &# ' !'!"+&!2';@' #+&-&' ' 5!'&2'&-' !' 0!2'.' !2!'A! "2H10#' !'1.2' ##0" !

' &Z 3 !-' /&/' ;! '" !' ." 3! '" . ' !' 3!k - + @' #.- &-!/' &-' !' ."!2 &/' 0 ! ' .' !' *"! ' .22' Z 7!+# .' !' M&-*' . ' ' 7 &# '2 .0+/' *". 7' .' &1' ;@' "! 2.-' . ' !' 2 &/' Y3". #!22 l' Z .' &Z +&!*!' 3!. +!' ;@' !+ @Z V &# ' !@' !"!;@' 202V&-# 'Z ." / &-!/' ;@' 0 ."& @' . ' !' ."!2 &/' 3&"+& -&!- ' ' &' -@' !"& '. ' -@' .0- @' /.' !%!#0 !' ." "! 0"-' -@' V "& ' 3"!#! ' ." V "" - ' &-' -@' . ' !' ." Z . ' !' M&-*' 7& &-' !' 2 &/' !"1' # ++!/' # ! - Z !"1' !" !' &% ' @' . ' .'!1;!"' -/' ;! ."!' -@' V "&' . ' &2# "*!'/!+&'!"!/' .' &1' . ' &Z Y.##0k @ `$?!' m ' !"& 7&#E' !' 2 +' -. ' ;!' / 1-& &!/' ;@' B."#!' . ' !' &/' 0 !' -." # "*!/' . ' !' 3!- +@' ."!2 &/' + .0* ' H& ' !' ' .##0 &!/' !' & #!' . ' !"& ' Y !" -@'(l' . ' !' 2 &/' @Z . '6! 0"-' # ++!/' " 2 &-.' " &-&' + ;&Z " &-&'." 90&-/!- ' " &-& ' 4!# 02!' ' .0" ." '!"!&*-' ."/' !' M&-*' ;@' '3! & &.-' /!+&'!"!/' .' & `' &-' !' 2 &/' 3 "+& 1!- ' ;@' !' .11.-Z'. ' !' 2 1!' ' !"#!&'!/' ' *"! ' # "#& @' . '4.7L2 '!' &Z'. 7' &-' &Z' R)8' 6! +1' -/' !' 4.7L2 '!Z ';!' &-' !' R<8' 6! +1';!'2.+/' ' -'!%#!2k 2&'!' 3"&#!' 7 !"!;@' H&!' %!"#&2!' . ' "# !"@' &Z *"! +@' /&2#.-&-0!/' -/' +-H.2'+.2 # 0" 2 &/' ."/' !' M&-*' #.-2&/!"&-*' !' 3"!1&2!2';@' !' /'& !' 22!-' -/' 0 ."& @' ."!2 &/' ' . / &-!/' -/'!2 ;+&2 !/' R U8' ' !'!"@' !"# -' " -*!"' -/'!'!"@' ." -@' . ' !&" B 9."2' L .1&!2'." !"' -2'7 &#' ' -@' &1!' !" !' B! 2'. ' &-' &# !+' !' "# -*!+' -!%' #.1&-*'2 +' ;"&-*'2!-/'." #.-'!@!/' &-.' &Z -/' -@' !"# -/&2!'&-' "" #E'b ++!@'." & 'Y. 'SI' !' &@' ." .0- "@' . ' !-&#!' ." Y. FI' . !" & @' .7-'." .0- "@' ".1' 7 !-#!' -@' 20# '4.7L2 '!Z' !' ;!!-' ' ;! ."!' &Z &1!' ;".0* '2!-' ." #.-'!@!/' &-.' &Z -/' ' !'!"@' &1!' . ' !&" ;"&-*&-*' 2!-/&-*' ." #.-'!@&-*' . ' -@' 20# ' !"# -/&2!Z &-.' &Z 6! +1' 2 +' ;"&-*' 2!-/' . ' #.-'!@&-.' &Z 6! +1'7& ' !' 2 &/' !"# -/&2!2' &-' !' 2 1!' "" #E' b ++!@' ." & '7 !"!&-' -@' 20# ' !"# -/&2!Z 2 +' !' !"! !" ;".0* '2!-' ." #.-'!@!/' ." !'!"@' Y 0-' V !&* (l' . '20# ' !"# -/&2!Z 7 &# ' !"!" !" 2 +' ;!'#.- &-!/' &-' !'!"@' "" #E' b ++!@' ." & ' B.0" 4.7L2 '!2' 0 .-' 3 &-' . 'B." !& 0"!' .' !' M&-*' ." !'!"@' ! !0+' . ' ;"&-*&-*' ' !'!"@' 20# ' 4.7L2 ' 'H2' '&&H/' -/' +2.' +&!' 2 &/' 4.7L2 '!Z 2.' ;".0* '7!-' ." #.-'!@!/' ;@' !' &/' !"# -2' !&" B C."Z W ."-&!Z' ." !"k ' -2'&-.' &Z 6! +1'2 +' ;!' 2! "# !/' -/' 20"'!@!/' ;@' !' @."2' !"& 2'4 &+& 2'." # &!' b.'!"-."Z' . ' 20# ' & &!Z' ." .7-2' 7& &-' +&&Z 6! +1' 7 !"!' -@' 20# ' "" #E' b ++!@' ." & ' 2 +' !"! !" #.1!' . ' 2 !' 3. = -/' !' 2 &/' @. 2' !"& 2'4 &+& !' ." # &!' b.'!"-."Z 2 +' 22&*-' 7.' !-' 1 2' !% !" ' .' 2! "# ' !' 2 &/' '!2' -/' !' 2 &/' 7.' !-' .' ;!'27."-' ;@' !' 2 &/' @."2' !"& 2'4 &+& 2' ." # &!' b.'!"-."2' R ()8' (!@' 2 +' "O+@' -/'&-/& !"!-+@' 1 "E' !' 2 &/' '!Z' ';!' -.' *../' -." 20 &#&!-' ##."/&-*' .' !' --!" 2' 20# ' '!Z' &-' &1!Z' 2' 7!"!' 7 -' .' ;!' 1 "E!/' .' !' -!-' ' +' !' M&-*(Z +&!*!' 3!. +!' 1 @' '!' M-.7+!/*!' ' !1' 7& k .0' B" 0/L

S' 2.-' !-' ." '/ !' 0"K .0" /!+' !@-!'!-'+!' ')-/&' !2 0&'#.-!&*-0j' '*" -/' /!' 2& ;&!-' ' 6.@' /!' !.' S' +0@' ##"!2 !".&' '"! 2.-' /!' +!j' /& j' #!22!j'#.1!' ' 2.-'+&!*!' !. +!' '/!+ &!j' S&+2' .0-' '@#!++' @' !2' &+' ."/!&*-!j' ' + 0 ."& !' /0' /& ' +!1!-' S' 2& 2#0-!' &2#.0-'/ 2#0-' .0- !!'!%!#0 !' .0' "! . -!' 2#0-!'; ' #! '.0' 7 " - '!-' 2#0-Z' /!j' .0" j' /0' 6.@'/!&-j' +!' RM' $1!' !++!j' &# !3' $1!' <2' +!' 'H' H.0"' /!' .'!1;" C' /!'[-' 2#0-!' ; ' /!' /&2# "*!' /!+&'!" +0@' /!'2' .##0 #&.-' /!' &2#.0-' -!'2.&' !-/ 1 *!' ' ."#!' /0' /&' !2 0&' -!' /!+' !@-!' ' -/&' 2.&' # "*!' .0' 2.&' &+' S' #!++0@' /' .##0 &!' +. &#!' /!' &2k #.0-' ' -' S)0-' 0" 2#0-Z' /!' +!j)/H j' H.0"2' /!' "!L' .0"-!' !++!j' " 2 &-.' " &-&' & ;&Z " &-&' .0' 90&-/!-' " &-&

!1' 0" #!.' S' -!' ' +!' 6.&' ' +0-' !&#&.-' '+0@' ; &+&!' !-' +!' /&' + -!-' ' +!j' .!Z /&#!++!' /'!-!-/0!' S' *" -/' !2# "#& !' /!' 4.7!2 @!j' !2' ."!' !-' #!2' 2.-' 6.& +1!' C' #!0%' 4.7!2 '!j' S' 2.0-' !-' 1!21!' +!' 6.& +1!' 2.-' !-/0j' ' ". ' !%#!22&'!' "&#!' .0-' +!' ! !' / "# !"&!' !2' *F00/!1!-' /&2#.-&-0!j' C' ;&!-' KZ /0j' 1!21!'-!' e' +!' 6.& +!j' -&22!j'#.-2&/!L' " -' /!+' /'@Z 22!-' C' 0 ."& !' 20&2/& j' /' ."/!&*-!' C' !2 ;&&!' C' !-' !' S' # 0-!' 1 "# 0-' !2 0-*!'" C' # 0-!' .0' 2#0-' /!' +.0" !# .0"Z' Y .0"2 l' .0' 2!"L' ' -j' S' +' 2#0-' !1 Z' Z' +' !2 !' /!' !&-' &# !++' +"# 0-*!++' 2# !&-' '!&*-(-' 1!2-!".-' !-'.&!".' .0' #.-'.&!".0-' !-' #!2' !' 2#0-' 1 "# 0-/&2!' !-' "L' "&E!' b +.H!' .0' -&!' /!'+' &!!' .0' @2' /!' SO!+!' 2#0-Z' &!+%' 4.7!2 '!Z' /!')-' #!2' !1 Z' .04' !2 !' 1!2-!j' !-'.&!j' .0' #.-'.&!j' !-' #!2' $"!' ' # 0-!' !1 Z' /!' +.0" 1!2- 0-#!' !-'.& -#!' .0' #.-'.& -#!' /!j' &!+%' 1 "# 0-/&2!j' !-'#!2' 6.& +1!' 1!2-!-' !-'.&!-' .0' #.-'.&!' !-' 1!21!' +!' 6.& +1!' .'!2S&' +!j' /& j' 1 "L' # 0-/&2!j' !-' 1!21!' ""&E' b +!!' .0' &!' !-' SO!+!' 2#0-Z' &!+%' 1 "# 0-/&2!j' c".0-' 1!2-!j' !-'S&!j' .0' #.-'.&!j' !-' f' 0" # &0-!' .&Z /!' .-! -#!' / 0&!+' 1 "# 0-/&2!' S' !-' 2' c" ' #.- !&*-0j' !-' # 0-!' ""&E' b +.&!' .0' &!' 'S- "!' 4.7!2 '!2' 20" @-!' /!' ." &&& 0" 0' 6.@' 0" /! 0+!' / 1!2- -#!' /!' # 0-!' 0&!+' 4.7!2 '!' 'H2' '&&H/' 0%&' !2' /& j' 4.7!2 '!2'!-2@' 1!2-!"Z' !-'.&!"Z' .0' #.-'.&!"Z' '+!j' /& j' 1 "# 0-j' +.0" !# .0"Z' &&1!@Z' .0' 2!"' 0-j' !-' #!2 !' 6.& +1!' 2.&!-' 2!"# !j' C' 20"'!&!j' '+!j' +2' &2#.0-j' 4 &++& Z' .0' # &!' b.<-.2' / 0&!&%' &!!j' ' &++!j' /!&-j' #!2' /& ' 6.& +1!' '+' .0' 2#0-!' &!+' ""&E!' b +!!' 0' &!' '&!-/" ' -' 2' /!' !&" Z' ." '2 +0-' '+!j' /& j' &"Z &2#.0-j' 4 &++& !' .0' # &!' b.<-.2' / 22&*-!" /!0%' .1!j' !% !j' /!' c# !" +!j' /& j' '!j' C' +!j' /& j' /!0%' .1!Z' !2 "!' H0 "!j' '+!j' /Ej' &+2' &2#.0-' 4 &++&' .0' # &!' b. L' - 0"2' +!-!-' S' &+2' !"". 0-' 2&*-!" ," &!1!-' C' &-/+L' !"!-1!-'+!j' /& j' '!2' -&!-' !2 ! - j' ;.-!j'-!' 20 L' & ! -j' !-' &!+' 1 -!" # 1!' !-' !1 2' 22!' 0&!+%' '!Z' 2.&!-'!2 "!' 2&*-!j H' +!-!-' S' .0' +&!*!' ! +!' /!' - !' /&' '(+!' 6.@' O&22!-' '!" #.-&2 0-#!' /&#!0%' 2 &-j' " 0/!

' 0"-!Z' %'.$-

D1 '==0' #1=& 1' D<+'-.' D1'' F '' &=' "'0BD< .1' >< ' 1 ? -' F ' 0' A? '-.' 'BD<1' ><' 1 >0

!&? &K0 <+10' 0D<' #1' '>C& 1A' =& ' 1+1 ' &-'&= 1 BD<-A'\1' '>C& 1A'# ' C1?0' = &>' B1 <' &?- '10

4.72 '!Z' & ." !/2 +' ;!' 20"'!@!/' 2!' "# !/' -/' 1 "E!/

6!#& . ! 0;2&/&!Z . .-- *! -/ 3.0-/ *! *" - !/ !M&-* .
&Z & !D f J$ (C 3 pp ") L

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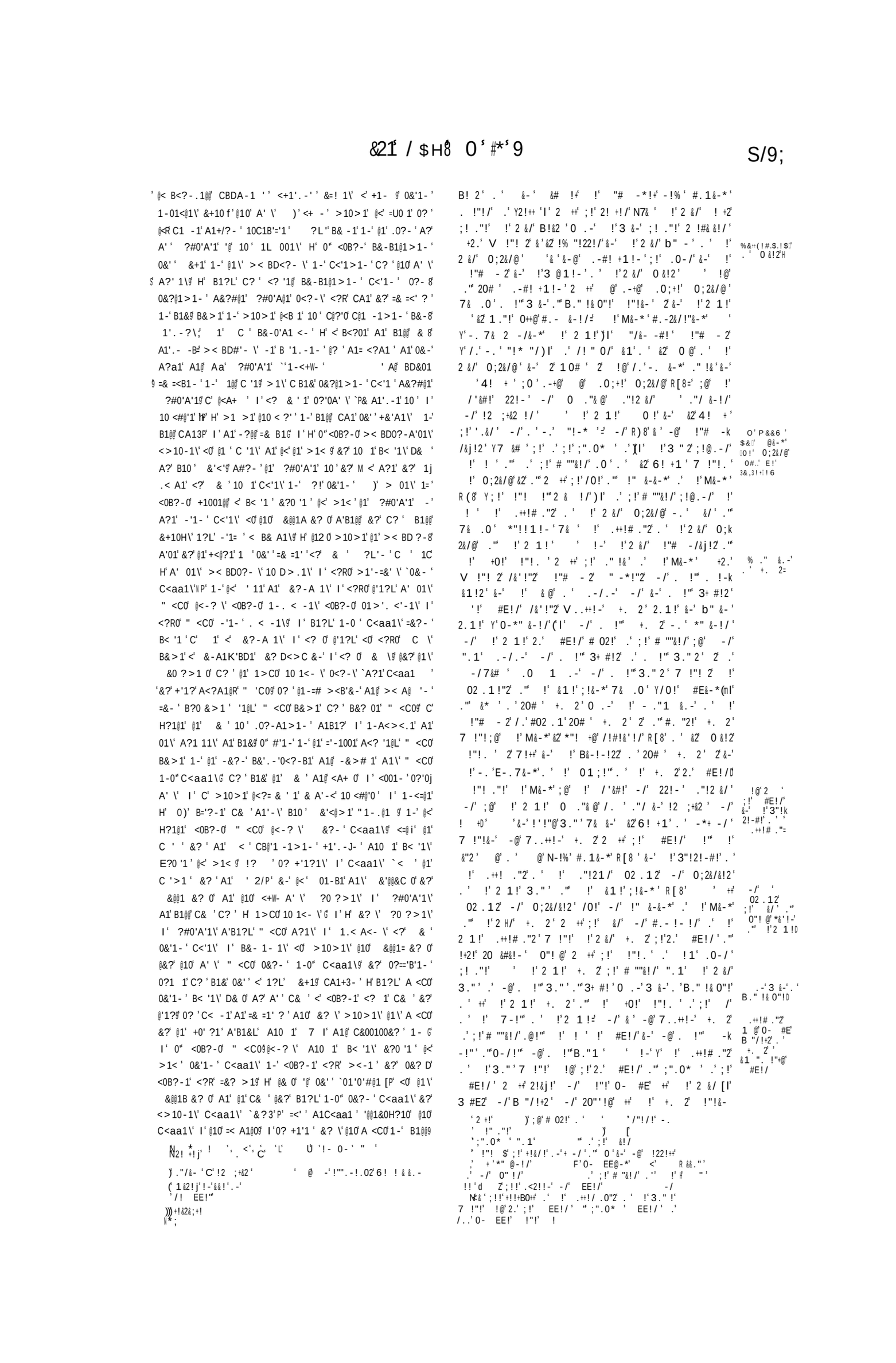
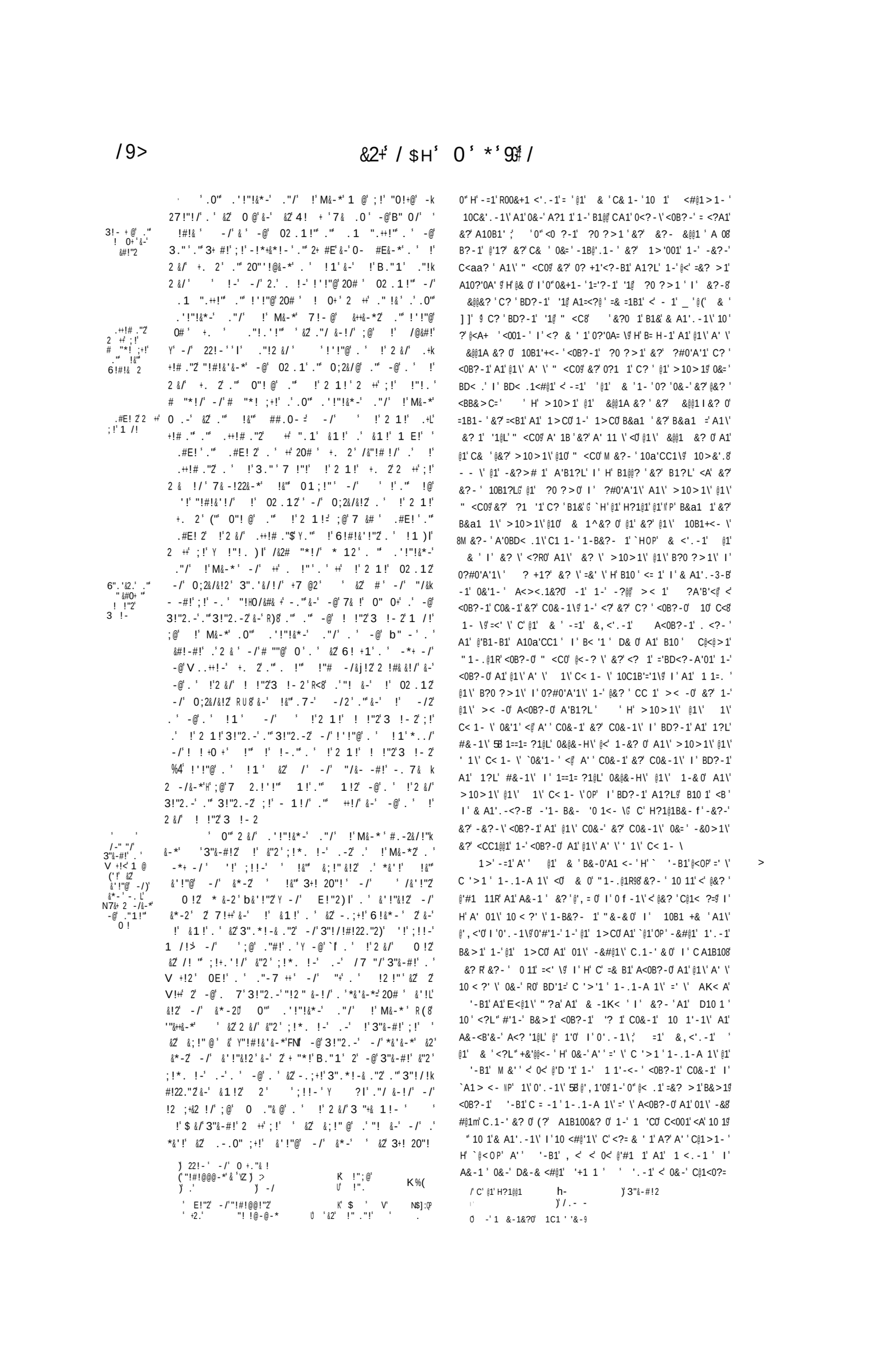
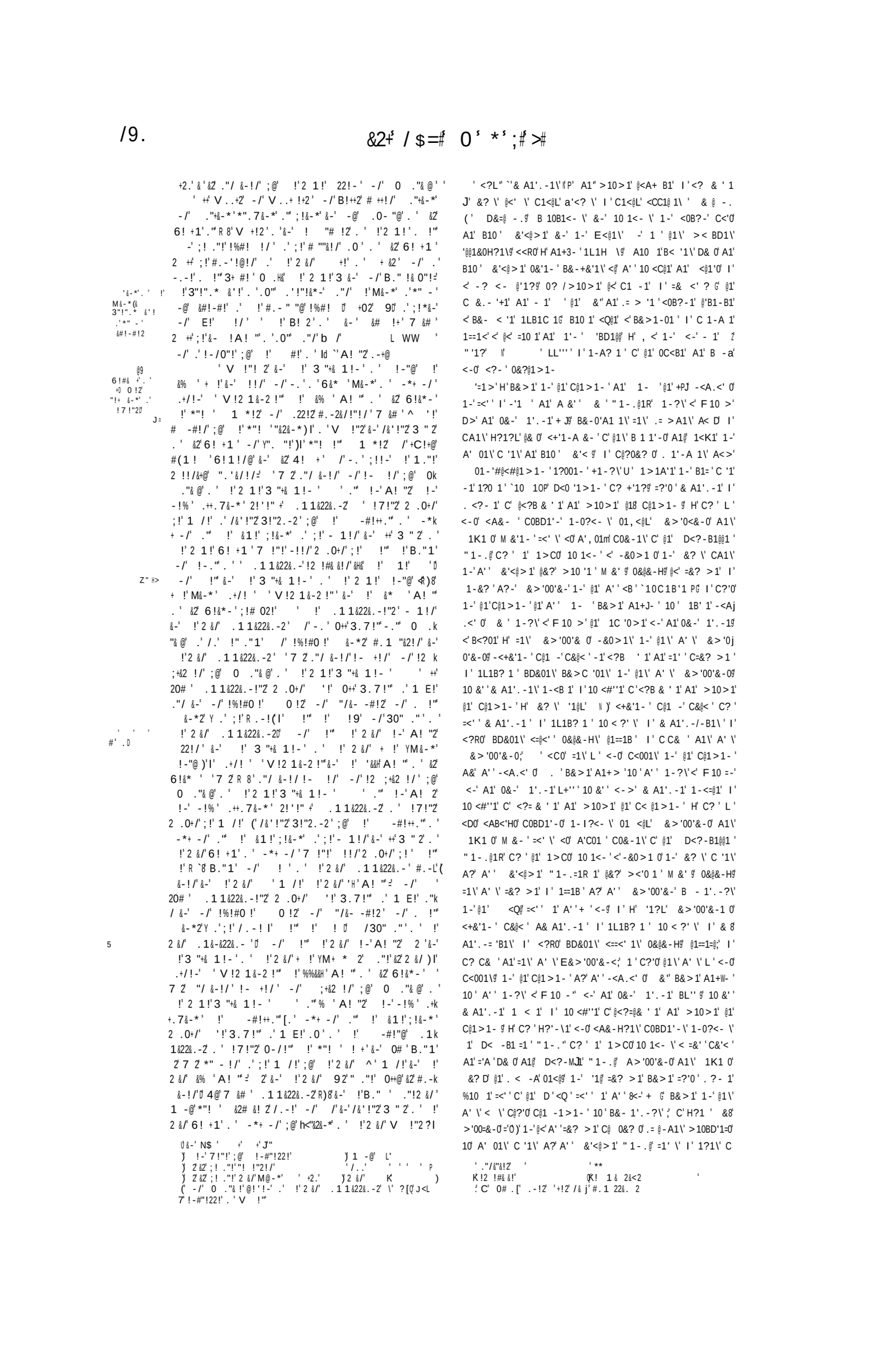
1>C& 1@Lˢ!ˢ@1\'A'\' &10ᵍ1-ˢB10ˢ0&-ˢC'1>1-ˢ'<001>8ᵍ
#@1\'!ˢC'@<?!& @1ˢA'B1@@ᵍ <Aˢ & A1'.-1ˢ!ˢ10 <#@'1ˢ!ˢ
1-<=@1ᵍH'<ᵗ@<ᵗ =10 1ˢA1ˢ@<ᵗ <'+'1ˢA1ˢ 1=&ˢ &D-ˢ <C '0ˢ
C1D1'<ᵗ +1'.--ᵍ-?@@ᵍ >< BD?-ˢ" >\1-'&?ᵗ 0?-.1ˢ
>1ˢ&?ᵗ `0&1==ᵗhᴾ<0B?-0ᵍ><50ᵍA &CᵍA& ˢA<.1-ˢ <K18ᵍ
A1a -ˢ 1@?1ˢ"<><0a1ˢ <1-ˢ <1&-ˢ D<>1@1ᵍ-1ˢ
<0B?-0ᵍ <?R0ᵍ" <CᵍA1ˢ0&@1ᵍ-1ˢ<0B?-1ˢ & 01ˢA1ˢ0&'1ˢ!ˢ
A& 1ˢ-1ˢA1ˢ0&'1ᵍA1@ᵍ=<@0<?-B1ˢA<0B?-0ᵍC< A1\'A1ˢ@<ᵗ@1ˢ
>1<ᵍ<ᵗ+1-A1ᵍA1+/-ˢHˢ@1\' &@@1= &? 0ᵍA1@ᵍ ?#0'A'1ˢ
A1 &-<.1ˢ!ˢ &?-A<.1ˢ!ˢ &?- & 1ˢA'B1@@ᵍ1-'@1ˢ & ˢ
A10?'0ᵍ @1ˢH?1@1ˢ >10>1ˢ@1ˢ >< BD<?-A@01ˢ 0&'@ˢ>'01'<ᵗ 1ᵍ
&?-ˢ0? +'1?ᵗ !ˢ>10? 1ˢ @1ˢ >10>1ᵍ!ˢ &?-ˢ 1-01@1ˢ BD108ᵍ
B?-1ˢ C1B1ˢA'B1@@ᵍ 1-ˢ @?-1ˢ= -ˢA1ˢ B10ᵍ&+10Hˢ@1ˢ 1<@1ˢ&?ᵗ
` &?@1hᴾ0C1B'<@>1-ˢC? ˢB1&ˢA10 1ˢ& A1'.-1\ᵍA&?-ˢ@1\'
>10>1\' & 1=&? 0ᵍ &?-ˢ@?-1ˢC< ˢ!ˢ>10>1ˢ@1ˢ &?-ˢ
& &?ˢ<Aˢ@<? 1ˢC< ˢ1-ˢ@&?ˢ.< A1ˢ0 <@>1-ˢ'ˢ!ˢ0"
<0B?-1ˢA<?A1@ᵍ " &CˢA& ˢA< .1-ᵍ <KA1a -0ᵍ 1@1?1 1mˢ
"<><0a1\' <1'-0ᵍ <B1-1 =ᵗ <C&-0ᵍ D<>1@1 =ᵗ !ˢ
" <C0ᵍ A1ˢ0&'1ˢ!ˢ & 01\ᵍ0&'1-ˢ<0B?-1ˢ 1>C0ᵍ 1-ˢ<C0ᵍ
>'01'<ᵗ+1-A1ˢ1-0" -'1-ˢ1-01<@1\'&?ᵗ -1'<- \'A1@ᵍ 1<@0?ˢ
B1@@ᵍ >< BD<?-A'01ˢ -0ˢ>'01'<ᵗ+1-A 1@ᵍ Hˢ &0ᵍ`<'@?ˢ'/Pˢ
Hˢ>'0ˢ >10>1ˢ@1ˢ >< BD<?-A'01ˢ<ᵗ +1-A1ˢ=& =<B1ˢ B1@@ᵍ
BD< >'=11ˢ&?'@1ˢ +<@?1ˢ1-ˢ G@1ˢ & ˢA10 1ˢ10C&'.-1\'
A1ˢA1?Lˢ CA1\' 1-ˢ!ˢ@1ˢ &+1ˢA'B1@@ᵍA1ˢ@<ᵗ '1 B1ˢCA1ˢ
ˢ <?L"& A1'.-1\' 10ˢC'@<ᵗ A'ˢ<?^& ˢ1'ˢHˢ@1\' & 1B8ᵍ
&?0ᵍA1ˢ >10>1ˢ@<ᵗ ?#0'A'1ᵍ!ˢ@1ˢA'ˢ &?- @@&?ᵍ
0&'1-ˢ'<ᵗ &?ˢ 1>C0ᵍ 1H?'0'ˢC 10A1\'A1C01@1ˢA1@ᵍ >< j
BD<?-A'01ᵍ B B1?Lˢ 1-01<@1-ˢ1-'H?1 1B&-f ˢ 1>C0ᵍ 0"
0&'1-ˢ 1H?'01\ᵍ 0<?='\'AB@<'1ˢ < A<-B1ˢ&?ᵗ BD&01ˢC? ˢB1&ˢ
C - ˢ 1Dᵍ<0B?>'ˢ><-1ᵍ 0?ˢ C< 1ˢ A1ˢ =& =''' ?Rᵗ <ᵗ @1ˢ
C&00100&?ˢA'B1@@ᵍLLˢ0ˢC?ˢB@@?-1ˢA1ˢ@1\' &@@1= &? 0ᵍ h)ᵗ
&?- &@@&0ᵍ<ᵗ<0B?-1ˢ 1>C0ᵍHˢ'@0ᵍ 1=?01-ˢ1-ˢ "A1-01<@1ˢ
<?A1@Lˢ><BD<?-A'01\'<C0ᵍA1@ᵍ 1H?10 1ˢ=<'ᵍ&?ᵗC'.-1-ˢ
<0B?-1ˢBD&01ˢC?ˢ @1-01<@1ˢA<0B'>'A1@ᵍ ><BD<?-A'01ˢ
ˢ<?L'@ ˢ'@ˢ1ˢ& A1'.-1\'C'@<?= & ˢ1'0?'0A@ˢHˢ &?\'
><0ᵍA1\' '1@Lˢ" <C0ᵍA& ˢA< .1-ˢA1ˢ <KA1a -ˢ 1@?1ˢ
"<><0aˢ <1-ˢ <B1-1ˢ <1&-ˢ D<>1@1ˢ!ˢBD?-1ˢ
<?1ˢ" <CˢA1ˢ0&'1ˢ & 01ˢA& 1ˢ!ˢ0&'1ˢ& 1ˢ10 1<-\'
A1'-\'B10ˢ &'<@>1ᵍ!ˢ <C10ᵍa ˢ=10 1ˢA1ˢ 1=ˢ'ˢ 'BD1@

) !2 ˢ ' .&"!ˢ "ˢ '.$- +ᵗ &
F -'!"".-!.02'6! ! &&.-ˢ
` ! +2ᵗ +ᵗ +
'#!++0@







!"! !&-2 /!+ ! 7!' &&"!- ' -!#!22 "&! 1 !- ' "! / !22!j' "!L' .0"1 !j' C 1 !- / !j0 ."! &+ !2 ' &-2& S' ."!' "/!' !-' /&,2!j' &!j' /!'#!2 ' /&' 6 .& ' R (8 ' 2& ;&!-' !-' +!j' .0-L' !!2 /!' M!- ' C 022!%' #. 1 !' &++.0"2 /!&-j' 1 !21 !' +!' ' 6 .& +1 !' !-*+' C 0%& /!&-j' +!j' ;.0-/!j' /!j' 1 "L' # !j' /!' +!&2 b0@2-!j' C 1 !j ' '#"! !-#!' /!+ ! 7!' /& 2!j'3"!j' C !- j'!-'*" 0-/' S0 -/ !'2.0-'20".0-/!j' C /!2 ".&!j ' C +02.0" ' *)0-/!j' 2!1 ;+ ;+!j' 1 !2# &! 2 R)8 0"' /! 0+ !' Y C ' 0# ."& !<!' 2 0-' <&2!1 ;+ ;+!1 /!&-j' ;"&! ' !1 2 /!' #;&!"' 2& ;&!-' !-' /!#"!#!' C /32L' "0##&.-' /!+' '&' "!' +&' !+./!' /!' 2!&-' 2*+&2!' #.' /!2 0$2' /!' +&!*!' ! +`' - !' $22., &*-!' K2 +!' 6 .@' /0' /&' 6 .& +1 !' !-*+' C /!'+!j' /& j' 1 "# !j' C -&!-&21!-' /&#!0%' 2&-.-' "!1!/&!' !-' #!2' "/!' 2 &!1!-' 2.&' 0"'&!&&0 !' /&' +!' 6 .@' +!j' +1&22!j'#.-2&/!" -' ' + /'@2' C 22!-' /!j' /& j' 2' !2 0!+%' C !1 ."!&%' C ' '"!S0!2 !'/!j' /& j'b .!2' 5# ' 0# ."& !' /!+' /&' +!L' 1!-' /' ."/!&*-!' !- # !' 5# ! ;+&!' S' 0"' S0&-j!' -2' 2# !&-2'!-20 - j'2!< +%' . -&22&.-2'/!j' !7!"2' 2.&!-' & j' !2' /& 2!j' 2.-!j' ' +!' 0-#!++!'" !-*+!3' 0"' +!' !1 2' !2 ! - j' ' -.21!"2' !-' .0 j' "&!j' !-' #!2' 6 .& +' !-*+' CN /!'+!j' /!' < ' /&' 1 "# !j' +.0' 1 !2 &!'" !2 '.0' " '2.+.-S'+ ' .0"1 !' C' ! !# !' /0' /&' .1&22&.-' #.- !&*-0j' !-'+!' /&' # !' !& !'+! /&' Y' @H <' ' .02 "!' #!.' /' ."/!&*-!' C' !2 ;+&!' 1 !21!'+ 0# ."& !' S' .0 j' &!&%' ;1&22&.-!"2' &!-' +!@-' .& '" /!' &'" ."/!&*-!'" 5# !%!#0 !'" !2 0& j' 5# ."/!&*-F-#!j' 5# 032' # .2!j' &"2' 2.+.-S<+! !#' 5# 0" ." ' /!j' 1 !21!j'+!j' .1&22&.-2' '@' !1'#.1!' !'"+ 0/ ;+!' !2 0& ' /!' *-' " '!-$ 032' !2 '."/!&*-!'S' .0 j'E&/!+%' 1 !2!'5# !/!7!@' 5# ' .0'+!' 6 .& +1 !' &*+' c".&!-' .02 &!j' 2&-.-' '+!j' #..2!j' /!+' 1 !' "R(8' S0!+!' !2 0& ' 0&2 ' &' 0"' *1-/' ;&!-' /!' .0'#!2 ' "!' !-' .02 -' /!j' 2 "!& 0"' !' /!j' .0 j' 6&32 ' !-2&' S'+!j' -&! 2' 5# ; !0+0=< ""!&!-' !-'@#!0%' +.0"' " 0-E' 5#+ "*!' 22 *!' 5# 0%&' !-' 2 +' /.-' /!' .0' "&!' /!' !22.-' #"!!2' !-+!j' 1 !21!j+' 20"' S0!+!' *-' " ' *(0-/' 2!- !-#!' # .2 .+&E!' /!%#.1!-*! &' ' *" 0-/' -.01 ;"!' /!j' '!2S !j' !-#.0; "!' +!j' " # .-"2' /&#!+' !2 .&' -0-#&!' 5# 1 !21!' + ' 2!- !-#!' S0 "!' .& j' !-' + -' !&*-!- !>' !2 ' /!#;"!j' ' + ' +!@' /!' 2!&- !' *+&2!' ##."/ 0-'H ' !-' !"" -#!' /0' /&' !2 0&' /!' *-' " ' /&!2!2' !2 0& j' /! 0&2' .0-' !2 !j' & j' 5# ."/!&*-!j' !-3' S0!0%' !-' 0-' +!1 !-' !-0j' -' "&1' /!+' 020" !' "!&*-!' /0' 6 .@' !-"@' +!' S0 "' !2 .&' "!#& !' S' !-' -' %%' ' /0' 6 .@' /7 "/' +!' &!"#!& *!-& .0"' - !' /&' ' +!' 6 .@' S."!2 ' ' #!.' S' +!j' #.1 2' 22 *!T' /!j' -&! 2' 5# ; !0%' !-' +!j' *P0-/!j' 6 <2' !-*+' 0"!- ' 2& 2.'!-' .& j' /&2 S0";!j' ' +!' !"' /!2' *." !j' 1.+@-2' !2 -E!j' !2 E!j' 5# E&/!0%' R)8' S0!0%' 0"!-' +!' !j' 5# 1&2!j' !-' !1 2' +!' 6 .&' & j' +!' 6 .@' !-"@' C' /! 0&2' !&+' +!+%' 6@32 ' S0!0%' +!j' &! 2' 5# ; !0%' 0"!-' /&2L' .0";!j' S&+2' -!' 0&22!-' 22!"' #.1!&+2' 2.+.&!-' ".&!-' .02!j' 5# -! !1!-' ; 0j' 2 0-j' !2 "!' "!+!' !j= 5# S ;"&! 2' ".&!-' 20"' #!." 0-/!j' 2' &2#.0- j' /!j' +&!0%'

)!-*' '.$ ' 2)' +' ' # / 1 *!2' %' .$- / 0# .]' * < :'
Z -' 2&21!'
' -' &2' + #!' L ' ' -/' ' . ' &-2!"' !"". -!.02' 6! ! & &.-2' . '2!'!" +' "!#!/&-*' 7."/2<O ' ' -/' !' .+/!2' %' .$- ' *"!!' 7& ' !' !%' 2' "&- !/' ;.'!
'+!' 2 "!& 0"!' ' ' ? !" ! 1 !-' '
)!-' *" 0-/' / 1 *!' /0' !. +!' ##."/' 0&2' # !2 ;+&!2' S' .(F &!&%' *."#!2' 1.+@-2' !2 -;!2' !2 E!2' # E&/!0%' ' +

7!"!' -!#!22 "&+@' "!/"!22!/' "! ."1!/' -/' 1!-/!/= .7'2.' &' &2' ' -.7' .' + !' &-' /&' !"2'3 "2' .' &2' 6! +1' .' -*+ -/' 2'7!+' &-' !' .0- &!2' .'M!-' -/' 022!%' 2' &-' . !"'3+ #!2' 7& &-' !' 2 1!' 6! +1' .' -*+ -/' //' +2.' 7& &-' !' 4.0-/2' . ' !' "# !2' . ' + &2' b0@-!2' -/' 1 1!2';@' Y "&2&-*!' .' V !"' /&' !"2' -/2' -/' !-!1!-2' &-' *"!' 90 - &@' ;!' Y/".7-!/)!' -/' /!2".@!/= -/' Y1 -@' *"!' (!' &2# &! 2' R)8' ;!' '!"@' +&E!+@' 7& &-' 2 ."' &1!' .' ++' 2' 7!+' &-' !' !#"!' 2!' Y. ' !' 02!- -#!' -/'(!' &' !L' &@ .;/' .' 4.+@' 0"# ' 2' ' . !"' !' M&-*(2' +&!*!' 3!. +!' . ' &2' 2 &/' 6! +1' .' -*+ -/' -/' .' !' 2 &/' "# !2' < /' 0 !"' 0-/.&-*' .' !1' &' 6!1!/@' &-' &2' 4! +' ;!' +.' !' 1."!' 2 !!/&+@' ".' &/!/= 0"' 2 &/' .' !"!&*-' ."/' !' M&-*' #.-2&/!"&-*' !' 3"!1&2!2';@' !' /' &#!' -/' 22!-' .' !' 2 &/' ."/2' &"&0 +' -/' !1 ."+' -/' ;@' 0 ."&@' .' !' 2 &/' 3 "+& 1!-' ' ."/ &-!/' !-9!/' -/' !2 ;+&2 !/' ' .'" & !!-' A! "2' -!%' !-20&-*' 2!'!" +' .11&22&.-2' .' !7!"2' 2 +' ;!' 1 /`' .' /&' !"2' 3!"2.-2';@' !' -#!++.'" .' -*+ -/' ."' !' &1!';!&-*' .';!' - 1!/' &-' +' 3 "2' .' &2' 6! +1' .' -*+ -/' -/' .' !' ."!2 &/' "# !2' 7 !"!' !!/' &2' ."' 2 +' ;!' !"' !' B."1' -/' !' .' !' 2 &/' .1k 1&22&.-' #.- &-!/' &-' !' 2 &/' = 1 /!' !' 2 &/' &% ' ! "' -/' 1."!.'!'" !' ' ."/ &-!/' -/' 2 ;+&2 !/' ;@' !' 2 1!' 0 ."&@' ' +' 20#' .11&22&.-!"2' '!' 0+' 3.7!'" .' 1 E!' ."/ &-' -/' !%!#0 !' 0 !2' -/' "/&- -#!2' -/' . !'" &-*2' Y' .';!' /.-!U I' !'" ! ! -/' 30" ."' . ' !' 2 1!' .11&22&.-2 ' V !"! 2' ;@' !' +0/ ;+!' 0 !' . ' *-' " ' 1.-*2' . !'" &-*2' &' &2' #.- &-!/' ' +' M!/!+2' ;@' 1&2!' -/' !/7@' -/' ".0* .0' !' 6! +1' .' -*+ -/' 2 .0+/';!' Y E&-*' 7@' 2 '&-*';@' !' !' 4 -E2 (!' 7 &#' 0!' 7 2' 1 /!' .'" !'*"! ' V ! +' .' +' &2' -/' &-' '.&/&-*' !' 1&-!22' .' +' 6&'!"2' 2.' ' &2 -/' 4. 2' 1&* ' '!' &-' !1' !&'" +"*!' -/' "!!' 3 22 *!' -/' +2.' &-' Y' !*0 "/')!' .' +' !' B"@' .' B&2' 2 7-!/' 7& &-' !'2 1!=' 0 .-' 7 &#' *-' " ' Y !' *"! ' !-!-#!' -/' .2 .L' +.+&#E' 0"2!'!' ;@' '*"! ' 01;!'" .'4&2 .2' 7 2' ".k -.0-#!/' * &-2' !'4"! E!"2' .' !'2 1!' -/' !'2 1!' !-!-#!' &2' B.0'" &1!2' &-' !'A! "' .!-+@'/!#+ "!/' #k #."/&-*' .' !' 7'.' .+@' 0"# =' -/' &-' &"1 -#!' .' !' 2 &/' 0!' .' !' b"! ' "!" ' /&'!"2' 0!2' '!';!!-' Y !"[!1 /!' -/' "/ &-!/= 1.-*2' 7 &#' &-' '3 "+& 1!-' .+/!-' &-' !' B&"2' A! '" .' !' 020" !/' 6!&*-' 'M&-*' !-"@' !' B.0" '&' 7 2"!#& !/' &-' !' 7!-@L & ' A! '" .' M&-*' /7 "/' !' &"/' 3".*!-& .'" .' .0"' ."/' !' M&-*' ' -.7' &2' ;!# 02!' ' !' #.11.-'3 22 *!2' .' & 2' -/' 4. 2' &-' !' *"! ' 6&'!"2' .' -*+ -/' 7!"!' . !-&1!2' /&2k 0";!/' ;@'+!'@&-*' .' V ! "2' &++2' &++2 -E2' E!2' -/' M!/!+2' .' !' *"! ' 1 *!' .' !' 3!. +!' ' 7 2' ."/ &-!/' -/' !2 ;+&2 !/' ' ++ 20#' V ! "2' &++2' &++2 -E2' E!2' -/' M!/!+2' 7 &#' 7!"!' +!'&!/' -/' 2!'0 '&-' $' &1!' .'M&-*' /7 "/' .-' .'M&-*' !-"@' -/' !"' &-' 20#' 6&'!"2' 7 !"!;@' !' & 2' -/' 4. 2' 7!"!' /&2 0";!/' ' !@' #.0+/' -.' 22' 2' !@' 7!"!' 7.-' 2 .0+/';!' E!-' 7 @' -/' RU 8';".E!-' /.7-' Y-!'!"' .' ;!' 2!' 0 ' * &-'[!' -/' ' V "&2' 2 .0+/' ;!' !"!0 .-' 2!-' .' !' !"& 2' . ' 20#' 3+ #!2

Q !-#"!22!' <20"".0-/!/' <1.'*"! !'+&E!' ' j$P' ' P U C' / 1 *!2' ."' + E' . ' 0^ ."& !' <' ` & -/' /!2 "0##&;-' . ' !' ' .'/. :6

(0'/.7!-';0';@' !'#..2!2' . ' !' U '2 '@-*L))' ' '*"<!' !- !-#!' .2!+'E' '& .T' L . '!%#.1!-*!1!-' Q 2&/&!-' "' "'J) /!-!' 7& /0!'"! "@-*' @!-'

B."B& !! ' A! "2-!%' !-20&-*' ;11&22&.-2' . ' !7!"2' 1 @';!' *" -!/' !" !'B."1' .' .2!'0-/!" A! =

6!#& +' . ' *-' " ' `*: B64 P -/' 0!2' "!+ &-*' .' V! "2' C#

3 "! 3@ #.-&"1&-*' 5J /7L+ ' 2 ' '#

ʻ / $Hʻ 0ʻ *ʻ

N7 !"!ʻ -!!/ʻ2 .0+/ʻ ;!ʻ .ʻ2O"ʻ!@ʻ -/ʻ&-SO&"!ʻ -/ʻ ŸŸ !ʻ
2 1!ʻ .ʻ!%!#0 !ʻ -/ Iʻ ʻ 02 &#!2ʻ2 .0+/ʻ ;!ʻ !"! .ʻ
22&*-!/ʻ ʻ +ʻ &1!2ʻ Y7 !-ʻ !!/ʻ"!SO&"! ʻ= ʻ L -/ʻ
!"R)8ʻ*"&!ʻ.02ʻ .1 + &- ʻ Y; . ʻ . ʻ*"! ʻ !-ʻ -/ʻ
. ʻ !ʻ .11.-2ʻ !"!0 .-ʻ 1 /!ʻ&-ʻ !ʻ3 "+& 1!-ʻ. ʻ
J 5ʻ !ʻ2 &/ʻM&-*ʻ /7 "/ʻ !ʻ &"/ʻ&-ʻ !ʻB&'!ʻ -/ʻ ."&! ʻ
A! '" . ʻ &2ʻ6!&*-ʻ2 !7&-*ʻ ;@ʻ !&"3! & &.-ʻ ʻ !ʻ
L2 &/ʻ 0 !ʻ7 2ʻ-.ʻ/0+@ʻ!%!#0 !/ʻ-.'" .;2!"ʻ!/ʻ ##."/k
&-*ʻ .ʻ !ʻ ŸB."1ʻ -/Iʻ B!ʻ!"!. ʻ ʻ7 2ʻ ##."/!/ʻ
-/ʻ !2 ;+&2 !/ʻ ʻ !ʻ2 1!ʻ 0 !ʻ&-ʻ ʻ3.&-ʻ
2 .0+/ʻ;!ʻ .+/!-ʻ -/ʻE! ʻ ##."/&-*ʻ R$ʻYʻ !ʻ !-."0!ʻ
. ʻ !ʻ2 1!-ʻ Y /H.&-!/)!ʻ !"! .ʻ ʻ&ʻ -@ʻ20# ʻ -k
-.@ -#!ʻYʻ;!ʻ/.-!ʻ ʻ !ʻ2 -!ʻ!ʻ;!ʻ;".E\-ʻ/.7-ʻ;@ʻ
/0!ʻ3".#!22ʻ#.- &-!/ʻ&-ʻ !ʻ2 &/ʻ 0 !ʻ -/ʻ ʻ !ʻ
7 &# ʻ Yʻ * &-ʻ /. ʻ +!'@ʻ]!ʻ 2O# ʻ --.@ -#!2ʻ -/ʻ ;!ʻ
!"!. ʻ/O+@ʻ &- !/ʻY2 ++ʻ`!ʻ"0-ʻ&-ʻ !ʻ3 &-ʻ. ʻ -ʻ
ʻ "E2ʻ .ʻ .0"" ."/ʻ !ʻ M&-*ʻ .ʻ ;!ʻ+!'&!/ʻ ;@ʻ !ʻ
2 "! 2ʻ. ʻ !ʻ %# !SO!"-ʻ !ʻ2 1!ʻ 7ʻY2 ++ʻ"!ʻ;!ʻ
.+/!-ʻ. ʻ --.@ -#!ʻ 1 /!ʻ;@ʻ !ʻ!- -2&-*ʻ. ʻYʻ !ʻ
2 &/Iʻ V ! "2ʻ &++2ʻ &++2 -E2ʻ E!2ʻ -/ʻM!/!+2ʻ
2ʻ;@ʻ-!7ʻ+!'@&-*ʻ 2ʻ&-ʻ !ʻ2 &/ʻ 0 !2ʻ1."!ʻ + &-+@ʻ
! "! ʻ-/ʻ !-ʻ ʻ !ʻ6!SO!2ʻ. ʻ !ʻ2 &/ʻ .1)ʻ
1!-2ʻ2 !7&-*ʻ;@ʻ !&"3!&&.-ʻ ʻ !ʻ #.11.-ʻ
3 22 *!2ʻ. ʻ & 2ʻ -/ʻ4. 2ʻ&-ʻ !ʻ*"! ʻ6&'!"2ʻ. ʻ
-*+ -/ʻ ʻ -/ʻ +2.ʻ ! /.72ʻ -/ʻ3 20"!2-ʻ -/ʻYʻ " ;+!ʻ
-/2ʻ['Iʻ /H.&-&-*ʻ.ʻ !ʻ2 &/ʻ6&'!"2ʻ7!"!ʻ*"! +@ʻ/&2k
0";!/ʻ/".7-!/ʻ7 2!/ʻ -/ʻ /!2".@!/ʻ;@ʻ !ʻ.0" Lʻ
*&.02ʻ!- -2&-*ʻ -/ʻ 2" &&-*ʻ. ʻ V ! "2ʻ &++2ʻ &++k
2 -E2ʻ E!2ʻ -/ʻM!/!+2ʻ&-ʻ .+/ʻ &1!ʻ 1 /!ʻ -/ʻ
+!'&!/ʻ;! ."!ʻ !ʻ &1!ʻ. ʻ !ʻ2 &/ʻM&-*ʻ /7 "/ʻ. -ʻ
.ʻY !ʻ2 &/Iʻ M&-*ʻ !-"@ʻ7 !"!;@*"! ʻ .22ʻ -/ʻ k
1 *!ʻ. !-ʻ!-20!/ʻ .ʻ !ʻ3!. +!ʻ. ʻ !ʻ 6! +1ʻ -/ʻ
/ &+@ʻ 7.0+/ʻ !-20!ʻ& ʻ 6!1!/@ʻ 7!"!ʻ-. ʻ ". ʻ&/!/-
V !"! ."!'&ʻL7 2ʻ."/ &-!/ʻ -/ʻ!- !/ʻ;@ʻ !ʻ 22!-ʻ
. ʻ !ʻ2 &/ʻ3 "+& 1!-ʻ .+/!-ʻ !ʻB&"2ʻA! '" . ʻ !ʻ
2 &/ʻ "! !-2!/ʻM&-*ʻ !-"@ʻ !ʻB.0" ʻ ʻ !ʻ2 &/ʻ
0 !2ʻ&-ʻ +ʻ !&"" "&#+!2ʻ2 .0+/ʻ;!ʻ.;2!"ʻ!/ʻ &"1+@ʻ
E! ʻ -/ʻ /0+@ʻ!%!#0 !/-ʻ /H.&-&-*ʻ !"!. ʻ ʻ .1k
1&22&.-2ʻ 2 ;0+/ʻ;!ʻ 1 /!ʻ&-ʻ /0!ʻB."1ʻ .ʻ 20 &#&!-ʻ
3!"2.-ʻ .ʻ ;!ʻ 02&#!2ʻ&-ʻ !ʻ!"@ʻ .0-@ʻ. ʻ -*+ -/ʻ
7 !"!ʻ !!/ʻ2 .0+/ʻ;!ʻ .ʻ2O"!@ʻ -/ʻE!! ʻ !ʻV !"2ʻ
-/ʻ* ! ʻ6&'!"2ʻ !"!ʻ -/ʻ .ʻ#."!ʻ -/ʻ 1!-/ʻ !ʻ
B 0+2ʻ -/ʻ .ʻ1 E!ʻ/0!ʻ %!#0/.-ʻ;@ʻ !ʻ2 &/ʻ 0 !2ʻ
##."/&-*ʻ .ʻ !ʻ ! ʻ. ʻ !ʻ2 1!ʻ 2ʻ 7!+ʻ ;@ʻ !&"
0"ʻ!@ʻ /'&#!ʻ -/ʻ &2#"!&.-ʻ 2ʻ ;@ʻ -S0!2 2ʻ .ʻ;!ʻ
E!-ʻ !"!.ʻ7& &-ʻB" -# &2!ʻ -/ʻ7& .0 ʻR[8ʻ7 !-ʻ
!!/ʻ2 +ʻ;!ʻ -/ʻ .ʻ ! '" -/ʻ/! !"1&-!ʻ +ʻ .2!ʻ
&-*2ʻ ."!2 &/ʻ=ʻ -/ʻ1."!.ʻ!'" .ʻ2O"ʻ!@ʻ !ʻV! "2ʻ
&++2ʻ &++2 -E2ʻ E!2ʻ -/ʻM!/!+2ʻ&-ʻ .+/ʻ &1!ʻ1 /!ʻ
-/ʻ+!'&!/ʻ;! ."!ʻ !ʻ2 &/ʻ &1!ʻ. ʻM&-*ʻ /7 "/ʻ. -ʻ
.ʻM&-*ʻ !-"@ʻ=ʻ -/ʻ2O# ʻ 2ʻ !@ʻ &-/ʻ. ʻ 10# ʻ !-Lʻ
-2!/ʻ.'" 2" & !/ʻ .ʻ#."" ! +ʻ;"! Eʻ/.7-ʻ -/ʻ 1!-/ʻ
&-ʻ !ʻ --!'" -/ʻB."1ʻ ."!2 &/ʻ=ʻ '&-*ʻ +7 @2ʻ ʻ
"! 2OH ;+!ʻ 0;2 -#!ʻ. ʻ !ʻ2 1!ʻV! "2ʻ &++2ʻ &++k
2 -E2ʻ E!2ʻ M!/!+2ʻ2.'&-ʻ.+/ʻ &1!ʻ1 /!ʻ -/ʻ+!'&!/
ʻ -/ʻ&ʻ -@ʻ2O# ʻ --.@ -#!2ʻ. ʻV! "2ʻ &++2ʻ &++k
2 -E2ʻ E!2ʻ -/ʻM!/!+2ʻ&-ʻY+! &-* `ʻI. D !ʻ3 22 *!2ʻ
-/ʻ Y2 " &&-*? Iʻ&-ʻ .+/ʻ &1!ʻ 1 /!ʻ -/ʻ +!'&!/ʻ ;/ʻ
HO/*!/ʻ ."#.-2&/!"!/ʻ;@ʻ !ʻ2 &/ʻ 02&#!2ʻ .ʻ ;!ʻ;".E!-ʻ
Q /.7-ʻ."1!-/!/ʻ !ʻ ʻ ʻ !ʻB"!! .+/ʻ. ʻ !ʻ
2 1!ʻ2 +ʻ /.ʻ %!#0/.-ʻ !"!.ʻ ʻ &2ʻ .7-ʻ .22ʻ
7& &-ʻ +ʻ 'A! '" !"Yʻ M-.7+!/*!ʻ*&'!-ʻ.ʻ &1 ['I

ʻ .ʻ/.ʻ !". ʻ!%!#0#&.-ʻ -/ʻ +2.ʻ F
* '&'2 0+/ʻ;!ʻ-!/! 0+ʻ ʻ 0 .-ʻH
0. ʻ !ʻ-.;+!2ʻ -/ʻ .!-2ʻ ʻ ! ! !
ʻ /@-* 5 7!"!ʻ1 /!'&'2 0+/'ʻ¥ʻN$ ʻ
)ʻ2 0+/ʻ1 E!ʻ.';!'"!&2S/ʻ *!@-ʻ 2ʻ2 0+/ʻ ʻ
Kʻ2O# ʻ -ʻ+.-/!2ʻ2.7!-ʻ @ &'-/
0ʻ/&2.0"; 0-#!ʻ 2" &0"!2
0ʻ-.&&# #&.-ʻ.ʻ @&-ʻ !" ʻ.';!ʻ1 /!

&?ʻ >10 '1 '8, &'ʻ A1ʻ0? +A1ʻ Iʻ1-H?1 1ʻ Iʻ A1ʻ=1@ʻ1-
1L1B?B'&-ʻ ʻ<?L" Hʻ ?0ABʻ &'1-ʻ 0ʻ B1&ʻ <00'.-1\
<0ʻ &? \'@1\'=&@ \'Hʻ'@ʻ#?0&'. &'ʻ ʻ<=20ʻ `0? 'B1& P
. 1+&? 'B&>C@1'-ʻ A1\'.0?-A1\'Iʻ A1aʻ &10ʻ=<'ʻ 1-ʻ@1
C@1>1-ʻ A?ʻ A'ʻ & ʻ @1ʻ '1 B1ʻ <-ʻ A1ʻ0&-ʻ 1'.-1
`]L+ Pʻ B&>C@1'.-W- \'C@&? 'C1 '=ʻ 'Hʻ@1ʻA'ʻ 10 < ?'
-10 &'ʻ C<0ʻA?1>1-ʻ 1L1B? \'-1ʻ .< A1\' 0&&-Hʻ@1=1B
A'B1@@ʻ <BB& A1\9=?'0 'Iʻ 10 <#@'1\'Hʻ@1ʻA'ʻ 10 < ?'ʻ1-ʻB1@@
C&'-ʻM &'=0 1-?\'Iʻ.< A1\'0&&-Hʻ@1==1B'A'B1==Gʻ <&?08
<-ʻ <ʻ B1@"ʻ Hʻ 0"<0B?-ʻ A1@ʻ <-?0<?-Aʻ `=?'001-ʻ 0&= hP
R &'ʻ <#< ?\'Cʻ A?1ʻC110ʻ B&-1'.-?\' 1-ʻ@1ʻA'ʻ 10 <8
-'ʻ Iʻ B1@@? ʻ Hʻ =1 &'ʻ 1@1+1ʻ@1ʻA'ʻ <-?00?-B1ʻ I
A1ʻB1&'A?1>1-ʻ< 1'-ʻ1-B&? .&'ʻ@<ʻ C1 -1ʻA1ʻ ʻ> B
A1 0ʻ-=1ʻ_ʻ@1ʻ & ʻ<ʻ@1+1 0ʻ Cʻ@1\'10 1' 1\'A1@ 0BD18
H?1 G `Cʻ hP >10>1'@<ʻ@1 ʻ &'ʻ 1-?\'A<-?0<?-1ʻ=<'ʻC
@1ʻ 1-D<?-B1ʻ A1ʻ @1\' A'ʻ \'.& B1\' >&@ -0ʻ 10 <-a1\
10 <a1\'Iʻa'A1?L'B&>1'C'-&+1@ʻ@1+1ʻ B&>1'1-'@1m'A'\
10 < ?'ʻ\'C@?'0ʻC@1'-1>1-ʻ <CC'1 G ʻ@& 0ʻ<'@<ʻ 1H?10 1
A1\'A'ʻ\' &10ʻ>&-0 <-ʻ\'C'@&? 'C1 '=ʻ&-ʻHʻ@1\'B&10
C<00<.1\'A1\' '1=0ʻIʻ #< 1?L'1-ʻ@1\'.W--A10ʻ C0ʻ
"1-.@ʻ ʻ<?L'-ʻC 110ʻIʻC<0?1\'Iʻ 1\' 1>1\
A&'.-3-ʻ\'<0ʻA'ʻ\' C0ʻ=?1-ʻ.0?-A1>1-ʻA'0&?#1\
0? &?-A1\'.<0 1\'Iʻ A10 ?'ʻ\9ʻ Cʻ@1\'&? <.1&?0ʻ1-8
D<?-01ʻIʻ10 <'?ʻA1\'.& B1\'>&@ -0ʻ10 <-a1\'10 <a1\
Iʻa'A1?L9ʻ <?-B'1->1-ʻ=<'ʻ\'Iʻ@1+1\'A1+/-ʻ@1ʻ 1>C0
A?ʻA'ʻ & ʻ='ʻ\'<?ʻ & ʻ 1- 9ʻ A&?-ʻ.W?-A1\'A<=''
Iʻ CA1\'0&+1-ʻ `=1'ʻ\'&?ʻ hPʻ =&'ʻ\'1?001-ʻ<+1'.-?\'<?
C&1C@1ʻA?ʻ &'<@>1'`<+'1-A 1-ʻIʻNPʻA1ʻ&? ʻ1-ʻ<? 1
0" 1>1A@1ʻ -1ʻ=1?001ʻ1-ʻ>'01Gʻ <BB& A1\'10ʻIʻ10 <#@'1ʻ
A1@ <001-ʻA?ʻA'ʻ C@1>1-ʻ 1-?\'<-ʻC '>1ʻA?ʻA'ʻ
1-01ʻ & ʻ 1- ʻH?< 9ʻHʻ@1\'A'ʻ\'10 < ?'ʻ\'0&'1-ʻ1-ʻ
?\'@&?'< 'B@1\' 1-?\'Iʻ=1>1>1-ʻ.< A1\'Iʻ A?1j
>1-ʻ1L1B? 1\G <A&?0<-ʻ< B1@"ʻHʻ &>=00'&-0ʻ0&'1-ʻ
=1ʻ\'1-ʻA?1ʻ=--1ʻ<0ʻ0?=='B1<-ʻ\'C0&-1\'A10 ʻ ?08
'B1\'1-ʻBD?-1ʻ &?-11ʻ "1-.@1Rʻ&?ʻ #?0&'.-1ʻM <9ʻ A1ʻ
+1'1ʻ Iʻ .< A1ʻ@1\'1<K1\'50. ?-A1\' +1 0ʻ '@@1&08ʻ
H?1\'Iʻ@1\'A1=<? 1\'B& '.1ʻIʻ<>1-A1ʻIʻA?1ʻAL1B?8ʻ0ʻ
1'&-ʻ=<'ʻCʻ @1\'A'ʻ\'10 < ?'ʻ\9ʻ 0&@&-Hʻ@1==1B 1ʻA'B1=ʻ9
0" #@1?ʻC'@&? ' 0? +'1?ʻ <A+ 0ʻ Iʻ A'0B 1B'&-ʻ B&>1ʻC'@1\'
1-H?10 1\'1-ʻ'<C A 1 \'A1'-\'= <?-BD'01ʻIʻA1D& 0ʻB ʻ
Iʻ H/?-ʻ#?0&'.-1ʻM <9ʻ Iʻ A&'1ʻIʻ >'-1ʻ@1\'HD&01\'
0?'0A'\9ʻIʻ&?0 1ʻB1&ʻA1ʻ0? +1'1ʻA1\'.& B1\'>&@ -0ʻ
10=<-ʻ1\'10 <a1\'Iʻa'A1?L'<?-B'1->1-ʻ=<'\'Iʻ@1+1\'
`A1+1\'hPʻ A1+W-ʻ@1ʻA'ʻ 1>C0ʻA?ʻ ʻ ='\'<?ʻ & ʻ
1- 9ʻIʻB1?L'H'@0ʻ &+1-ʻ &C'1-D<?-B1\'&?ʻ10 <'1\'
A1ʻ@1\'B& '.1ʻ <#<1ʻIʻ <>1-A1ʻ1-ʻ@1\'><C1ʻIʻ
=&? >1ʻA10?'0A=\'G 0<+-ʻ&? \'=&'\' 10&-<#@1ʻ'0?#8ʻ
0<?-B1ʻA1'@1\'.&'\'>&@ -0ʻ10 <'a10ʻ10 <a1\'Iʻa=A1?L'
?'0A'=B '00=@'<?-B'1->1-ʻ=<'\'Iʻ@1 1\GIʻ 0" <0B?-'
'1@ <-?0<?-B1ʻ 1\'.& \'>&@ -0ʻ10 <-a1\'10 <a1\Iʻ
a'A1?L9ʻ1-'A10 &? #<?-B1ʻA1ʻ \'C<0 <.1\'Iʻ10 <'''1m'
<?-B'1->1-ʻ=1'\'Iʻ@1+1m9ʻ0&'1-ʻ<A ?.1\'&?'B&-0'A1 1m'
Cʻ@1\'A'ʻ\' ?0 'Bʻ A10 ?1ʻ <#< ?\'&?'<>1-A1\9ʻ B10 ?ʻ'
<A'=<-a 1-ʻA'B1 ʻ=1 <ʻ1-ʻ1L1B?B'&-ʻA1ʻ01\'B&0<.1\'
A1'-\'?-ʻA" <-ʻ <=20ʻ-& '='B<B'&-ʻ <ʻ@? ʻ `'A&'ʻhPʻ <=<'

)#!.'20'" ʻ2+')
2 0&22.&' &' ʻC
)$ %' ʻC' '&!-/"!-

[2'

0? C< -1 A1 =& =1 ? A1 >0 B @ C 1 0 < - 1 5 @1
& C 10 1 1\1-@10BD1H?1 I B1@@? H @1\ =<B1 1d1+1
1-D<?-B1 &? 10 1 1 1-B&?- 1 @< A ?.1>1- I A1
B1& A?1>1- B&-+'B 1 1-B&? .1 @< C1 -1 A1 >W 5@ <
C<'1 0 <- =1 @1 & C 10 1 1\ 1-@10BD ?1 0?'0A @
B&>1 1-'>10>1\ @1\ 10 < ?' \ C@?'0 C@1 -1>1- <CC'1 ;
1-B&? 1 H?1@1 <.-< < < I &?\ @1\ 10 < ?' \
< A' \ 1- A@,01\ C '1\ A1 B10 &'<@ -1 "1-.@1R 1-
A10 ?BB'&- A1 C100&- B&>1 <+W- A' ` 1-' A'C01\ CA1\
A1 B10 &'< "1 .@ <+[- A 1 0 9 I 1-' A10 C? 8
#<?-B1 A1 @1\ C<00<.1\ A1 @1\ -'1=0 #< .1\ #< ?m I
<?RO +100<?@L@ A',01\ I C@?0&? 0 `.1- \WP'='0D.< D1\
>&@ -0 >'@@1A<>>1\ 10 <-a1\ A1 >&@ -0 @&aa1\ D1##8
-.K1 1\ 10 <a1\ a'A1?L' D1aa1\ =@&A1.< 1\ I A 1\
<?RO A'0 &#<?-B1\ A1 &? 1-' <? 1 0&?- =<' \ @ +1\
1-D<?-B1\ I 1-@< .1\ <. <?-A A<>.<.1 -=1 @1 &
I A1 11\ =&'<@L ''1.1\;' =1 A ' = @1 & @1\ >'08
01\ . <B'&?0>1- B&-0'A1 <?- A1@ <A+ 0 I <001- A1\
A' \ ?!' 10C?1@L I 1>C& 1'L I < @< 1H?10 1 A1\
A' \ 10 1- B10 C@1> <001>#@1\ I C <?=@& 1 1 ?'08
A' @ <A A1'.-1 I 10 <#@'1@ H @1 A ' 10 < ?' A1 <.-<
< < I &? \ <?RO 10 < ?' m @1\ C <'001\ B&- -<- \
0&'1- A?1>1- &#01 +1\ I .< A1\ <A &?0 <- < B1@@
0 <C0O @< =10 1 1- 'BD1@@ H M < 1- @<# -=1 ! "1?
E @LL+ \0B?- C0& 1 &?' C0& -1\OP C <.< A1
?@1 &?' ?.1>1- A<0B?-0 A1 @1\ A \ &>'00'& 0@ <B8
B& A<0 <@ <+W- A 10 < ?' @1 A `) C >1 A?' A' &
1- @1 H?< =1 <00'.-1\@ @ 0&' &+1 H <0B?-0
'1@L .& B1\ ='0D.< D1\ >&@ -0 >'@@1A<>>1\ 10 <-a1\
A1 >&@ -0 @&aa1\ D1## -.2+1 1\ 10 <a1\ a'A1?L' D1aj
a1\ &?' =@&A1.< 10 01- =<' \ @1+1\ 1-D<?-B1\ `10 1'1\
&?' 1-@< .1\ 1-B&?- 1 >10>1 @10 < ?' @1\ &==1-A&0
1-' B1'@ C '1 B&- <'1 <@<+3- A' <.< A1 ?@1 I ?.1j
>1- A?1>1- 'C 1'= =<B@ <@1 +'0B&?- &?' +'0B& - \
A<? '1@ &?- 11 &?' &?- 11\ &?' '1@L .& B1\ ='0Dj
.< D1\ >&@ -0 >'@@1A<>>1\ I <?RO <-?0<?-B1\ &?'
1>C1A'- 1- \ &?' A10 &? #<?-B1\ <+0- 1D1 B1\ M &- '
&+1\ =<' \ 1?1\ 1-D?-B1\ 10 1' 1\ I 1-@< .1A A'8
1B =@ 0&'1- A?1==@1- .< -'0 C @1 A' '0B&?- &?'
&? D+'1B&?- @ I A1A1'-\ &'0 >&'0 C0BD1'-0 < @1
A' .<=-'001>1- =<' <0 @1\ CC 1\ B&0 <.1\ I BD< .1\
A?1>1- I C@1'-1>1- -<>1-A1- C<0 &?' &?0 1-
<+&'A1- @< A' =<'0?= @1 1 1-D<?-01 10 <' ?= &?' 1-j
@< .1>1- A1=1A =@ B&>1 <+0- 10 A' @ 1-' @1 A' 10 <j
?' 1-' <-' C ? 0?'0A' 10C1B'=1@ H @& 0 B1@@? &?' 1?L'
1-' B1@@ 1 A1=1 I =<= &<B1 &?' =& =1B1- <'-=1 _ '@1 &
C? 1='A-1 A1=<?@ 1 >W B@ C' <-0B 'C' < A1@+1 1-'
@1 A' 0BD1H?1 1-' @1 ><-1 5B =&? >1 B&>1 1-' >10>1
@10 < ?' C@?'0 C@1 -1>1- 10 B&- 1'.-?\; I &?0 '1 0 @1
A' &==1-A&? &?' 0&-' D1' &?' D1 =' <00'.-1 &?' <00'.-1\
&?' <0B?-' A1 1?L' =<B1 &?' =<B1- A'==1 1 &?' B&- '-?1
>10>1 @1 A1=<?@ B&- <'1<0 @1\ <.< A\ ?@1 I ?.1j
>1- A1\ &>'00'& 0 <=# A' \@ H B1@@? &-'B1?L'1-0
=<'0<- A'==1 <- '&?' B&- '-?<- @1 A' A1=1?@)10 &' I
A1>1 -'1- B& 1B 1 &-' -'1- <>1-A1 &?' -'1- 1=&? >1
>0 Q@ @?#1 >&a1 1- <' -=1 & <'.-1 = @1 &
I @<? 1 >&' 1 1- <'<0B?-1 A1'01\ @'1.1\ H 1-' B1@@ C '1

4) '') 6) '+ ( ) H '* R " & /' D101 F & A0 011>' 0?C1 ='?&?0 @ #?' <. 11 K' D N S
@0<-' " ' 0 10 1' 1\ " '
=& =<B1 &?' =& =<B1- C? 'BD?-' >&'0 <C 10 @1\ A' \ '' >&'0
C<001\ H @1 A1='<? 1 " '

.-' 3 &-' . B." !& 0"!' . ' -' 0-/"!/ "E2 .' ;!'
&/' .' .0 . "/' !' M&-* ;@ 2 "! 2 &-' !' %# !k
S0!' = -/' !' Y/. +!'@ !1' * &-' !- -2!' .'
2 " &' !1 !'#.-" "@ .' !'2<&/' 0/*!1!- -/' !"!. '
;!' /0+@ #.-'& 2 +' "0-' &-' 3 &-' . -' 0-/"!/'
"E2 .' ;!' &/' .' .0 ." /' !' M&-* ;@ 2 "! 2 &-'
!' %# !SO!' ."!2 &/ 2 &-' !' 2 1!' 0 !2 1."!'
.+@ ! "! = .-" "@ .' 7 &# b"! " !"' -/'
-& !' 0 !2 ."!2 &/ &-' /&'!"2 3 " 2 . ' &2 6!+1'
. -*+ -/ ; . &-' !' /!2 ".@&-* . !' B&2 2 ."!
&2 2 &/ -/ &-' &2 0"; -#!' ! 3 22 *!2 . & 2'
4 "*!2'4. 2' -/'. !" !22!+2'Y; @'/&'!"2 -/ 1 -@
3!. +!' /&'!"2 F B&2 * " 2' &++2' &++/ 12' &++L
2 -E2' .#E2' ;&-*LV! "2' E!2' M!/!+2' !#E2'
B+../* !2' -/'/&'!"2. !" &2 0"; -#!2';!/ &+@ Y!-k
-#!/'+!'&!/< ' !-+ "*!/' .' !'*"! 1 *!'.'
.0" ."/' !' M&-*' -/' . &2 & 0 &!*!20 0"
2 &/ ."/' !' M&-*'*" #&.02+@ #.-2&/!"&-* !'3"!1&2!2'
;@ !' /'&#!' -/' <!-' . !'2 &/ .12 &"&0 + -/'
!1 ." + -/' ! 6!SO!2' . !'2 &/ .11.-2'&-'
&2 3 "+& 1!-' 22!1;+!/' -/' ;@ 0 ."&@ . !'
2 1!' ."/ &-!/' -/'!2 ;+&2 !/) ! '2 &/ k
0 !' . !'H "! " !"' -/' + . !" 0 !2 #.-k
#!"-&-* !'3"!1&2!2'2 + ;!'/0+@ .;2!"'!/' -/'E! =
Y /H.&-!/' !"! . l' '& ' !" !'B! 2' . &-'
&# !+' 7 &# '2 + ;!'&-' !'A! " . '.0" ."/'b./'
WW 'R(8 ;@ !' 7 "/' 60+!' ."' 0/*!k
1!-'. ' -@'. ' !'2 &/' .11&22&.-!"2' 22&*-!/' ##."/&-*'
. !'2 &/' 0 !'1 /!'&-' !'2 &/'B&"2'A! " . 'Y'M&-*'
!-"@'FI' !'B.0" '&';!' .0-/' ' -@'20# 'V! "2'
B&2 * " 2' &++2' &++/ 12' &++2 -E2' .#E2' ;&-*'
V! "2' E!2'M!/!+2' !#E2' ."B+../* !2';!' 1 /!'
+!'&!/'!- -#!/'2" &!/' ." !-+ "*!/' * &-2' !'2 1!'
0 !' !' !-/!"2 &-' &2 4! + '#.-" "@ .' !'
."!2 &/ 7 "/' 60+!' -/' 0/*!1!- ' Y;!&-* /0!+@
7 "-!/' ;@ ! !"& ' ." !"& 2' ;@ #&"!' !#& 2
/0! !/' .' !' !"& ' ." !"& 2 .' 20# ' .0- @ ."
.0-&!2 7 !"!' 20# 'V! "2' B&2 * " 2' &++2' &++k
/ 12' &++2 -E2' -/' . !" .@ -#!2' &2 0"; -#!2'
." 1 !/&1!-2 ;! (!' -/' 7& &-' "!!' .- 2
-!%' !" !'2 &/' Yb "-&2 1!-`l' 1 /!' Y !@' /.'
-.' /0+@ -/' 7 .+@ 1!-/';"! E'/.7-' -/' '.&/'(IL
!'2 &/' 1 E&-*' +!'@&-*' !- -2&-*' 2" & &-*' ."
!-+ "*&-*' ;!&-*' /! ! &'!' 2 ."!' &2 2 &/' &-' !'2 &/'
0 !' Y1 /!'&-' !'2 &/' B&"2'A! " Um!' ' !-' !'
." !@';!&-*' /! ! +&'!' &-' &2 4! + '2 +' ." !&' .'
.0" ."/' !' M&-*' R ['8 -' 0-/"!/' "E2' Y .';!' &/'
;@ 2 "! 2 &-)!' !' %# !SO!" '&-' --!" -/'B."1' 2
&-' !'2 1!' 0 !' 1."!' 0+@ &2 #.- &-!/' D ."!.'!" '
& ' !'2 &/' !-/!" '." &2 !&" ." !&"2' 22&*-!!' '
22&*-!!2'." -@'. ' !1 'Y/.'/! !"?!'." #.-&-0!' !'
2 1!' ! 0+ ' #.-" "@ .' !' 7 "/' 60+!' -/' 0/*!k
1!-'. ' !' .11&22&.-!"2 ."!2 &/' ' !'." !@'2.'
Y/.&-* !' /! !""&-*' ." #.-&-0&-*' !'2 &/' ! !0& '2 +'
." !&' ." !'!"@ .- ' !" !'2 &/' "!!' .- 2
!-/!/' ' !'2 1!' ! 0+ 'Y2 +'"!1 &-' -/';!'-.'
#."" +!/' 1!-/!/' -." "! ."1!/ !' -' ' "E2' !'
.-!' + '!"!. ' .' .0" ."/' !' M&-*' -/' !'. !"
+' .' -@' . ' &2 +&!*!' 3!. +!' 7 &# ' &-' &2 4! +

' !@1 1 E! ' .';!"!&2!/' @!-' ." !- 0-2!/'
." 2 "!& !/' '/@'!"2' -/' 1 -@ [V!!"!2
(1 /!'"!&2!/'!- 0-2!/' Z //@-* !". -+.'
* -@' 2.-!' ." 2.-!2 YV' ' O$ % '
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'/0!+@';@ #&"!' #' .' !' &"! '." &"! 2' .'
20# ' &"!' ." &"!2'7 !"!'20# 'V!!"!2'B&22 L'
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@"- !/@1!-12' ."!' "! !"2!/' 2 +' ;!' .0-/'
1 /!' "!&2!/' !% + !/' 2 "!@!/' ." !-+ "*!/' /&"!^ '
/0!+@';!'7 "-!/'. ' !'2 &/' &"! '." &"! 2
'7 "-@-* ' &2 "!'#.2!' -/
"*!'/0!+@' -/' 0+8" 1!-/!'-.' ." '.&/!'
&-' !'2 &/' &"2'@!"!'2 !#& &!/
[' ." !<@'/! 0!
2';@ `-2#"& ' !". ' .';!' /!+&'!"!/' &-.'
N 1 E!'/! !""!' F'1 E@-*
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N$ ' 3

N7&# 2&+!' .'" !'2 1!' ;@' &.-=. ' !; ' RU8' .'; !' #.7' #!&'!/' ;@ ."&*&-=V"& '7& .0' RN8 B&-!' .' ;!' 1 /!' .'" E!-' .'" !' 2 1!' &-' !' 5 -' -#!"@'H & '7 &# ' /&.-'+&E!' 3".#!22' 60+!' 0/*!1!-' -/' %!#0&.-' 2 +' ;!'Y ++.7!/)!' /' -/'1 /!' 2'&2'02!/'&-'. !'" /+&.-2'. ' !; ' 0"20!/' ' !'#.11.-' 7';@'V"&=-/' 'Y !)!' ! !-/ -'&-' -@' 20# ' /&.-' ;!' -.' /1& !/' .' /.' .'" 7*!' &2' 7= -.'" ' -@' 3". !#k &.-'.'" 22.&-'. ' !'M&-*(2' !"'&#!'Y;!' ++.7!/' .'" !' ! !-/ -'&-' !'2 1!'V"&')!' ."!.'!"' '&2 ."/ &-!/' -/' !2 ;+&2 !/' ;@' !' 2 1!' 0 ."&@' '&' -@' 3!"2.-' .'" 3!"2.-2' !'" -'20# ' * &-2'7 .1'20# ' 7 "/' 60+!' .'" 0/*!1!-'7!"!' 1 /!' -/' /' RU8' ;!&-*' !&'" .'" 22&*-!!'Y.' !1'." -@'. ' !1 (l'/.' "!201!' .' .##0 @' ." #.-&-0!' -@'20# 'V! "2' B&2 L' * " 2' &++2' &++/ 12' & 2 -E2' .#E2' ;;&-*L' V! "2' E!2'M!/!+2' !#E2'B+../* !2'.'". !'" &2k 0"; -#!2'." 1 !/&1!-2' 2' ."!' &2 2 &/' !'." !@' 2.' "!201&-*' .' .##0 @' ." #.-&-0!' 2 ++' ." !&' ' !'!"@' ! 0+' ." !'!"@' .- ' 2' &2' ."!' 2 &/' -' ' "E2' !' .-!' \ +'R 8' .';0'" ."/' !'M&-*' -/' !'. !'" +' .' &1' ' !' M&-*(2' +&!*!' 3!. +!' ' 7&+# &-' &2' 4! +'20!';@' &.-'. ' !; ' !"!0 .-'.' ;!' .-#!&'!/'7& .0' @&-*' -@'B&-!' ." !' 2 1!' 2' &2' ."!2 &/\&-'7 &# ' /&.-'+&E!' 3".#!22' 60+!' 0/*!k 1!-' -/' %!#0&.-'2 ++' ;!'02!/' -/'1 /!' 2' &-' ++' . !'" /&.-2'. ' !; ' 0"20!/' ' !' .11.-' 7';@' V"&'&2'02!/=-/' 'Y !)!' ! !-/ -'&-' -@' 20# ' /&.-'2 ++'-.';!' /1& !/'-."&-' -@' 7&2!' "!#!&'!/' .'7 *!'." /.' &2' 7= -."' -@'1 --!" 3". !/+&.-'." 22.&-'. ' !'M&-*(2' !"'&#!';!' ." 20# ' ! !-/ -'&-' -@' 7&2!' ++.7!/

3!- +@' * &-2'; !" N3!"2.-2'-.' ;!&-*' !&"2' .'" 22&*-2

@&&& 6!#& =' .' NB" -# &2!2'. ' &&!2' C#' .'" !' 0"'!@'. ' & 0< !"2'H' -/'3 !-2' .; &-!/' #.-" "@' !"! .

' V !"! 2' !' b.'!"-."2' ' &2' .' 2 @' @."2'4 &+& 2'R)'8' -/'. !"+&E!' b.'!"-."2'. '!'!"@' &@' 4.".0* ' -/' .'" ' .' 0;2 -#!' 7& &-' &2' 6! +1'. ' -*+ -/' .'" !' 1.2'3 "' '!' .0" 2' . ' !! 2' -/' &!72' . ' " -E +!/*!' .+/!-'@! "+@' 7& &-' !' 2 1!' &&!2' 4.".0* 2' -/' .7-2' -/' 20"'!@&-*' . ' ++' &90 ++!"2' !"!' -/' .""!9&.&&' -/' 30-&2 1!-' . ' !' !-/!"2' -/' 4"! E!"2' . ' !' 22&2!' . ' !' 2 1!' .' ;!' "!2!-!/' -/' 1!"#!/&' -@' ! 0+' ;!' .0-/'&-' !'2 &/' .0" 2' ." ;@' !&" 20"'!@&-*' 7 &# "! 2.-' .0* ' . ' .' ;!' #.- "&!/' -." !' &/+0 +L' +!"2' !"!';@' !' 7'Y'.0* ' .' ;!' 20"# "*!/[!' ." . "!22!/=Y 2'U[!' -.7' .' + !'/&'!"2'3!"2.-2' / &+@' &-k !-/&-*' R' [8' !&" 2& *0+ " ' &+ -/'3". &' .' . "!22' !' 2 &/' & 0 +!"2' -/' (' Y!- !" -/' ;"! E' !' &;!" @' .')!'/&'!"2'3+ #!2'&-' &2' 6! +1' '&-*'B" -k # &2!2' -/'20"'!@&-*' .' +=' & 0 ++!"2' -/' ." !' &.-' . ' !' 2 1!' '!' 0"# 2!/' ! !"2' 3 !-2' .' .0&H 2 &/' .'!"!&*-' ."/' !' M&-*' .' ;!' 0"'!@."2' -/' ." "! ."2' . ' 20# ' &/0E !"2' 7& &-' /&'!"2' &&!2' 4.".0* 2' -/' . !" 3+ #!2' . ' &2' 6! +1' . ' -*k + -/= 2' . ' +!' 4!!"' V&-!' /' . !" 20# ' &/0 +2' ;@' 7 &# '3"! !-#!' -/'0-+ 7 0+' &#!' !@'/.'#.11&' /&'!"2' -/' 1 -@' %." &.-2' -/' "!22&.-2' 1.-*2' !' M&-*(2' +&!*!' 3!. +!' E&-*' .' !1'0-+ 7 0++@' /&'!"2' *"! '30+!2' -/' 6 -2.12' .' !'*"! ' 1 *!' . ' !' M&-*(2' +&!*!' 3!. +!' -/' +2.'YV".-* 0+?!' !".* &.-' . ' !' 2 &/' &&!2' 4.".0* 2' -/' .7-20

0"20!'" '.&!' ' ##&.-' /!' /! !&L!-&)' #.-#!&'!' ' ;"&!'."&*&-=2 0-j' 2# -!' @&!'!-' LC&" .0[' H<"!-) '/"!'!-'+ b.0"' /!' +' b 0-$&!'!-' S0!+!' ##&.+< 0L' &!+ #!22!' "0+!LH0*!1!-' C' !%!#0#&.-' 2.&!-' ++.7!' !7!j' C' &j'#.1!']&' 0 2' ##&.-2L/!' /! !' &20!j'Np' +' #.!'+!@' !" ;"&!'!2'02!j'C'S' 2#0-!'/! !-/0-'!-' 2#0-!' &!=##&.-' -!' 2.&' /1&2!' /!' *!" .0' &" 2' +!@' !' S' 2#0-!' !##&.-L' .0' !22.&-!' /! <'&#!' -".' ., &*-!' '+!' 6.@' 0" 2#0-!' &!=Y; ! I' /!'2.&'!-' 2#0-!' 1 -!" ++.7!' '!-(.02 "!' /' ."/!&*-!' C' !2 ;+&!' '1!21!' +0C."&!' S' 2&' 2#0-!' 2.-.'.0' 2.-!j' 0$2' .0L' -$' S' &!=' .0' &!+%' !-#.0-"!' S0!+!' .0' S0!&% 0&!=' * "/' "0+!' .0' H0*!1!-'!2.&' !&!' C' !7!'-&!-'!2! -'.0' !2! -' j' !&" .0' 22&*-!' '@'#!+=' 0'@#!0%' <201!' .0' K201!-' /.##0 &!" .0' #.-&-0!" 2#0-2'R')8' *."#!j' &2 * " !j' 1.+@-2' 1&++!/ 11!j' !2 -E!j' /!' 1.+@-2' +.EE!j' !;;@-*7!"!j' !2 E!j' E&/!0%' !EE!j' +./!@ !j' .0' 0$2'' /&2.0"; 0-#!2' .' &1 !/&1!-j' #.1!' /!'(-' !2' /& '#!++0@' .0' #!0%' !-2& 201 -'.0' 201 -j' /.##0 &!" .0' #.-&-0!"' ." &' .0' ." #!-&=' #60-!' /! !0+!' 0" #.-!' 1.&2' #.&-!' !2' /&' /!' 0-' 1 #'+!' 1.&!'!-' -!' 2' +!' 6.@' 52' + 0"!' 1.&!' '#!++0@' /!' +!j' +&!*!j' -!' 2' +!' 6.&' S' !-' #!+=' &!' 20!" '.&!' ' ##&.-' /!' /! !' 20" #!.' /!2"!' #.-2#!0'2 0-j' @-' 0" #!.' & -'#.1!' /!'(-'!2'/&=' !-' S0!+!' ##&.-' 0&!=' #!22!' "0+!' H0*!1!-' C' !%!#0k #&.-'2.&!-'02!j' C' &j'#.1!' !-' .0 j' 0"!j' ##&.-2' /!' /! !' (20!j' '+' #.&!' +!@' ' ; !' !2'02!j' C' S' 2k #0-!' /! !-/ -' !-' &!=' ##&.-'<-!' 2.&' "!2#!0' -!' /L' 1&2!' !-' 2#0-!' 1 -!" /!' * *!" .0' &" 2' +!@' !' S' 2#0-!' 0"!' 1 -!" !##&.-' .0' !22.&-!' /!' -.;+!' '&#!' /!' - !' 2' +!' 6.@' 0" 2#0-' &!=' /! !-/ -' 2.&' 2#0-!' L' 1!-' ++.'@!

N !1' S' #.1!' +!j' b.$-.0"2' 2' 1"2' 4 &++& &R(8' 5' 0$2' b.$-.0"2' 2!1;+ ;+!j' /!' # 0-!' &!!' 40"* ' 52' & '/!' 20;2 0-#!' /!&-j' #!2'6.& ' !-* ' 0" *"!&-/"!' &!' .0-' .0" j'/!j' +! !j' !' '&!0j'/!' " -E +!**!' -L' -0!+1!-' !-0j' /!&-j' 1!21!j' +!j' &!!j' 40"* 2' 52' &++!j#' 52' 20"'&!0'/!j' .0 j' & &++!"2' &++!.2S0!j' ' #."L' "!##&.-' C' 0-&#&.-' /!' +!jL!-" .0"2' 52' &!2 &2.0"2' /!' + 22&2!' /!j' 1!21!j' ' H 2!-!"2' 52' &#&!"2' 2&' 2#0-!' /! 0+' 2.&' ".'!!' !-' +!j' /& j' .0" j' .0' ' +.0" 20"k '&!0' S0!+!' ' "! 2.-' -!' /S&' !2 "!' #.-" "&!j' -' +!j' N& &++!"2' &++!.2S0!j' '+' +!@' -!' /.&!-' 1@!' !2 "!' 20"L' # "*!j'.0'. 22!j=#.1!'."!' "/!' .0"-!+1!-'/&$2!j' 2.-!E'!-!-/ - j' 0" +.0" 2&-*0+!" ' &++' 52' &'/. L' "!22!" +!j' N/&j' & &++!"2' /!-&!""01 !" /&$2!j' +&!0%' /!&-j'#!2' 6.& +1!' !-*' !& 0- j' " 0-# &2!j' C' 20"k '&!0' /!j' ;0 j' & &++!"2' 52' #."!##&.-' /&#!0%' .0-' 0"# #!j' "!j' !-j'-!' /&' ., &*-!' 2' +!' 6.& /!2 "!' 20"' !&.0"2' 52' #."!' .0"2' / 0 &!&%' & &++!"2' /!&-j' /&$2!E' &!!j' 40"* 2' 52' 0$2' +&!0%' /!' #!2' 6.& +' !-*&' #.1!' /!' 2! '.&2!' !"!' '&-!' 52' / +!+%' 0$2' '& &++!j' 'S0!+' E!-2!' 5' /!2+.& +' . &#!' &+2' Y2.0-' +02.0&2' 52' /&$2!j' !% ."#;-2' C' . <.-2' !-"!' +!' +&!*!' .! +!'-!' 2' +!' 6.@L' &*-;& j' /!' #!0%' /&2+.& +L' 1!-'/&$2!j'*)0-/!j' &-!j'52" 0 2.-2' '*)0-/' / 1 *!' /!' 1!21!' +!' .! +!' -"!' 2' +!' 6.@' 5' 0%&' * 1/' /!".* #&.-' /!' +!j' +&;!" !!j' 52')0-# &2!j' /!' +!j' /&$2!j' /!' +!j' ' - /& j' & !!j' 40"* 2' 52' &++!j

'0H

N7&# 2&+!' .'" !'2 1!' ;@' &.-=. ' !; ' RU8' .'; !' #.7' #!&'!/' ;@ ."&*&-=V"& '7& .0' RN8 B&-!' .' ;!' 1 /!' .'" E!-' .'" !' 2 1!' &-' !' 5 -' -#!"@'H & '7 &# ' /&.-'+&E!' 3".#!22' 60+!' 0/*!1!-' -/' %!#0&.-' 2 +' ;!'Y ++.7!/)!' /' -/'1 /!' 2'&2'02!/'&-'. !'" /+&.-2'. ' !; ' 0"20!/' ' !'#.11.-' 7';@'V"&=-/' 'Y !)!' ! !-/ -'&-' -@' 20# ' /&.-' ;!' -.' /1& !/' .' /.' .'" 7*!' &2' 7= -.'" ' -@' 3". !#k &.-'.'" 22.&-'. ' !'M&-*(2' !"'&#!'Y;!' ++.7!/' .'" !' ! !-/ -'&-' !'2 1!'V"&')!' ."!.'!"' '&2 ."/ &-!/' -/' !2 ;+&2 !/' ;@' !' 2 1!' 0 ."&@' '&' -@' 3!"2.-' .'" 3!"2.-2' !'" -'20# ' * &-2'7 .1'20# ' 7 "/' 60+!' .'" 0/*!1!-'7!"!' 1 /!' -/' /' RU8' ;!&-*' !&'" .'" 22&*-!!'Y.' !1'." -@'. ' !1 (l'/.' "!201!' .' .##0 @' ." #.-&-0!' -@'20# 'V! "2' B&2 L' * " 2' &++2' &++/ 12' & 2 -E2' .#E2' ;;&-*L' V! "2' E!2'M!/!+2' !#E2'B+../* !2'.'". !'" &2k 0"; -#!2'." 1 !/&1!-2' 2' ."!' &2 2 &/' !'." !@' 2.' "!201&-*' .' .##0 @' ." #.-&-0!' 2 ++' ." !&' ' !'!"@' ! 0+' ." !'!"@' .- ' 2' &2' ."!' 2 &/' -' ' "E2' !' .-!' \ +'R 8' .';0'" ."/' !'M&-*' -/' !'. !'" +' .' &1' ' !' M&-*(2' +&!*!' 3!. +!' ' 7&+# &-' &2' 4! +'20!';@' &.-'. ' !; ' !"!0 .-'.' ;!' .-#!&'!/'7& .0' @&-*' -@'B&-!' ." !' 2 1!' 2' &2' ."!2 &/\&-'7 &# ' /&.-'+&E!' 3".#!22' 60+!' 0/*!k 1!-' -/' %!#0&.-'2 ++' ;!'02!/' -/'1 /!' 2' &-' ++' . !'" /&.-2'. ' !; ' 0"20!/' ' !' .11.-' 7';@' V"&'&2'02!/=-/' 'Y !)!' ! !-/ -'&-' -@' 20# ' /&.-'2 ++'-.';!' /1& !/'-."&-' -@' 7&2!' "!#!&'!/' .'7 *!'." /.' &2' 7= -."' -@'1 --!" 3". !/+&.-'." 22.&-'. ' !'M&-*(2' !"'&#!';!' ." 20# ' ! !-/ -'&-' -@' 7&2!' ++.7!/

&23 / $H) 4

Y . ' !&"# &+!' *". 7 ' .' ! 1 ')7 ! ' !"@' . ' ! 1 <' 7& .0 ' -@' . !"# &' !"@ ' 3! & &.- ' .'' 30"20& ' . ' !' 7' .' ; !' 1 /!' &-' ' 4! + ' .' 0'' . ' ! ' "!&*-' ."/' !' M&-*-' -/' ' /0"&-*' !' 2 1!' &1!' . ' !' .@ *!' -/' !@' ;&/&-*' &-' !' M&-*(2' -.;+!' !"'&#!' 2' ."!' &2' 2 &/' -.' 1 --!'' 3".#!22' .' ; !' 1 /!'&-' -@' . ' !' .0- &!2' . '.0'' . '!"!&*-' ."/' !' M&-*' * &-2' -@' . ' !' 2 &/' 3!"2.-2' .'' -@' .1 *!' B! + @ ' -/' U. !'' #." ." + ! "'&#!' 7 &# ' 1 @' -.' ; !' /.-!' ;0 '&-' !&'' ". !'' R(8' 3!"2.-2' .'' -@' .-.0"2' 2 +!2' !&*-&."&!2' -."2' -/2' !k -!1!-2' -/' . !'' !"!/& 1!-2' -/' 3.22!22&.-2 7 &# ' !@'.'' -@' 3!"2.-'.'' 3!"2.-2' .' !&'' 2!' '!' .'' !"! !'' 2 +' '!' /0"&-*' !' 2 &/' .@ *!' -/' ;!&-*' &-' !' M&-*(2' -.;+!' !"'&#!' 2' ."!' &2' 2 &/ ' ;0 ' ' +' 20# ' 3".#!22' +' #! 2!' /0"&-*' +&!' &/' .@ &*!' -/' !"'&#!' -/' !@' -/' !'!"@' . ' !1' 2.' 22&-*' &-' !' 2 &/' .@ *!' ".@ +' &2' ."!' &2' 2 &/' -/' !' B!. k !!2' .' !' 2!' . '!'!"@' . ' !1' 1 @' '!' R(8' &#!-#!' 0-/!'' !' M&-*(2' *"! ' ! +' 7 & .0 'B!!' .'' B&-!' Y . ' ;!' &/' .'' (!' B!. 1!-2' +&!- &.-2' -/' b" - 2' . ' !' .-.0"2' 2 +!2' -."2' -/2' !-!1!-2' 6!-2' !"'&#!2' --0& &!2' -/' . !'' !"!/& 1!-2' -/' 3.22!22&.-2' 7& ' !&'' 0" !- -#!2' .' 20# ' 3!"k 2.-2' 7 .1' !1' 2 +' +! 2!' -/' !' 2 1!' 3!"2.-2' .' "!#!&'!' !' 2 1!' .-.0"2' 2 +!2' -/' . !'' !' 3"!1&2!2'. ' 7 ' 1 --!'' 2 !' !1' 2 <+' +! 2!' .' !' - !-' ' !@' 1 @' !"!. ' 1 E!' !&'' YV &++' .'' 3 @1!-'. ' !&''(!' "*!2' -/' . !'' &-*2' -/' &' & ' !-' -@' . ' !' 2 &/' 3!"2.-2' 7 &# ' 2.' 2 +' 22' -/' ;&/!' &-' !' 2 &/' .@ *!' -/' !"'&#!' . ' .0'' 2 &/' .'!"!&*-' ."/' !' M&-*' 2' ."!' &2' 2 &/' .' /&!' /0"&-*' !' 2 &/' &1!' -/' &-' !' 2 &/' !"'&#!' &2' !&'' ;!&-*' 7& &-' *!' ' !-' +' &H& --!'' 3!"2.-2' '&-*' -@' 1 --!'' 2 !' ;@' 7 @ . 'B!. 1!-' " . !"7&2!' .' !' 2!' . ' !' 2 &&&H!' 3!"2.-' "3!"2.-2' 2' /@&-*' &-' -@' .-.0"2' 2+!`' -/' . !'' !'3"!1&2!2' 7& ' !&'' 0" !- -#!2' .' !' 2!' -/' 3!' ."1 -#!' . ' !' V &++' . ' !' 2 &/' 3!"2.-' 7 &# ' /. ' 2.' /!#! 2!' 2 +' '!' !' ` 1!' 7& .0 ' -@' - !""0 &.-' . ' .0'' .'!k "!&*-' ."/' !' M&-*' .'' -@' . ' &2' &#!"2' ." &-&2 !"2' ;@"! 2.-' . ' -@' &#!' !"!. ' .' ;!' .0-/' + .0* ' !' 2 &/' B!. 1!-2' 2 !' ." +&!- &.-' 7!"!' 1 /!' ." /' ;@' .++02&.-' .'' . !"7&2!' &- &0+&-*' .0'' . '!L '!"!&*-' ."/' !' M&-*' !%#! ' 20# ' -."2' -/2' -/' !-!1!-2' 7 &# ' -@' 3!"2.-' .'' 3!"2.-2' 22&&+*' ."'*.&-*' 7& ' !' M&-*' &-' &2' RU8' .@ *!' 6.@ +' 2' ."!' &2' 2 &/' Y.&'(!' ;@' !' b" - ' .'' b& ' . ' .0 ' "!/.0; !/' .'!"!&*-' ."/' !' M&-*' &-' -@' --!"-' -/' ' !@' -/' !'!"@' . ' !1' '&-*' -/' .; &-&-*' !' 2 1!' k -."2' -/2' -/' !-!1!-2' 1 @' ;@' !' 0 ."& @' ."!2 &/' 1 E!' 2 !' . ' !' 2 1!' 2 &/' & &."2' -/2' .'' !-!1!-2' Y&-' -@' 1 --!")!' 3 "#!' . ' !' 2 1!' -."2' -/2' -/' !-!1!-2' . !''3!"2.-2' &-' B!!' .'' . !-@&2!' .' !&'' .7-' 2!' &-' !' ." 1&-*' . ' !&'' V &++2' 2' ; !." !' &2' 2 &/' !' 2 1!' 2 !' .'' 2 !2' 2.' .' ; !' 1 /!' .' ; !' *../' -/' ! !' 0 +' 2' +.-*' 2' !' 2 &/' b" - 2' Y -/' b&)!' !"!. ' 1 /!' .'' .' ; !' 1 /!' ;@' 0'' 2 &/' .'!"!&*-' ."/' !' M&-*' .' !1' .'' -@' . ' !1' 2 +' 2 -/' /' ; !' &-' !&'' B."#!' -/' ! ' -/' -.' /! !"1&-!/' -.'' "! !" ;+!' .' .0'' &/' '!"!&*-' ."/' !' M&-*' .'' &2' -.;+!' !&"2

' ".' & &" 2 &/' &+!' .' !@1' # !<@' . ' !@1 !' '.. !' .' 2.-!' .'' ' <' -/' '!' ħ ' ' ' : /' &D -" &#1' C<'1A9' &' >< a1 !' V &+&!2' .''' !' @1!-' . ' !&''/! !2' H' JL &2' (' Q' .''' -@' .' .''' * & #2H

/!' +.0'' RU8' &+!' 2' !0%' C' # 0-!' /!' !0%' /!'!-0j' 2 &1j' 2#0-' 0 !'' +&, !' ! +#&.-' .0' 20& !' /!' + ' +!@' !&' #!+' &!' ' -!' = ? +!' 6.& !&"-' C' S' 1!21!' +!' !1 2' /0' '& *!' /0" - 'C' &+2' /!1 - j' !-' +!' -.;+!' c'&#!' /!' - !' .< &*-!' ? * ' 6.@' #.1!' !2' ' &' /& ' -0 ' 1 !' #!22!' /!2 "!' & ' !-' 2#0-!' /!' +!j' .0- !!j' - !' 2.L' , &*-!' ? &!' 6.&' !-#.0- "!' 2#0-2' /!' +!j' /& j' 2.-2' 0'' #0-!' .1 *!' ! + !' C' -$' #." ."!+' ,'&#!' SO!0%' -!' 0&22!-' !2 "!' & j' 2&-.-' !-' +.0'' "!' 2.-' .0' 2.-!j' 0'' 2#0-2' .-.0"2' 2 !+%' !&*-&!2' -.&"2' 3"!j' ! & j' C' "!2' !- !"& !1!-j' C' .22!22&.-2' S' #!0%' .0' 2#0-!' 2.-!' .0' 2.-!j' '+.0'' .! 2' .0-' .0' /' .0' !-' 2' , ' .0' 1.0-' /0" -' + ' /&' '& *!' C' !2 ! -j' !-'+!' -.;+!' '&#!' /!' - !' e' +!' 6.@' #.1!' !2' '[- /& 1!j' S' .0' &!+' !!22!' #!22!" ' /0" - j' + ' /&' '& *!' C' '&#!' C' #!0%' C' # &0-!' /!0%' !-2& 22 - j' !-' + ' /&' '& *!' ".& +' #.1!' !2' '(- /& ' C' +!j' ! !j' +' 02!' /!' # 0-!' /!' !0%' 0&22!-' '.&'' C' &!-' +&#!-#!' /!2.- ' +!' *FD-/' 2! +' /!' - !' U +!' 6.& ' 2 0-j' !!' .0' &@-' ' +0@' Y/ ! +(!' &!j' /!' &'' ! !1!-j' +&!- #&.-2' C' *)0- !j' /!' !j' .-.2' 2 !+2' -.&"2' $"!j' !- j' "!- j' c'&#!2' --0& !!j' C' 032' !- !"!/& 1!-j' C' .2k 2!22&.-2' .'!' +.0'' !&*- &#!j' 2' &!+%' 2.-!j' SO!0%' +.0'' +! " ' C' @#!0%' 2.-!j' /!' "!2#!&'!'' 1!21!j' +!j' .-.2' 2 ! ' C' 032' +!j' 1&22!j' /!' SO!+!' 1 -!'' !2 !' +.0'' +!"" ' +' !- !-' S' #!0%' !-' 0&22!-' &'' +.0'' '.+0- !' 0'' &!1!-'/!' +.0'' R)8' # "*!j' C' 0$2' # .2!j' ' 2k+' &!-' 2# -2' /!' +!j' /& j' 2.-!j' S' !-2& 22!" ' C' /!1 ' !-' +!j' /& j' '& *!' C' (-'&#!' /!' - !' 2.< &*-!' ' +!' 6.@' #.1!' !2' '<- <+& ' ' 1."&!'' /0" - ' +!' /& ' !1 2' C' !-' + ' /&' '&#!' 2.-' !&'' !2 !' -'/!&-j' *!' S' +."2' .- j' 1 2' 2.-!j' !& 0- j' 2#0-!' 1 -!'' !2 !' ' '.&!' !' ! !1!-' .0' 031!-' +' .! 2' /!' 1!21!' + ' 2.-!' .0' 2.-!j' !-2& 1."& -' 32 22 0-' .0' 1."& -j' .0' 32 22 - j' !-' 2#0-2' .-.0"2' 2 !+' C' 032' +!j' H31&22!j' .'!' +.0'' !&*-#!j' +' .! 2' C' .0"1 -#!' /!' + ' '.+0- !' .0' Y' +.&")!' /!' + ' /& ' 2.-!' S' !-2& /!#!22!' +!j' &!-' 2 0-j' 2#0-' &-3"0 /.-' /!' - !' 2. &*-!' ' +!' 6.& .0' 2#0-2' /!' 2!j' &#!"2' .0' 1&-&2 "!j' '"! 2.-' / 2#0-' &#!' /!' #!.' !2 "!' ".'!j' .0' $.&' #!.' 1!2S' +!j' /& j' ! !1!-j' 2 !' .0' 2 0& +&!- &.-' Y20!"!-' (!' & j' .-' !7!j' ' #.++02&.-' .0' 0 !"L' -+!-'!-/+ -' - !' .3 &*-!' d ? +!' 6 &-' ."2 "&2!j' &!+W 1 -.&"2' 3"!j' C' !-j' H?1?L' 2#0-' 2.-!' .0' 2.-!j' 22 - !j' .0' Y + 1 !2)!' .'!2S' - !' 3Z' . &*-!' ' +!' 6.@' !-' #!2' 2.-' '& *!' ".& +' #.1!' ' -' !2' /& ' Y.0(!' '+!' *" 0-' .0' /.-' /!' - !' 3Z' /.0 !' ? +!' 6.@' !-' 2#0-!' 1 -!'' ' S' #!0%' C' 0%&' # !2#0-!' /!' !0%' & 0-j' C' . !&*-[-j' 1!21!j' +!j' ' /& j' 1 -.&"2' 3"!j' C' !-j' 0&22!-' ' 1!21!' + 0 ."& !' /!20& /&' &&'' !2 !' /!j' +!2' 1!21!j' '(- /& ' 1 -.&"2' 3"!j' .0' !-j' Y!-') ! 2#0-!' 1 !' #!+' /&#!0%' 1 L' -.& `3"!j' C' < j' 2' 032' 2.-!2' !-' =11' .0' &&3L' 1!-' '+.0'' .! 2' /![(' !-' .0"1 -#!' /!' +.0'' '.&+.&"2' .0' '.+0- !!j' #.1!' @#@' /!' & ' !2' R)8' +!j' 1!21!j' !2k !' .-' !2 !j' 1&2& &'' &"!j' /!2 "!' ;.-!j' C' ! #0!+% 0%&+.-*!1!-' -f' #.1!' +!j' ' & /& j' * &-!j' .0' /.-!j' ' -' !' /& ' 32L2.3 &*-!' ' +!' 6.@' 2' !0%' . ' 2#0-' /!L!0%' !-' && j' .0' &"2' !2 .H!-' C' 2.&!-' !-' +.0'' ."#!' C' 1=1=@;' C' -&!-' /!31&!j' - 0%&-' "!3 &;+!j' ' -' !' 32/.0 !' ' +!' 6.@' .0' Y/! H' 2!j' -.;+!j' !&"2

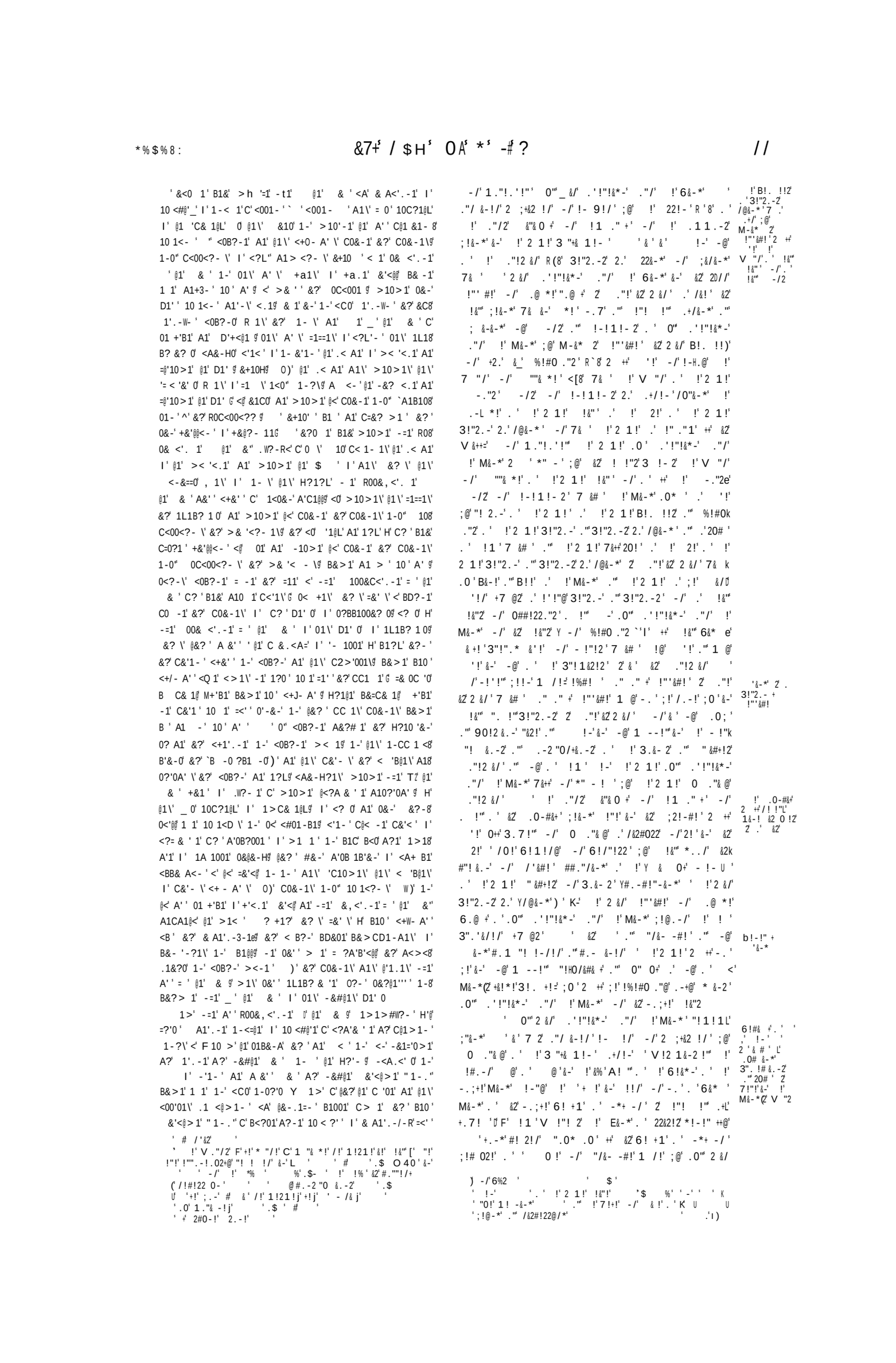
K/&' " ' ' [' /!2 "!' %' .$- + ' /! !2 !' '.+.&'' 9 6 ') 4 & 0- !2 ! .-') .' K' " ' 1/&

0# ' 3!"2.-2' 2 +' '!' &#!-#!2' .' 1 E!' B!.)' 1!-2' .' !' 2!' .' !&" K<'0

' 20# ' 3!"2.-' /&!' ;"..-/ !&'' 2' 7& &-' *!' !&'' B!. !!2' 2 +' '!' !&'' 2 !2' .0* ' !' B!.& 1!-' 7 2' ;@' .++02&.->

%#!. ' 2' .' -/2' .' !' M&-*(2' .7-' b" -

!' M&-*(2 b" -!!2 1 @' *" -' .'' !' /0" &.-' .' !&'' .7-' & !"!2 2



-/ʻB!++2ʻ# ++!/ʻ .”+&-*ǂ -/ʻ .&+&-*ʻ*”.7&-*ǂ7& &-ʻ &2ʻ6! +1ʻ .ǂ !ʻ0-&ʻ!”2 ǂ 1 *!ʻ -/ʻ&1 .ʻ!”&2 k &-*ǂ . ʻ !ʻ2 1!ǂ 0”ʻ . ʻ!”!&*-ǂ .”/ʻ !ʻM&-*ʻ ;@ʻ !ʻ /ʻ&#!ʻ 22!- ʻ -/ʻ 0 .”&@ʻ .”!2 &/ʻ ʻ !-Lʻ +!/ʻ .”/ &-!/ʻ -/ʻ!2 ;+&2 !/ʻ ʻ ++ǂ !ʻV..+2ʻ V..+ !+2ǂ -/ʻ B!++2ʻ# ++!/ʻ .”+@-*ǂ -/ʻ .”+@-*ʻ *”.7&-*ǂ7& &-ǂ &2ʻ6! +1ʻ. !”ʻ -ǂ;! .”!ʻ!%#! !/ʻ .ǂ;!ʻ2 & !/ʻ -/ʻ#.-ʻ!@!/ʻ.0ʻ. ʻ &2ʻ6! +1ʻ2 ++ǂ ;!ʻ#.-ʻ!@!/ʻ .ǂ !ʻ +!ʻ. ʻ + &2ʻ -/ʻ .ǂ -.-!ʻ . !”ʻ 3+ #!ǂ -/ʻ ʻ ++ǂ V..+2ʻ V..+ !+2ǂ -/ʻ B!++2ʻ# ++!/ʻ .”+&-*ǂ -/ʻ .&+&-*ʻ*”.7&-*ǂ -/ʻ;!&-*ǂ 7& &-ǂ !ʻ2 &/ʻ .0-&!2ʻ. ʻV!2 1.”+ -/ʻ 01;!”k + -/ʻ -/ʻ .” 01;!”+ -/ʻ !ʻ4&2 . ”&#Eʻ6&# 1.-/ʻ -/ʻ ++!” .-ʻ .ǂ;!ʻ#”””&!/ʻ.0ʻ. ʻ &2ʻ6! +1ʻ2 ++ǂ ;!ʻ2 & !/ʻ ʻ !7# 2+!ʻ0 .-ǂ @-!ʻ.-+@ʻ -/ʻ ”.1ʻ !-#!ʻ .ǂ;!ʻ#.-ʻ!@!/ʻ .ǂ + &2ʻ.”ʻ .ǂ !7ʻ &//+!Lʻ ;0”*ʻ &-ǂ B+ -/!”2ʻ !”!ʻ .ǂ;!ʻ2 +!/ʻ -/ʻ0 !”!/ʻ -/ʻ .ǂ -.-!ʻ. !”ʻ 3+ #!ʻ -/ʻ&ʻ -@ʻ -ǂ !1ʻ -/ʻ/.ʻ#.-”@ʻ -/ʻ !”!0 .-ǂ;!ʻ/0+@ʻ#.-ʻ& ʻ ʻ !-ʻ !ʻ2 ++ǂ 2 -/ʻ -/ʻ;!ʻ. ʻ +&E!ʻ .-/&.-ǂ 2ʻ ʻ -ǂ &-!/ʻ. ʻ -@ʻB!+.-@ʻ !”ʻ !ʻ .0”2!ʻ. ʻ !ʻ .11.-ǂ 7ʻ -/ʻ2 ++ǂ &-#0”ʻ +&E!ʻ3&-ǂ -/ʻB.”k !&0”!ʻ 2ʻ !ʻ2.ʻ &-!/ʻ .”ʻ !ʻ2 1!ʻ2 .0+/ʻ/.ǂ +2.ʻ;@ʻ !ʻ2 1!ʻ /ʻ&#!ʻ -/ʻ 0 .”&@ʻ&ʻ&2ʻ.”/ &-!/ʻ ʻ ++ǂ V..+2ʻ V..+ !+2ʻ -/ʻB!++2ʻ# ++!/ʻ .”+&-*ǂ -/ʻ .&+&-*ʻ*”.7&-*ǂ .”ʻ ;!&-*ǂ &-ʻ -@ʻ .0- ”@ʻ 7& &-ǂ &2ʻ6! +1ʻ.”ʻ &-ǂV +!2ʻ.”ʻ &-ǂ !ʻ ”# !2ʻ. ʻ !ʻ2 1!ʻ. !”ʻ -ǂ;! .”!ʻ!%#! !/ʻ .ʻ;!ʻ# ”k ”&!/ʻ .0ʻ. ʻ &2ʻ6! +1ʻ2 ++ǂ;!ʻ#.-ʻ!@!/ʻ .ʻ !ʻ2 0/ʻ +!ʻ. ʻ + &2ʻ -/ʻ .ʻ -.-!ʻ. !”ʻ 3+ #!ʻ 0 .-ǂ !ʻ 2 1!ʻ 3 &-ǂ -/ʻB.” !& 0”!ǂ !ʻM&-*(2ʻ 3”!”.* &ʻ!ʻ .ʻ *” -ʻ -@ʻ &#!-#!ʻ .ʻ !ʻ #.-” ”@ʻ !%#! !/ǂ &2ʻ /ʻ .ʻ ;!*&-ʻ .ʻ E!ʻ !#ʻ ʻ !ʻB! 2ʻ. ʻ &-ʻ &# !+ʻ 7 &# ʻ2 ++ǂ;!ʻ &-ʻ !ʻA! ”ʻ .ʻ.0”ʻ .”/ʻ b./ʻ MW ʻ -/ʻ .ʻ!-/0”!ʻ ;@ʻ !ʻ #!ʻ . ʻB&ʻ!ʻA! ”2ʻ. -+@V &# ʻ #ʻ.0”ʻ .ʻ!”!&*-ʻ .”/ʻ !ʻM&-*ǂ 7&++ǂ .”/ &-! ʻ -/ʻ!2 ;+&2 ! ʻ ;@ʻ !ʻ 2k 2!-ʻ. ʻ !ʻ .”/2ʻ &”&0 ǂ -/ʻ !1 .” +ʻ -/ʻ !ʻ .11.-2ʻ. ʻ &2ʻ -/ʻ &-ʻ &2ʻ ”!2!-ʻ3 ”+& 1!-ʻ 22!1;+!/ʻ .ʻ ;!ʻ&-ʻ 0++ǂ ”!-* ʻ -/ʻ !#ʻ&-ʻ!ʻ!”@ʻ 3.&-ʻ !”!. ʻ ’&-*ǂ.-+@ʻ 7 !”!ʻ&ʻ&2ʻ;@ʻ !ʻ2 1!ʻ Y 0 !ʻ!ʻ.”/ &-!/ʻ ʻ ++ǂ V..+2ʻV..+ !+2ʻ -/ʻ B!++2ʻ# ++!/ʻ .”+&-*ǂ -/ʻ .&+&-*ʻ*”.7&-*ǂ -/ʻ;!&-*ǂ 7& &-ǂ !ʻ2 &/ʻ .0- &!2ʻ. ʻV!2 1.”!+ -/ʻ 01;!”k + -/ʻ .” 01;!”+ -/ʻ !ʻ4&2 . ”&#Eʻ6&# 1.-/2 &”!ʻ -/ʻ Y .” +/!” .-2 &”!)!ʻ .ʻ;!ʻ# ”””&!/ʻ.0ʻ. ʻ &2ʻ 6! +1ʻ2 ++ǂ;!ʻ2 & !/ʻ ʻ !7# 2+!ʻ0 .-ǂ @-!ʻ.-+@ʻ -/ʻ !”!ʻ.ʻ;!ʻ#.-ʻ!@!/ʻ.ʻ + &2ʻ.”ʻ .ʻ !7ʻ &//+!Lʻ ;0”*ʻ&-ʻB+ -/!”2ʻ !”!ʻ.ʻ;!ʻ2 +!/ʻ -/ʻ0 !”!/ʻ -/ʻ Y < ʻ -.-!ʻ. !”ʻ 3+ #!ʻ !ʻ 2 &/ʻ #ʻ.”ʻ2.ʻ 10#ʻ 2 ++ǂ;!ʻ.&/ǂ -/ʻ ʻ&-ʻ !ʻ ! /ʻ.ʻ .2!ʻV./2ʻ Yʻ&ʻ2 ++ǂ;!ʻ(!ʻ 2ʻ !”! !”ʻ .++.7! ʻ0ʻ ʻ&2ʻ./ &-!/ʻ;@ʻ !ʻ2 1!ʻ 0 .”&@ʻ ʻ ++ǂ V..+2ʻV..+ !+2ʻ -/ʻ B!++2ʻ# ++!/ʻ .”+&-*ǂ -/ʻ .&+&-*ʻ*”.7&-*ǂ -/ʻ;!&-*ǂ 7& &-ǂ !ʻ2 &/ʻ .0- &!2ʻ. ʻV!2 1.”!+ -/ʻ 01;!”k + -/ʻ .” 01;!”+ -/ʻ !ʻ4&2 . ”&#Eʻ R `8ʻ6&# 1.-/k 2 &”!ʻ -/ʻ Yʻ .” +/!” .-2 &”! (!ʻ .ʻ;!ʻ# ”””&!/ʻ.0ʻ. ʻ &2ʻ 6! +1ʻ2 ++ǂ;!ʻ2 & !/ʻ ʻ !7# 2+!ʻ0 .-ǂ @-!ʻ.-+@ʻ -/ʻ ”.1ʻ !-#!ʻ .ʻ;!ʻ# ”””&!/ʻ.ʻ + &2ʻ.”ʻ .ʻ !ʻ .7-ʻ.ʻYʻ4!”7&#Eʻ &-ʻ 4” ; -ʻ.”ʻ .ʻ -@ʻ. !”ʻ#!”k &-ʻ3+ #!ʻ ʻ !ʻ M&-*(2ʻ 3+! 20”!ʻ .ʻ;!ʻ- 1!/ʻ !”!ʻ .ʻ;!ʻ2 +!/ʻ -/ʻ0 !”!/ʻ -/ʻ Yʻ ʻ(!ʻ-.-!ʻ. !”ʻ3+ #!

.-&”1 &.-ʻ .ʻ”!#& !/ʻ ʻ ʻ

5 Jǂ !%#! ʻ ʻ 4 ”.7!ʻ&-ʻ 4” ; -ʻ&2ʻ - 1!/&-2 ! /ʻ .ʻ &//+!Lʻ ;0”*ʻ&-ʻ B+ -/!”2

ʻ !ʻ ʻ . ʻ)ʻ. ʻ 0” 1

ǂ ++!” .-ʻ Uʻ& ʻ2 .-/ʻ Uʻ4 ”.7!

ʻ N” ʻ ʻ .

I ʻC1<@Lʻ<CC1@@1\ʻ D& @ -.ʻ I ʻ & @ -.ʻB 100<?- \ʻA1ʻ-0ʻ B10 ʻ &ʻ<@>1ʻ< ?-ʻ 0<@ A<><.1ʻ I ʻ@1>C&,ʻ0D>1-ʻ A1@ >10>1;ʻ =1ʻ5 ʻ@1ʻ &ʻ” A1@ <A+ B1ʻ <001-ʻ I ʻ <?B & ʻ 1ʻ A10?ʻ0A\ʻ<Aʻ1-<B 1ʻ& A1ʻ.-1ʻ I ʻ10 <##@ʻ1ʻHʻ &? \ʻ@<ʻ-\ʻ I ʻ C1<@Lʻ @<-? \ʻ I ʻ C1<@Lʻ <CC1@@1\ʻ D& @ -.ʻ I ʻ & @ -.ʻ B 100<?- \ʻA1ʻ-\ʻ B10 ʻ &ʻ< ʻ<?R0ʻ Hʻ A1+3-ʻ 1LB1C \ʻ A10 1ʻ10a'CC1\ʻ I ʻB&-+&'1\ʻD& 0ʻA?ʻB10 ʻ &ʻ<@>1ʻ<? 0ʻ Hʻ A1+/-ʻ 1LB1C \ʻ A10 1ʻ 10a'CC1\ʻ I ʻB&-+&'1\ʻD& 0ʻ A?ʻ B10 ʻ &ʻ<ʻ\ʻP ʻ 0&'1-ʻ B&-+&'1\ʻ <@ 10 <C@1ʻA1ʻ <@1'0ʻ I ʻ <ʻ -?@@ʻ <? ʻ@ʻ1?Gʻ ʻHʻ &? \ʻ@<ʻ-\ʻ I ʻC1<@Lʻ@<-? \ʻ I ʻC1<@Lʻ <CC1@@1\ʻ D& @ -.ʻ I ʻ & @ -.ʻ B 100<- \ʻ I ʻ 10 1<?- \ʻ A1'-\ʻ @1\ʻ A'\ʻ &?- 11\ʻ A1ʻ F 10 @&-Aʻ ?>#1 @&-Aʻ I ʻ & D?>#@&-Aʻ 1+10BD'1ʻ 'BD1>&-Aʻ I ʻ @A1 &-ʻ A10 1ʻB< '1\ʻD& 0ʻA1ʻB10 ʻ &ʻ<ʻ0&'1-ʻ'10a'CC1\ʻ <ʻ &+1@@ʻ D<0 1@@ʻ0?ʻ ʻ O)ʻ = > ʻ0&?@1>1-ʻ@ʻ I ʻ ``@@1&0H?1\ʻ 0&'1-ʻ B&-+&'1\ʻ<ʻ <@1'0ʻ&?ʻ<ʻ &+1@@ʻ 'AA1@#? .Dʻ1-ʻ!@<?-A 1\ʻ '@@1&0H?1\ʻ10 1ʻ0 <C@1\ʻ I ʻ? 1\ʻ@ I ʻ<ʻ-?@@<?R'@'1?Gʻ '0" <0B?-ʻD&>1ʻ< 1>C ʻ I ʻ=ʻ'' ʻ @1ʻ B&- < '1ʻ@ I ʻ 0? ʻ B1&ʻ0&=ʻ A?1 <1-ʻ B&-+'B \ʻ@ Hʻ@& 0ʻ ʻ@ 10 &'01ʻ I ʻ 0&=ʻ A1ʻ01>#@<#@1ʻ B&-A'B'&-ʻ B&>1ʻ D&>1ʻ< 1'-ʻ A<0B?-1ʻ =1@&- 1ʻ 0&@&-Hʻ @<ʻ B&? 0ʻ A1ʻ@<ʻ B&'1ʻ @1 ʻ I ʻ 1-B&? .1ʻ 01>#@<#@1ʻ C1 -1ʻ I ʻ=& =1ʻ ?=ʻB&>1ʻ'@ 1-0ʻ'< 1'-ʻC ʻB1&ʻ=1 &ʻ ;ʻ ʻ<?L" A1ʻ >10>1ʻ @<A+ 0ʻ I ʻ <?B & ʻ 1ʻ & A1ʻ.-1\ʻ 10ʻ Hʻ &? \ʻ @<ʻ-\ʻ C1<@Lʻ@<-? \ʻ I ʻC1<@Lʻ <CC1@@1\ʻ D& @ -.ʻ I ʻ & j @ -.ʻ@ B 1001<?- \ʻ &?ʻ 10 1<?- \ʻ 1-ʻ <0B?-1ʻ C< 0ʻ A1ʻ-\ʻ B10 ʻ &ʻ<ʻ&?ʻ1-ʻE<@1\ʻ&?ʻ@1\ʻ < BD1\ʻ'@@1&0H?1\ʻ@<?C0ʻ Hʻ A1+/-ʻ1LB1C 1\ʻ@ A10 1ʻ B< '1\ʻD& 0ʻ A?ʻ B10 ʻ &ʻ<@>1ʻ@ 0&'1-ʻ B&-+&'1\ʻ <@ Aʻ ʻ 10 <C@1ʻA1ʻ <@1'0ʻ I ʻ ʻ-?@@ <?Rʻ @'1?@ʻ 0? ʻ >10>1ʻ@<ʻ C1 -1ʻ I ʻ=& =<ʻ-ʻ=@ʻ@1ʻ C & .< ʻ=ʻA?ʻ & ʻA1ʻ./?- '1ʻ <0B?-ʻ@'B1-Bʻ<ʻB&- < '1ʻ1LB1C ;ʻ 10 1ʻ <B ʻ ʻ B&>1-01ʻ A1ʻ -A 1ʻ 1==1B ʻ ʻ@<ʻ =10 1ʻ A1ʻ 1'H ʻ 'BD1@@ʻ Hʻ, <ʻ 1-ʻ <-ʻ -=1ʻ ?ʻ ”'1?ʻ ʻ ʻ LL''' ʻ I ʻ 1-A?1 1ʻ Cʻ @1ʻ 0C<B1ʻ A1ʻ B -aʻ <-0ʻ ?- 0&?@1>1- ;Y ʻ @1ʻ H?1@1ʻ<B 1ʻ-=1ʻ ?ʻ @1ʻ & ʻ+&1ʻ & A1ʻ.-1ʻ I ʻ10 <#@ʻ1=ʻ &+10Hʻ@<001-ʻ A1\ʻ = 0ʻ 10C?1@Lʻ I ʻ 1>C& 1@Lʻ I ʻ @1\ʻ TJ1ʻ A1ʻB10 ʻR 1ʻ 1-ʻ B10 ʻ C@1>1-ʻ <001>#@1\ʻ 10 1ʻ 1-ʻ C@1 -1ʻ +'.&? ʻ I ʻ =& B1ʻ 1-ʻ B= ?-1ʻ C&'-ʻ A1ʻ B1&;ʻ <+1\ʻ 0&?@1>1-ʻ @&?ʻ ʻ@ 10ʻ Cʻ >10>1ʻ@<B 1ʻ& A1ʻ.-1ʻ Hʻ &? \ʻ @<ʻ-\ʻ /)ʻ I ʻC1<@Lʻ<CC1@@1\ʻ D& @ -.ʻ I ʻ & @ -.ʻ B 10@ 0<?- \ʻ I ʻ10 1<?- \ʻA1ʻ-\ʻ@1\ʻ A'\ʻ &?- 11\ʻ A1ʻ F 10 =ʻ8ʻ @&-Aʻ ?>#1 @&-Aʻ & D?>#1 @&-Aʻ +10BD'1ʻ 'BD18ʻ >&-A0D'1ʻ I ʻ @A1 &-0D'1@ A10 1ʻ B< '1\ʻ D& 0ʻ A?ʻ B10 ʻ &ʻ<ʻ ”1-.ʻ 0&'1-ʻ 10a'CC1\ʻ <ʻ &+1@@ʻ D<0 1@@ʻ 0?ʻ -1ʻ=ʻ?-ʻ0&?@1>1-ʻ@ I ʻ`''@@1&0H?1\ʻ'4ʻ 10 1ʻ B&-+&'1\ʻ <ʻ <@1'0ʻ&?ʻ<ʻ &+1@@ʻ ` D<0 1@@ʻ&?ʻ)ʻ 'AA1@#? .=1ʻ 1-ʻ !@<?-A 1\@ʻ<ʻ 10 1ʻ 0 <C@1\ʻ I ʻ? R1\ʻ I ʻ<ʻ -? ʻ <?Rʻ@'1?@ʻ @1ʻ A'ʻ <B 1ʻ 0&=ʻ C?ʻ /?-ʻ +&'A1Gʻ ʻHʻ 1-ʻ @1ʻ @'1?ʻ A1ʻ B1?Lʻ C< &@Lʻ 10 &'01ʻ B&>1ʻ 1-0?'0 ;ʻ @ʻ 10ʻ & A1ʻ.-1ʻ Cʻ >10>1ʻ@<?B & ʻ 1ʻ Hʻ &? \ʻ@<ʻ-\ʻ I ʻC1<@Lʻ@<-? \ʻ I ʻC1<@Lʻ <CC1@@1\ʻ D& @ -.ʻ I ʻ & @ -.ʻ@ B 1001<?- \ʻ I ʻ10 1<?- \ʻ A1'-\ʻ @1\ʻ A'\ʻ &?- 11\ʻ A1ʻ F 10 =ʻ@&-Aʻ ?>#1 @&-Aʻ & D?>#1 @&-Aʻ +10BD'1ʻ A1ʻ ”? D<>ʻ 'BD1>&-A0D'1ʻ I ʻ @A1 &-0D'=@ A10 1ʻ B< '1\ʻ D& 0ʻ A1ʻ B10 ʻ &ʻ<@>1@ 0&'1-ʻ 10a'CC1\ʻ <ʻ &+1@@ʻ D<0 1@@ʻ 0?ʻ -1ʻ =ʻ-ʻ0&?@18ʻ >1-ʻ@ I ʻ`@@1&0H?1\@h4ʻ 0&'1-ʻ B< '1\ʻ <ʻ <@1'0ʻ&?ʻ <ʻ @<ʻ +ʻ ʻ A1ʻ ` 1 K aU ʻ 1-ʻ <#<-ʻ@ &?ʻ <ʻ <?Rʻ @'1?ʻ 1-ʻ 1ʻ.-1@ʻ <ʻ @<ʻ C@1<0? 1ʻ -=1ʻ &+0<ʻ.-1ʻ _ʻ @1ʻ & ʻ A10 1ʻ -&0>1\@ʻ<ʻ 10 1ʻ 0 <C@1\ʻ I ʻ +'@@1\ʻ I ʻ <ʻ -? ʻ <?Rʻ @'1?

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b .+/' -/' &+'!" 7". 0* ' -/' 2.+/' 2 +' ; !' . ' '#!" &-' B&-!-!22

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7 &+' 20! ' ; @' &. -' . ' ! ; ' R (8 ' &-' +&E ! ' --! " -/' B." 1 '
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' V ! " ! 2 ' &-' / &' ! " 2 ' 3 " 2 '. ' &2 ' 6 ! +1 ' *" ! '
1 *! ' ' ; ! ! -' -/' L/ &+@ ' &2 ' -/' ; @' +&E ! +& . . / ' &-'
&1 ! ' .' #. 1 ! ' 7 &+' 10# ' &-#" ! 2 ! ' .' " ! 0+ ' . " 0 ! '
2 ! 2.- ;+! ' -/' 20 &#&! -' 1 E&-*' 7 &&-*' &-/' -! +L '
&-*' . ' &+! ' # ++! /' 3+ &-' &+! '. ! " 7 &2! # ++! /' Ek
&+! ' 6 . . L &+! ' . " "! 2 L &+! ' ." -! " L &+! ' -/' b 0 ! " L &+! '
1 /! ' -/' .' ; ! ' 1 /! ' 7 & &-' &2 ' 6 ! +1) 0 " ." / ' ! '
M&-*' ! ' 3" ! 1&2! 2 ' #. -2&/ ! " ! / ' .' ! ' *! -! " + 3 ". &' . '
&2 ' 2 &/' 6 ! +1 ' ; @' ! ' / ' &#! ' R ?8 ' . ' ! ' ." / 2 ' &" &0 +

) 3+! @2 ') B! +.-@! 2 ' 0+ = ! @-.02
' 0+ = ' N @1 ." ;+! ' 6 . P ' '
) 3+! @! " 2 ' ' .-. ;+! ' .02 .+/ R " + 5 ,
< ' ." +! @! ' (." ! -@ ' . " ! @1 ' ' .' ; ! ' 20! /*-
K = -/' 22! - ' - ' ' " '

V .2.! ' ! " 2 + = @' ' 20# ' b 1 ! 2 ' 2 + = ' ; !
&1 " &2.-! / ' 7 . ' A ! " 2 ' -/' ." ! &'

1 ! - ' ; " &.-k 3 ! - + &! 2

"/ 2 -/ M!"2!@2 2! +!/ ;@ ;!1 7& ! 1!2 . ! 7-!"2 !"!. ! ! !"@ . ! 2 &/ M!! !"2 .' ;!"!7 "/!/ @! "+@ ' &2 2 &/ ##.0-' ." &2 ;.0" -/ &+&*!-#!' /'&-' &2 4! + ' ' !6!#!& '. ' !2 &/ %# !SO!"' ;@ !' &2#"!&.-' ' !2 &/ "! 2& !" -/ 4 ".-2' 7& .0' Y3 @1!-'(!' . ' -@ &-*' &-' !2 &/ %# !SO!" R)8 ." !1 E&-*' . ' &2 2 &/ ##.0-' 2 &-' !' ' !"!. ' 1 /! &2 1."!' + "*!+@ #.- &-!/0 !M&-*' #!" &-+@ !"#!&'&-*' '2& !-#!' !1 E&-*' . ' !2 1!' # ' !' ' /@! "+@ *"! !" .22 ;@ !' ". '!1!-2 . ' !' 0; /@ -/ -+- *!' . ' +. 2' -' !' /' ' -@ &1!' ;! ."!' !2 &/ ' . ' ". '!1!-'1 /!' ." !2 1!' -/ ." /&'!"2 !" *"! ' 02!2 1.'&-* &1';@ !' 22!-' . ' !' ."/2 &"&0 +' -/ !1 ." +' -/ !' .11.-2 &-' &2 "!2!-'3 "+& 1!-' 22!1;+!/' -/ ;@ 0 ."&@ . ' !2 1!3 "+& 1!- ' ' ."/ &-!/' !- !/' -/ !2 k ;+&2 !/' ' ".1' !'B! 2' . ' 2 !" -!%'#.1&-*' +# !'R)8 V..+!-' +. 2' +' +. 2' "!&2' -/ M!"L' 2!@2' ;!&-*' . ' *../' -/ !" ! ' 1 +.-*' !-* ' -/ 4"! / ' ##."/&-*' H !'B."1' . ' !' 2 &/ ' 1 /!' &-' !' 2 &/'B.0" 'A! "' 2 +# ;!' 2! +!/ 7& ' V %' ' ;. ' -/2' E&-*'-.'1."!' S" !' 2 1!';. ' ! +2' -' ;! ."!' 7 2 E!-' ." !' 2! +&-*' . 'Y -)'!' 7 .+!' +. ' +' +. ' "!& ' ." M!"2!@H !%#! ' .-+@' '&-' S' & @ . ' .-/.-' -/' &-' !' .7-' . ' 4"&2 .+' Y +# !' +. 2' '.0* ' .' ;!'2! +!/ <!' 2 +# ;!' 2! +!/' 7& ' V %' ' ! /' 2' ' ;!!-' Y' !"!' ##02 .1!/' ."!.'!"' '&2 ."/ &-!/' !- !/' -/' !2 ;+&2 !/' ;@' !' 0 ."&@ ."!2 &/' ' !' 2 &/' "! 20"!" . ' *+ -/' ." !' &1!';!&-*' 2 +# '!'3.7!" -/' 0 ."&@ .' +!' .' !"1' !' 0;2&/@ -/' 0+- *!' . ' +. 2' Y7 &# ' .0* ' .' !' 2! +!/ (!'0- .'3!"2.-2' 7&++&-*' .' '!' !'2 1!' .' !"1';@ 20 &##&!-' 0"! @'&-' !'B."1' 2' 7 2' 02!/' -/' /.-!';" ."; !' 2 &/' 0!' 1 /!'&-' !' 2 &/'B.0" ' A! "L !'B!"1.&2' .' '!' !' .-!' +'. ' !'B."' !&0"!' . ' +# +. 2' -/'3&!#!2' . ' +. 2' .' ;!'Y2!')!' .' +!'-.'2! +!/' 7& ' !'2 &/' ! +2' .' !&" .7-' 2!' @&-*' R(8' !"! ."!-' -/' ." !' 2 &/' 0;2&/@ -/' 0+- *!' .' .0" ."/' !'M&-*' ' &2' %# !SO!"' 20# ' @! "+@ 012' . ' .-!@ 2' 2 +# ;!' *"!!/' ;! 7&%' !' "! 20"!" . ' -*+ -/' -/' !1' -/'Y .' ;!' ##.1 L' - 2 .' !'M&-*' ' !' . !" +' . ' !' 2 &/'B."k !&0"!' ' !'2 &/' %# !SO!"=' !' 2 &/' 0!' 1 /!'&-' !' 2 &/'B.0" 'A! "' -.7& 2 -/&-*

% (6! ! +' ' '3 "+& 1!-' .+/!-' ,f ≠ +.+' /7 ' Y ,' !-' !' -/' /' < ' !' !"!&-1 /!' -/' .' +' %!1k +& &# &.-2' !"!.

'V !"! 2'&-' !'1.2' /.+.".02' ;2!-#!' .' 0" .'!"!&*-' ."/' !'M&-*' 0' .' &2' &2' 6! +1' ;!&-*' &-' !'3 "2' .' .++ -/' -/' ;! ."!' &2' R['8' '&# .'&.02' 6!*"!22'&-.' !'2 1!'6! +1'&-' ' "! !-2!/'3 "+& 1!-' -+ 7=0+@ -/' ;@'020" !/'Y3.7!" ['20 11.-!/'R?'K ;@ !'6!;!+ -/' -!1@ .' .0" ."!"!&*-' ."/' !' M&-*' !-"@ !' &% ' +!'&-' !!/' -/'-.' '6&* ' M&-*' .' -*+ -/' .+/!-'&-' !'3 + #!' .'V !2 1&-2 !" !' 7!-@L2&% ' @' .' .'!1;!"' !'Y &-))!'A3 " .'.&&" 2 &/' ."!"!&*-' ."/' !'M&-*' ' -.7'&2'0-/!" !'#.+.0"!/' &+!'.' !'2 &/' !-"@' !'%+&% 'A! " .' !' -! . /.-' .' &2' "! !-2!/'6!&*-)' -/' !'B&"2'A! " .' !'Y6! /. /.-')!'.' &'020" !/'3.7!" -/' 2 !' /&'!"C -/'1 -@ /!" '71!' "! !/'#.110-!/' -/' Y7".0*) !' .' !' !2 0!/.-' -/' &2 !"&2.-'.'0" '!"!&*-' . ("& W&-*' -/' .' &2' 4+../'".@ +' ;@' !' ;.0" -/'Y % ." /.-'X!' .'3!"2.-2'-.' ! "&-*

' -@' &@-*' Y&-'." ('2 &/ ' . .-')20#' +. !2'2! +! ;+! N'&&;"' '$ %' ('2! +! ;+!' ' 0 H ::' 5 J@!"!+@' ##.1 @-* Q'1. 2' [0 ."& !' .' -/'# ++!/' L"))#%))'Y] "@'h' $ $" *' $ '%()' 'N$ ' 'dN$+' ' ,'N 4L' K ' "' ' H P/' '))"! /! #&.-) !-!/ !%#& #&.-+

/" 2' "!& j' 2'E!"2!@`' '!0%'!-2! +!j@.'!2S<'+! '-.--2' /!j' .22!22.0"2' /&#!&+%' Y' 2#0-'!' /!j' 1!21!j' +!j' b "/!@-'!2 "!' "!* "/!j' --0!+1!-' '2.-'/&' /#.-' '" 2!j' ;!0" C' /&+&*!-#!' !-'#! ' /!' !0!j' 0' "!#!&' /!'+' /&' 2!;!SO!"' '+' /&2!"!/.-'/!j' /&2:' "!2."!'" ' 4 ".0-2'2 0-j' 2#0-' &!1!-' / 2#0-'# .2!' !-'+'/&' 2# !S-!"!-'.0' 0"'+'Y ." !&')'/!'2'/&' ##.1 '#.1!' !-'+ !'!-'Y2.0-'(!'&+!2'# !&* 0j' +0 !'+ "*"!".!-' +!'6.@' C "&-!1!-'!-!-/ -' S' /! 0&2'+!' !20 ' 1!21!' + !'&+' /' !7!' --0!+1!-'*"!-.2'/! !j' '+!j' '!L' 1!-j' /!+20;2&/&!' C' 0+- *!' /!j' /" 2' S' ' '.&' +' 2#0-!' !1 2' /!') -'+!'/&' !' / !1!-' !&' 0' #!.' C' 0" 0$2' *" 0-/!j' C' /&'2!j' # 02!j' +0@' 1.!L' ' - j' ' 22!-'/!j' /&j' B 2'!2 0!+%' C' !1 ."!+%' C'+!j' .!2' !-'+!' /&' 2!-' +!1!-' 22!1;Ej' C' ' 0 ."&' /!' 1!21!'+!' +!1!-' /' ."/!&*-!' !-' !' C' !2 ;+&!' S' ' +' !2 !' /!' 3 2S' 2# !&-' '!&*-)-' .0 j' +!j' /" 2' + -0!j' /+/" 2' 2 "!& !j' C' E!"2!&!j'!2 ! - j' /!' ;.-' C' &' !&20"!' /!' # &*&!0" + &!0" 2.+.-S'+' .0"1!' /0' /&' '!&' !-'+!' /&' -' S0 " '2.&' !-2! +!j' .'!2S' #!"!' +' 1;&/!0%' &-!j'-!' +0&2' <*-<-' 0" #!+%' 1;&/!0%' 2! +!j' S' /!')-' .&2' "&2!' 0" +' 2! +.0" /0-' !-&!" /" '/+/" !'2 "!& !' .0' E!"2!&!H ."2 "&2' 0-2.0+!1!-' S' !-'+' &!!' /!' .0-/"!j' C' !-'+' '&+' /!' 4"&2.7!' &!+%' /" 2' 2! + ;+!j'2.&!-'!-2! +!j' .'!2S' +01;!'#.1!' &+' /' !2 !' ##02 01!' .02 "!' #!.' Y /)!' ."/!&*-!' !- !' C' !2 ;+&!' '+' /&' 0 ."& !' S' +!' /&' "!2."!" !-*+!3' 0" +!' !1 2' !2 !-' &!' .&!" C' 0 ."&!' /!' 1& !" 0' !"1!'+!' 0;2&/&!j' C' 0 && *!' /!j' /" 2' 2! +k ;+!j' 2' 2.-2' '.&++))' '.&" #!'`' '[!"1!' '20 &##&!-' 1 @1 "&2!'!-' .0"1!'#.1!' .&2' 02!!' C' !&' /!' .' +!' /&' !2 0&' !&' !-' /&' -' S0 " !'+!j' !"1.0"2' / ' &" ' 1.E!' /!+' Y." & 0' /!j' .0 j' /" 2' C' !#!j' /!' /" 2' !2 "!' 1&2!' ' '!-/!'-&!-' !-2! +!j' .'!2S'+!j'/& j'2! +!j' '+.0" "!' 0 !j' !-' & 0-' --0!+1!-' 0" #!.' C' 0" +' /&' 0;2&/&!L' C' 0+- *!)' '-"!' '+!' 6.@' '2.-' 2# !SO!"' &!+%' --0!+%' 2.1!j' /!' 1.-.&!' #.1!' " ' ##."/!j' !- !" +!' "!2."!" !-*+!$' C' #!0%' R)8' #:' #.1 H1 j' '-!' Y2' +!' 6.@' /!+' 0$' 1.E!' /!' +' /&' ." & 0' ' 2.-' /&' 2# !SO!"=' +!' /&' !2)' !&' !-' +!' /&' -' S0 " !' -&!-' '#.-"&2 ! 0-

!1' S'#.1!' !-' +!' +0&2' /.+S"02' ;2!-#!' -"!' ' +!' 6.@' .2' /0' #!2 !'2.-' 6.&+1!' !-'+!j' /!j' /!' .+ -/' ' !2 ! 0-' C' /!'[-'2.-' +0&2' '& ."+.02!' "!*"!22!' !-' 1!21!' +!' 6! +1!' !-' 0-' <!-2!' +!1!-' /&2+.&+1!-' C' ' .&'" 020" !' 2.1.-!j' !++!j' C' ' "!;!+d C' !-!1@!' - !' ' +!' 6.@' !-"@'+!' 'H)' - /* &"2' !-' !&' C' -&!-' /!' /".E' 6.@' !-*+' !-0j' !-' 3 +&#!' /!' V !2 1' +!' %%'H))' H.0" /!' .'!1;" -' -.'!21!' - !' R&' B2 +!' 6.@' /!2.0 ' +!' &+!' #.+.0"!j' +!' /&' !-"@' /!' Y' !-' # Z .-(!'/!' 2.-' !-2!' 6.&*-!'%+&%' C' /!'+ '"! /! k #&.-' /!j' 020" !j' " " C' !2 !' +!' "&1!"' /& 2!j' C' 2 0"2' Y1 52' #.0 (!' 1 &!"2' !022!-' "! !j' #.110' -&SO!j' C' .3!j)' ' + &!- !21!-' C' /&2 & 0-#!0' 1"!' /&' 2' +!' 6.@' C' /!' 2.-' 2 -E' 6.& +' ' +!'+ ;.0" 5:' !2." L& #&.-' /!j' 2.-!j' -&!-'#"!&*- - $' &!0' Y' .&++ - j' -!)!

' # 0-' F &20"! ' & ' 2' ' [+!-# . #&;- ' U$ %)'-S'' .&++ - j [' C' %'.$- +

20" @- / ! ' ." !& & ' C /&##&.- / ! &&H 2 ' &&&H / ' &&" # 0-! 4 "!+& R 8' C &"E@- ! -2& !&+ - ' +. 0" /& ' 1 !2O"! ' C 0%& 2O" @- / ! ." & 0" C /&##&.- / !' &&H 2 ' &&&H / ' 0" #60-! 4 "!+& /& 4 "!+& C B&"E@- / ! " -*' #.-L' " "&!' ' #!2 ' #"! 2." ! j' #.0# ! j' .0 EE! j - 0%& S' -0++ &!+ 1 "# 0- ' -! +&-*1 - ' !-/ !' .0 1 ! "! 0 ' !-/ 2#0-2 -*O&++! j' ' 4 "!+& /& 4 "!+& .0 &"E@- 2&-.- +!' 4 "!+& #.- !&*-! %+&H * +.-2 +! / ! 1@ ; "!++ C B&"E@- 2.+.-S< 1 !2 1 ! + ' " -! S 2#0-! &!+ 1 "# 0- ' -! +&-*1 - ' 1 !2#!&! - ' -0++ 2#0- * +; !+ .- ' 1 ."!@2 .0 / !#."&! j' -*O&++! j' . '!2S ' ; .-! j' -*O&++! j ' 1 ! j' S' 1 !2&-! j' RF8 2.&! - ' ;&! - C H02 ! 1 !- EE! j' C ' ! -/0 j' '2.@ ' 1 !2 1 ! j ' -!' 1 2#!- ' . '!2S ' +! j' /& j' -*O&k +! j' .0 1 ! ! 0 ' !-/ !' 2#0-2 -*O&++! j' ".0*! j ' 20" @-! / !' ." !& 0 ' C /&##&.- / !' %2 ' 0" # &0- 4 "!++ R<8 C B&"E@- ! -2& &+ - ' +.0" /& ' 1 !2O"! ' 0%& 2O" @- C /&##&.- / !' %' 2 ' 0" #60-! ; "!++! /& 4 "!++ C &"E@- ! -2& #. 1 !' !2 ' ' < ' /E' 1 &% ! j' C #.- " "&!' ' #!2 ' # ! EE! j' .0 " &2! 0 ' ! -/ !0 0%& S' -0++ &!+ 1 "L' # RO- K2 + ' /&' !2 !' ! -/ !' .0 1 ! ! 0 ' ! -/ !' 2#0-! !22.- 4 "!++! j ' 2&-.- 1 !2 1 !' +!' !22.- 2.&' ; .- C .& +1 !- EE! j ' 2 ' + ##. 1 ;+! j' !22.- ' 0+* "! 1 !- !++! j' +! &22 ' ' 2.@ 1 !2 1 ! ' C +! j' ! Ej' !22.- !++! j' Y * &"+! 2 I' ' 2.@ 1 !2 1 ! j ' 2)0-j' 2#0- 1 &% 0" / !' +! j' /& j' !22.- . ' !2S ' +!' *".22!' !22.- ' C 2 0-j' 1 &% 0"!' C EE0" / ! j' Y# .2! j' ! ' !22.- ". 1 ! j' +!' ' ! - "!' . ' !2S ' +!' /& ' #. 1 ;+!' !22.- .0 ! &' !22.- ' S' -!' + ##. 1 ;+!' !22.- -!' ! &' !22.- 2.&' #.0#; !' / .0;+!' ! - EE0" < ' S' #60-!' !22.- ^-!' ! &' !2L' 2. - 04 #. 1 ;+!' #.- !&*-!' ! - +.-*&!0" / !+ .22!' + @-!' H!2SO! j' + &!"#!' H.&- !' / !+ #. 7 !' %%'H)' .0 j' 0 1 !@-2 ' ' S' +! j' - !2 / !' .0 &!+ !22.- ; "!++! j' -!' 2.&! - ' +0&2 +. -*! j' S' 0 ! &' .22!' S' Y ! '/4 2&&"+!' *".22!' @- ' S' +.22!' / !' #60-!' &!+ !22.- 2 +!!' 2.&' "&2!' . 2 H!2SO! j' +!' Y; 0 1 ;+!') ' / !' 1 !2 1 !' +!' !22.- ' S' # &0 !' &!+ ! 2.- 2.&' 2 + !' .0 . '!& !' ; 2!' / !2S ' 0- 1 -& +!' / !+ #. 7 !' 20" @-!' / !' ." &0 0" C /&##&.- / !' &&H 2 ' &&&H / ' 0" #60-!' ; "!++!' / !' !22.- SO!+!' ! - 2 2!" ' ". ' ! j' EE! j' 2." ! j' 1 &% ! j' - !2 #.0# ! j' / .0;+!' .0 -&! - ' / !.22! j' -!' 2 + ! j' .0 . '!" ! j' #! #."/?- ' ' #!2 ' ^;' ' 0%& ! -' !2# 0!" / !' +! j' #.-!2 / 1 *! j' C / !2#!& j' 'F / & j' "!' /& ' 2' +!' 6.@ / ."/ !&*-!' C] & # !' ' +!' 20&2/& ' 0# ."& !' S' .0 j' &"2 4 &++& 2 ' b .<-SO"2' / ! j' & ! ! j' &++! j' 40"*62 "L' # ! j' ! ' .0 j' 032 &!0% / !' #!2 ' 2.- 6.& +1 !' 0" +!' ! 1 2 !2 ! - j ' +.0 &+2 2.0- ' &"2 4 &++& 2 .0 b . ' L' -.0"2 ' &! - ' .& " ' C 0# ."& !' 0" -.21!" C !2+&!" /&2k #"! !' C ' !% !' 2.-!' .0 2.-! j' /0! 1 ! - ' / !' 2!"# &!" C * 0*&!" .0 j' &!+% @!22! 0+% #. 1 !' /!2O&2 2.0- ' "!L' !"#! j' YSO!0%' 2.0- ' "! !"#! j' /4 YSO!0%' NW4 #!0%' 2.&! - ' .& +1 !- ' EE! j' C * "/!- ' +.0" .& +' 1 !2O"!' C 22&2!' ##."/ - j' 2 +! j' . /!&*-F-#! j' 2O&2/& j +0-!' 1 .E!' / ! j' .0 j' +! j' @-2 ." ! !"! j' C !@-! j' '#60-!' /!' L!0%' 2.&' ' - !' e ' +!' 6.+' C + 0 !" 1 .E!' ' #!++0@ .0' #!0%' / !' 2! j' 20; *&! j' S' .0' SO!0%' 2!&2!". 0- ' .0' 20!". 0- ' 2!&2!" ' .0' 0"20!" ' 0" +!' 1 !2 1 !' ' ##&.- / !' / ! !' ; "!' ' + ' #.&!' +!@' ' ;&++' .0' + &- ' 2.+.-S' + ' #02 0 1 !' / !' + ' & ! !' .0' &++' +.0' '&! -/" ' ! -' 2' 2#0-2 ' Z& ; "!++!')' +! j' ; .-! j' -*O&++! j [' ' /&1 d ; "!++' <$ %@)$ % SO! -/' +.2!' "! !' &++&-*2' -/' .0" ! -#!' ." ! ' !"@ 4 ""!+ ' + ' 4 ""!+ ' -/' B&"E&-' 2.' &+&-*' !&" 2 &/' ! 20"!-/' +2.' 0 .-' 3 &-' . ' B." !& 0"!' -/' .22' . ' "! !' &++&-*2' -/' .0"L ! -#!' ." ! ' !"@ 4 ""!+ ' + ' 4 ""!+ ' -/' B&"E&-' .' !""&-*'2." ! /' + &/' ." #E! /' #.- " "@' .' &2' / &D +2.' ' -.' 2O# ' !"# - ' -." Y3 +&-*1 -' ' 2!+' ." Y2! '(' .' +!' -@ !+2 ;@ 4 ""!+ ' + L4 ""!+' ." B&"E&-' !%#! ' ! 2 1 ! 4 ""!+' #.- &-' 7.L -/L ." @ b ++. -2 ' !' + L4 ""!+' -/' B&"E&-' !" ! 2 1 ! 6 ! -.'" ' -@ R (8' !"# - ' -." 3 +&-*1 -' /.' 1 &-*+!' -@' Yb ++! ; ! ! -' 2 "' ! /' ." 0++! /'[' !+2 7 & ' *. . /' !+2 ; 0 ' ' ! 2 1 ! '*. . /' !+2 ; !' 7 !+ -/' HO2 +@' #E! /' -/' 2.+/)' ; @ ! 1 2 !+' !2 -." ' ! @' 1 &-*+!' 7 & ' ! 2 &/' !+ * ." 0 ' .' +!' -@' "! /' !+2 ' 0 .-' 3 &-' . 'B." !& 0"!' -/' .22' . ' ! -' &++&-*2' ." ! ' !"@' 4 ""!+ ' + L4 ""!+' -/' B&"E&-' 2.' &+&-*' !&" ! 20"!-/' +2.' .-' 3 &-' . 'B." !& 0"!' -/' .22' . ' ! -' &++&-*2' ." ! ' !"@ 4 ""!+ ' + L4 ""!+' -/' B&"E&-' 2.' 1 &%! / ' #E! / ' -/' Y2! 'F ' .' +! ' 2' ." ! '&2'2 &/' #.- " "@' .' &2' D +2.' ' -.' 2O# ' !"# - ' !" ! 2 &/' 3 #E&-*'. ' ; ""!++! /' B! 2 '2!++' ." Y2! ') ' .' +!' -@ ; ""!++! /' B&2 ' !%#! ' !' 2 1 ! B&2 ' ; ! 7 !++' -/' Y &&& 0++@')' #E! / ' '&2' .'2 @' Y -@' #.0- ; +! B&2 '#. 1 1 .-+@' # ++! /' +! &2 ; @' &2!+' !2 ' 7 & k .0 ' -@' &% 0"!' . ' ! 2 &/' R (8' B&2 !2' 7 & ' !' *"! ' B&2 ' -/' 7 & .0 ' &% 0"!' -/' #E&-*'. ' Y .E! 2 ' ." 21 ++' B&2 ' 7 & ' ;". E! -' 4 !++&!2 ' 7 & ' ! 2 &/' +!' B&2 ' ." 21 ++' B&2 ' ; ! ' + &/' / .0 ; +!' &-' !'3 #E&-* -/' ' ! ' !"@' +!' B&2 ' #.- &-' &-' !-* ' ". 1 ' ! 4 .-!' .' ! B&-') .' !' &"/' .&-' . ' !' &+' &%L -/L 7 ! -@' -# !2' ' ! ' +! 2 ' -/' ' !' !2' . ' ++' 20# ' ; ""!++! /' B&2 ' 2 ++' ; ! -.' +.-*!" -' !' +& +!' 4 .-!' ' "!2 ! ' 0 .-' !' *"! ' B&- -/' ' ! ' 4 .-!' . ' ! ' !"@' 20# ' + ' B&2 ' 2 ++' ; ! E! -' 7 @' .' !' ' !+' . ' ! ' B&2 -/' ' ! ' !"@' 20# ' B&2 ' ; ! ' 2 + ! /' . " . ! -! /' / .7 -' .' -' -/ 0+@' .' !' ++' 0 .-' 3 &-' . ' ." ! &-*' -/' +.2&-*' . ' "! !' &++&-*2' -/' .0"L ! -#!' ." ! ' !"@' 4 ""!+' . 'B&2 ' 7 &# ' !"! !" 2 ++' ; !' .0-/' #E! / ' 2." ! / ' 1 &%! / ' 6 ! / ' + &/' .0;+! ' ." -. ' ; .-! / ' -." 2 + ! / ' Y-. 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M&-*' -/' !' . !" +' .' &1 ' ." !1 ' .' &2' 0; H! 2' ' 2 ++' 2!&2!' ." 20!' ." !' 2 1 !' ; @' +&. -' .' !; ' ; @' V "&' ' !' . 1 1 .-' 7 ' ; @' 4&++' ." 3+ &- ' ##."/&-*' .' !' 02 . 1 ' .' !' & @' ." . 7 -' 7 !"!' -@' 20# " 3 +@-*' 1 -' Y * '$ ' J * [' ' M* ' $)' '6 Q' 'N$ ' **Z')' 0') 20# ! N)* +; ! .-' 2 ." ' !-' ." &++<') "0+@' fN$ ' ' !' +!' &22 ' ; @' ! 1' 2!+' I H ' 21 ++')' .E! 2' ." ; ". E!-' ; !+@ ! /' &22 ' \ 7' .7-!2' 40"* !2' "E! <' .' /O+@ ' $ ' $- % !' .- ! - 2' 4 ""!+' . ' !+2 ' -/' !@' 2 ++' - . ' ; !' 1 &-*+!/ &!"2' . ' & &!2' -/' 4 .". 0* 2 ' ! 2.7!"!/' . ' .&-' ! "# !"2' . ' 2! "# ' -/' * 0*!' ! 22!+2' B&2 +&# &. -' . '3!- +&!2

"!' /&' 2. , *-!' '+!' 6 .@ ' #.-2&/!")G1 ' +!j' 8 -&_2!j' ' /'@2' 22!-' C' 0 ."& !' 20&2/& j' /L' ."/ !&*-!' !2 ;+&!' C' !- +!' S' ' + ' !2 !' /!' 3 2S< 2# !&-' '!&*- +' -0+' !2.0'' /!j' "E!j' - 0 "!' 2.-!' 02 -' /!' '!-/!'' .0' 1 ! !'' 0' '!-/!' .0' !-')2' 02!" ' ' '!-/!'' .0' -! !' 0' '!-/' 2#0-' +.-*' "E!' .0' "E!j' /!' %!' !++!' !7!' '!-/' 2#0-2' /!j' 1!21!j' +!j' "E]j' ' 2#0-!' +&!*!' 2.-!' /0' 6 .@' .02 "!' +!' "&#!' /!' &&H 2' &&&H /' 0-' "E!' C' +.-*!j' R(8' /!' !%!' /!2.0 ' +!' ' +0!' /!' &-!21!' +' "&#!' 2& 9.1!' +!' '!-/.0'' C' + # .0'' /&#!+' 0& 2!-' "!2.- ;+!1!-' *"!!'' C' ##."/!"-' 20'' @-' /!' ."L' &0"' /!' #;0-!' +.-*' "E!' /!' %!' 0*1!-' Y' !-L' /!-)!' .02 !'' +' /&' "&#!' R<8' &&H 2' &&&H /0' WW 2' +0-!' 1.& !' !-' ' - !' 2., &*-!' ' +!' 6 .@' C' + 0 "!' 1.& !' 0' 2#0-!' /!' 2!j' +&!*!j' S' '.&!' 20!'' C' !'' + ' /&' ." !&0"' ' ##&.-' .0' ##&.-2' /!' /! !' !-' S0 +!' !1L' ;+ ;+!' #!22!' H0*!1!-' C' !%!#0#&.-' 2! ".0-' !7!' #.1!' !2' 020 +1!-' 02!' !-' ##&.-2' /!' /! !' (20!T' ' + ' #.&!' +!@-' ' S' -0+' /! !-/ 0-' !-' 2#0-!' -!21!' + ##&.-' .0' ##&.-2' Y' H' ," ' /1&2!' /!' * *!'' 2 ' +!@

!1' 1.-2 '!' 0&2' !-' +!' /&' +!1!-' ' +!j' <' /&#!+' #.1!-' Y .!0"!2' ;.-! ' C' # !j'2&;&!-' ! L' *&!j' #.1!' /.0;+!j' 2#+!-' ! "!' R +-:!-' !& j' f !' 0++!j' C' #.-/!-2!j' ' ."#!' /!j' Y !0"!R N 4 2' . !2S' 1 @-2' C' !!2' C' !"!-' +!j' !2.0"2' /& !0%' .0-' .L' -!2 !1!-' '[-' #!2' !1 2' * &-!j'+.0'' '&'!'' * "/!j' +02.0"2' -&2!j !"' - j' C' ;.-!j' .2 &!+%' H!2SO!j' ."!' "/!' S' ' +!' 20; &+!' @1 *&- #&.-' '+ ' /!2 "0##&.-' /!j' + ;.0"2' C' 202!- &# /!j' +02.0"2' . !j' &!+%' 0"!j' ;.-! ' C' # !j' .0-' !2 !' 0++!j' C' #.-/!-2!j' !2 1.+@-2' 0+& 0- j' C!-' 1!21!j'+!j' -.+@-2' +!j' /& T' ;.-! '!' # !j' Y., (' /!;"02!j' # /!2#!&' ;+! +!-' .3!j' C' !-' -0++' 1 -!'' ' +!' 1.&!-' / 2#0-' -.+@-' 0&22!-' !2 "!' .& +1!-' #0 j' 0' *0-/ / 1 *!' /!' -!' /&' 2.3 &*-!' T2' +!' 6.@' C' /!j' .0 j' 20;*&! T' 2!T' C' ' &- +' /! ! 2 0-#!' /!j' &!+%' SO!+%' 2.0-' !2.0"2' / 0L' &!+%' 0"!j' ;.-! ' !' # !j' 2 0-j'#!.' S' +!' *" #!' /!' - !' e' +!' 6.& c".&' 2' !0%' 1.-2 "!' !-' #!2' &!' # 0'' #!.' /!' 0"' !'' "!1!/&!=' !' /&' +!' 6.H' /!' 22!-' /!2' !2 0!+%' # !1 ."!+%' C' '+ '20 +&# #&.-' /!' 2!j' /& j' .!2' !-'+!' /&' +!1!-' 2!1;+!T' C' '+ -#L' ! & !' h 8 ' /' ."/!&*-!' # 0"' !0' S' -0++' S& -!'' 2.-' SO& SO&++' 2# ' < ' + ' !2 !' /!' 3 Z' 2! & ' ' *-)-' &/+!' .0' #.-/!-2!' .0' # 02!' /!2 "!' ++!j' .0' .-/!-2!j' 2#0-2' 0"!j' ;.-! ' .& # !j' /.0;+!j' .L' 2!#*&#j' !-' 2#0-!' 1.+@-' 0++ - ' .0' ' +!' 1.&!-!' / 2#0-' 1.+@-' 0++ 0- ' 20'' @-' /!' ." .&< # /"!' %+'2' 2& 2.'!-' #.1!' &+' !"" ' +!' #.-" "&!' ' #!2' ' ' %' J' -0++' 2.-' 0"!'' # !'' .0' 0 "!' S#.-S' H 2' + ' /&' !2 !' /!' 3 2S' 1! !' .0' # 02!' /!2 "!' 1&2!j' 2#0-2' 0"!j' ;.-! ' .0' # !j' /.0;+!j' .0' 2!-*+!j' !2 "!' 0++!j' .0' #.-/!-2!j' 0' 2#0-' &!+' 1.+@-' .0' ' +!' 1.&!-' / 2#0-' &!+' 1.+@-' .0' 1! !' 0' '!-/!' 2#0-2' &!+%' 0"!j' ;.-! ' .0' # !j' /.0;+!j' .0' 2!-*+!j' +!j' S0!++!j' 2' + ' /&' !2 !' c".0-' !-2&< j' 0++!j' .0' #.-/!-2!j' 20'' @-' /!' ." &'' # /!'' L& !' +!j' 0"!' j'(' ;.-! ' # # !j' !-2& 1&2!j' #.1!' !2' ' -' /&' 0' 2#0-!' &!+' 1.+@-' /!2 "!' 0++!j' .0' #.-/!-2!j' .0' 0 "!1!-' !2 "!' 1&2!j' 0' '!-/!' #.-" "&!' ' #!2' ! ' # 0%&' /!' ."k &'' C' /"!' %+'2' 2& 2.'!-' #.1!' 2#0-!' &!+' 2.-!

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0'' 2 &/' .'!"!&*-' ."/' !' M&-*' #.-2&/!"&-*' !' 3"!k 1&2!2';@' !' /'&#!' 22!-' -/' 0 ."& @' ."!2 &/' ' ."/ &-!/' !2 ;+&2 !/' -/'!- !/' ' ".1' !' B! 2' . ' 2 !'' -!%' #.1&-*' -.' 4.7@!'' -.'' . !'' 3!"2.-' 02&-*' .' 2!+' .'' 0' .' +!' .'' 7 &#' !"! !'' 2 +' 02!' .' 2!+' .'' 0' .' +!' -@' .-*' 4.7' .'' 4.72' .' A!7'2 +' 2!+' -@' .' !' 2 1!4.72' .' -@' .' !' M&-*(2' +&!*!' 3!. +!' ;.'!' !' 3"&#!' .' "!!' &++&-*2' .0"L !-#!' '4.7'-' -/' +.-*' 4.72' .' A!7'0-/!'' !' +0!' .' !' 2 1!' 3"&#!' 2' !' !++!'' -/' 40@!'' !"!.' 1 @"! 2.- ;+@' *"!!' -/' ##."/-' 0 .-' 3 &-' .' ." !&' .'' !'!"@' .-*' 4.7' .' A!7' . !"7&2!' 2.+/' ;.'!' !' 2 &/' 3"&#!' .' "!!' &++&-*2' -/' .0"L !-#!' 7!- @' !' M&-*' -/' !' . !'' + ' .' -@' .' &2' +&!*!' 3!. +!' ' 7&+' !"! ."!' 20!' -/' "."!' !' 2 &/' B." !& 0"!' ;@' &.-' .'' &.-2' .' !; ' 7 !"!&-' +&E!' 3".#!22' 0/*!1!-' -/' %!#0 &.-' 2 +' ;!' /' 2' &2' #.11.-+@' 02!/' &-' &.-2' .' !; ' 20!/' ' !' .11.-' V-/' ' -.' ! !-/ -' &-' -@' 20# ' &.-' .'' &.-2' 2 +' ;!' /1& !/' .' 7 *!' &2' 7 ' ' 7 2' /"!7!/' &-' !' 2 &/' <("+& 1!-' h)>' .7' ' Y 2 ? ' 4.--! 2' -/' 2' 2' 7!+' 2&-*+!' 2' /.0;+!' 7!"!' 7.-' .' ;!' Y & 0++@') ' 1 &/!' V"S * ' 0++!/' -/' &#E!/' Y;@' !-(2' "!-*) ' ' &2' ;' 2 @' 7& ' -/2' -/' B!! ' -/' !"!;@' !' E!"2' .' !' 2 1!' ' !' .-!2 +@' ;! ."!' &2' &1!' * &-!/' !&'' &'&-*' -/' E! ' 1 -@' "!- &#!2' !"' - 2' -/' *;./' Y .02!2 (' &+' -.7' .' + !' ' ;@' 20; +!' 1 *&- &.-' .' !' !2 "0 &.-' .' !' ;.0"2' -/' 02!- -#!' .' 1 -@' !-' 20#' Y 2 (' 4.--! 2' -/' 2' ' !' ;!!-' 0++!/' -/' &#E!/' &-' 0++&-*' &++2' -/' &-' !' 2 &/' &++2' !' 2 &/' Y 2(' RU8' 2' ;!' ;".E!-' -/' /!#!& 0++@' 7".0* ' -/' &-' -.' 7&2!' ;@' !' 1! -' .' -@' &+' 1 @' ;!' Y' & 0++@' (' 1 /!' .' !' *"! ' 1 *!' .' .0'' .'!"!&*-' ."/' !' M&-*' -/' .' +' &2' 0;H! 2' -/' !' &- +' 0-/.&-*' .' 20# ' 7 &#' ;!' !' E!"2' .' 20# ' Y 2 (' 4.--! 2' -/' 2' 0-+!22' !' b" #!' .' .0'' .'!"!&*-' ."/' !' M&-*' 2 .0+/' ;!' .' !1' 2 !7!/' &-' &2' 4! + ' -/' !"!0 .-' ' ".'&/!' 6!1!/@' =' 0'' 2 &/' .'!"!&*-' %&"/' !' M&-*' ;@' !' 22!-' .' !' ."/2' &"& 0 +' -/' !1 ." +' -/' ' !' 0 +&# &.-' .' &2' 2 &/' .11.-2' &-' !' 2 &/' 3 "+& 1!-' 22!1;+!/' -/' ;@' !' 0 ."& @' .' !' 2 :!' ' ."/ &-!/' -/' ".'&/!/' ' -.' 1 --!'' 3!"2.-' R(8' !'' !' B! 2' . ' 2 !'' -!%' #.1&-*' 2 +' 0++' .'' &#E' .'' Y/.'04' .' ;!' .&+!/' .'' EE!/' -@' Y 2 (' 4.--! 2' .'' 2' /.0;+!' .'' 2&-*+!' &-' -&' 0++&-*' &++' .'' ;@' !' 1! -' .' -@' 0++&-*' &++' 0 .-' 3 &-' .' ." !&' -/' .'+.2!' %+'2' 2' . !-' 2' !' 2 +' /.'#.-" "@' .' &2' ' -/' +2.' ' -.'3!"2.-' Y ' E!"(' !"' .'' . !'' 7 2.!'!'' !' ;!' .'' !' 2 &/' B! 2' . ' 2 !"' 2 +' Y2! m ' .'' # 02!' .' ;!' Y2! F ' -@' Y 2 (!' 4.--! 2' .'' 2' .0;+!' .'' () # .' ;!' 0++!/' .'' +#Ee/' Y .'[' !' -@' 20# ' &++' .'' ;@' !' 1! -' . ' -@' 20# ' &++' .'' Y2!' !' .' +!' -@' 0# ' Y 2 ('4.--! 2' .'' 2' .0;+!' .'' &-*+!' 7 &# ' !'' !' 2 &/' B! 2' 2 +' ;!' 2.' 1 /!' 0++!/' .'' &#E!/' && .H& 3 &-' .' ." !&' -/' +.2!' !' Y 2 (!' 4.--! 2' -/' 2' 2.' Y2! [' ' 2' ."!' &2' 2 &/' .' -@' 20# ' &++' .' ;!' 0++!/' .'' &#E!/' .'' Y. !"7&2!' 2!' .' ;!' 2.+/'?'!' #.-" "@' .' &2' =' -/' +2.' .' ." !&' -/' +.2!' %+2' 2' . !-

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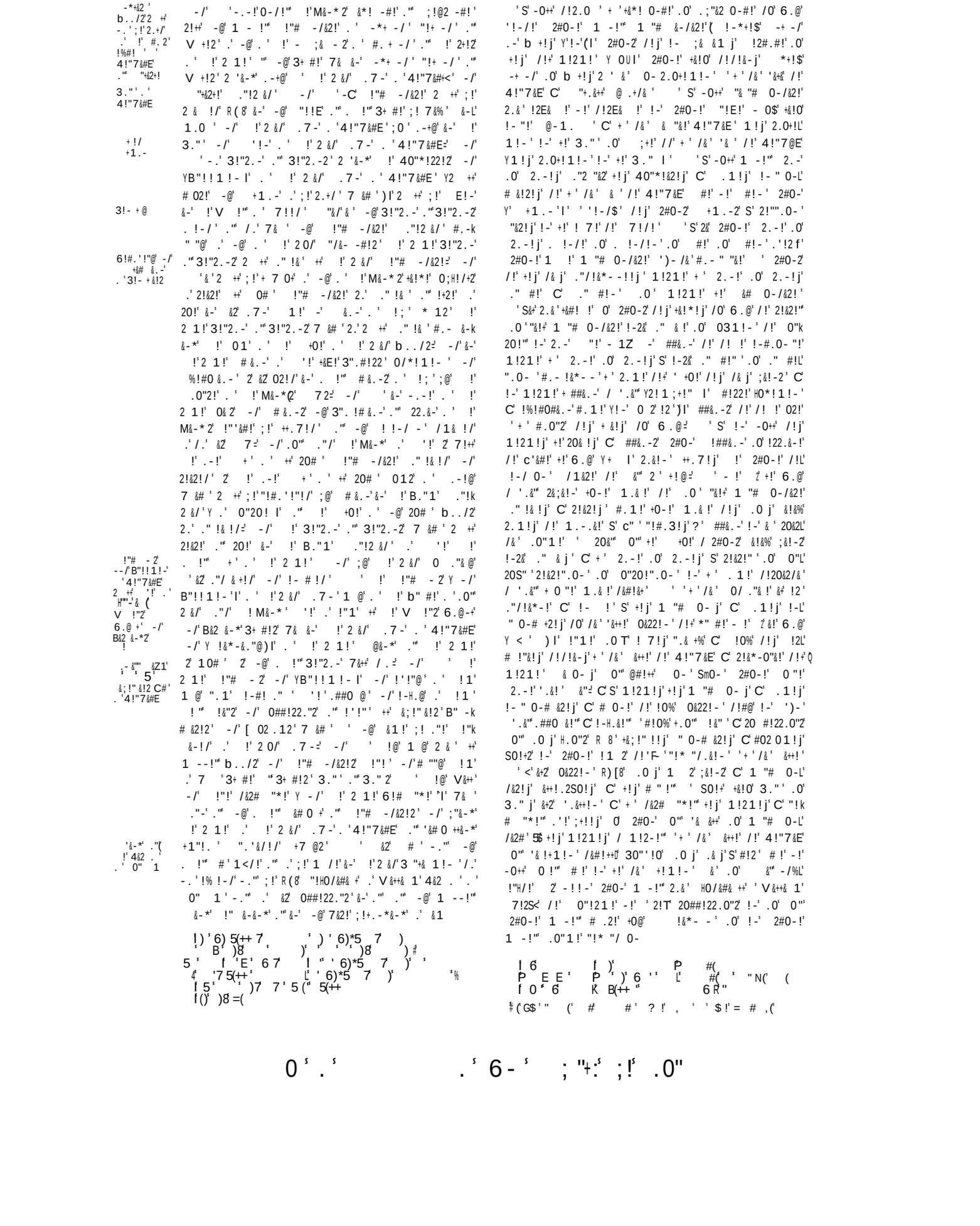

To face page 477 of Vol. II. of the Statutes.

Commencement of the Entry of Statute 1. Richard III. in the Exchequer Book XI. at Westminster.

At the bottom of the preceding page in that Book. } Explicit statuta apud Westm̃ edita anno primo &c

Ricardi tertii.

Juchascun la grace de Dieu Roy Dengleterr & de ffrance & Sr dis
nes Cumes le conqueste tierce al honour de Dieu & de Seint Esprit &
puy Coedy pur lestatut de nostre dit Seignur le Roy fait a Glouc̃ en
temps a Estur le dymenge prochein apres la conversion de Seint Paul de cest regne
pur mesme de Seignurs & assent des Esp̃uels & temporels & les
Coens en cest Parlement ordeigne & establie que mesme le statut
cite de mesme le parlement ordeigne & establie que mesme de son
people ses tems statutes & ordenn̄ez en la forme q̄ ensuet.

Primerement q̄ mes tres q̄ mes & dis tout feoffements ordres grãt
nom sicome honorables testes & seignorie donations de rauer en nom at
q̄ mont entre les Subgiettes de Roy en tout q̄ mil home q̄ a estate
tiels testes rentes & droites ou autres enheritementes & les femes de omit nomitte ou Dobber en aſsaun
tiels testes ou autres enheritementes & les seignors Volentees des home & de sa forfeyt & de
seses a me de Die ou des ans & les annuitees grãtez a asume q̄ sone ou g̃sone & q̄ my lem̃ droite q̄ my the
de lem̃ vies ou autrement dont en q̄ ascun site q̄ nie me Dit grãt grand honorable & doute des messes
q̄ cause de les p̃mes & dis tout feoffements q̄ dit Jeo en droit des q̄ seignor les estoit ordeigne estabiez en droite
q̄ les Subgiets de les ps Esp̃uels & temporels & les Coens en cest Parlement assemblez en
droit q̄ home a state feoffement dont q̄ de ase grãt les ses & ton ſtynations des tiels rentes rentes
droites ou enheritamentes sanz ou en & ou en apres este faitz ou en & ~~ou en apres este faitz en en~~ & de
asume q̄ sone ou g̃sone & esteantz de q̄ tiel droit ase de Cam memorie a leyse & ment en Dimesse a asume
q̄ sone ou g̃sones et tout q̄ tons & executions en & ou sanz dient bons & effectuels a tielly a q̄ il
est ensi sanz en & ou dones & a tout tantz a dit droits en nomitte les dessus dons feoffem̃ dons ou grãt
tem̃ ent & en nomitte les dessus dons feoffem̃s dons ou grãtems & droits les seignors en clamantz droit
les tenps en lement come heyre ou heyres as mesmes verdons feoffems dons ou grãtems & chesme deux
& en nomitte tout autres auantz ou clamantz a tiel title ou messe en yceles tan q̄ son lement en droits
De mesme le verdon feoffem̃ dons ou grãtem verdons feoffems dons ou grãtems ou ces ou lom
dit heyres a temps del bayse ent vent ou ent̃ dit ou grãt sanz Dauntre a chun en q̄ sone ou g̃sone &
tiels dont title action & mes & q̄ reason Dastaut dit en le taille ent sanz & come les ancyn Dassent &
test acte ne eust ore este sanz Item apres le dit Roy en embrant comment les Coens de cest dit statute q̄
nauns & dessus a remuncions & ordenn̄ate con etse en nomitte la dit de test statute ount este mys
a grant Subsidez & importables charges & exactions & en especiall q̄ me noms imposicion appelle Gene
volente q̄ ont Dimes & mis les Subgiettes & Coens de cest dit & en nomitte le lem̃ volentees & dite omitta
ter grandes & grosses Demonstrance a dit Dieu pres finall destruction q̄ al Dimes & q̄ les nons & home & honora
bles de cest dit statute q̄ en the seon Dit cell sirent compellez de l'ne tesstre a dessa dit & dit hostiels et vne
en grãt & q̄ mune & ronde & dit Dettes nonpaiez & lem̃ en sanz ment p̃sentz et tiels memorable q̄ est
les anoient ordenez q̄ my la estate de lem̃ ainsnes sirent ament ses a grant desp̃ le gise Dieu & la dest
tynacion de cest dit statute q̄ dit q̄ nie Dit p̃ le dit Roy de les droits & assent des dit ps & Coens en le dit p̃
lement assemblez & q̄ an tiquite de tiel droit & ordeigne q̄ les Subgiettes & dit statute de cest dit statute
de ycelluy ount en mais mande & dient charges & mes tiel charge ou imposicion appelle Gen dolence ne q̄
tiel semblable charge de cest q̄ tiels exactions appellez Gen dolence de ount cest temps apris & dient q̄ pris

STATUTES OF KING RICHARD THE THIRD.

Anno 1° RICARDI, III. A.D.1483-4.*

Ex Lib. Scacc. Westm. XI.

INCIPIUNT STATUTA apud WESTM'
edita anno primo Ricardi tercii.

Rlichard p la grace de Dieu Roy Dengleᵗre & de Fraunce & ſ' Dirland puis le conquest tierce, Al honour de Dieu & de Seint Esglise & pur cōen pfit du Roialme Dengleᵗ, a son primer plement tenuz a Westm̄ le vintisme tierce jour de Janvier lan de son reigne primer, de ladvys & assent dez ſ's Espuelz & Temporelx & lez Cōens du dit Roialme Dengleᵗ au dit plement sūmonez & p auctorite de mesme le plement ad ordeigne & establie pur quiete de son poeple ceteins Statutes & Ordenᵃncez en la fourme q̄ sensuet.

Caᵖ I. Primement pur ceo q̄ p privez & disconuz feoffementes gᵘund nounsuertie trouble costes & grevouz vexacions de jour en jour accruont entre lez subgiettes du Roy, en taunt q̄ null hōme q̄ achate cres teūtes rentes & ſvices ou aut's enheritementes, Ne fēmes qe ount jointture ou Dower en ascuns cres teūtes ou aut's enheritementes, Ne lez darreins volentees dez hōmez destre pfourmez, Ne leses a ᵗme de vie ou des ans, Ne annuiteez gᵘuntez a ascune psone ou psonez pur leur ſvice pur terme de leur vies ou autᵗment, sont en parfite suertie ne saunz gᵘund [graund [1]] trouble & doute des mesmes p cause de lez privez & disconuz feoffementz; Pur remedie des queux il est ordeigne establie & enacte p ladvys de les ſ's Espuelx & Temporelx & lez Cōes en cest ꝑsent plement assemblez & p auctoᵗ

[1] An erroneous Repetition.

STATUTES made at WESTMINSTER,
In the First Year of KING RICHARD III.

RICHARD, by the Grace of God, King of England and France, and Lord of Ireland, the Third after the Conquest, To the Honour of God and of Holy Church, and for the common Weal of his Realm of England, at his first Parliament holden at Westminster the Three-and twentieth Day of January, in the First Year of his Reign, by the Advice and Assent of the Lords Spiritual and Temporal, and [at the Request of [1]] the Commons of the said Realm of England, summoned to the said Parliament, and by the Authority of the same Parliament, hath ordained and established for the Quietness of his People, certain Statutes and Ordinances in Form following.

Ex Rot. Parl. 1 Ric. III.

I.
Rot. Parl. nu. 20.
The Inconvenience of secret Feoffments to Uses.

AN ACT agaynst pryvy and unknowen Feoffementᶜ.

FORASMOCHE as by privey and unknowen feoffementᶜ greate unsuertie trouble costes and grevous vexacions dailly growen among the King's Subgiettis, in somoche that no man that bieth eny landes teūtᶜ rentᶜ and ſvices or other inheritamentᶜ, nor Women that have Joyntoure or Dower in any landᶜ, teūtᶜ or other inheritamentᶜ, nor mennys last Willes to be pfourmed, nor leses ([2]) ᵗme of lyff or of yeres, nor annuites gᵘunted to eny psonne or psones for their ſvice ([2]) ᵗme of their liffᶜ or otherwise, be in pfite suerte nor without greate trouble and dowte of the same by cause of the seid privey and unknowen feoffamentᶜ: For remedy wherof, be it ordeigned establisshed and enacted by the advyse of the lordes ſpualx and tempelx and the Comens in this ꝑsent pliament assembled and by

[1] Not in Original. [2] for *Printed Copies.*

* The Statute of this Year, in French, was printed, by Maclinia or Caxton, soon after the End of the Session of Parliament; and is also included in the Collection of Statutes by Pynson (1497.) The Text now given from *Lib. XI.* in the Exchequer at Westminster agrees in general with those Printed Copies. Some of the Acts, as inrolled on the Parliament Roll of this Year, were printed in the Edition by Pulton (1618) and some others in subsequent Printed Collections. These differ, in their Preambles and other Particulars, from the correspondent Chapters of the English Text of the Statute as given in the Old Printed Editions, translated from the French Text. *MS. Pet*; *MS. Hatt.* 10.; *MS. Cott. Nero C. I*, and other Manuscript Collections of Statutes contain the Statute of this Year in French, agreeing very nearly with the French Text in the Oldest Printed Copies. The Introductory Clause of the Statute in English is given from the Old Printed Translations.

All Estates, Feoffments, &c. shall be good against the Sellers, Feoffors, &c. their Heirs, and Persons having or claiming Title to their Use.

auctorite of the same, that evy astate feoffement yeft relesse g*unte lesis and confirmacions of landys teñt' Rent' vices or inheritament' made or had, or hereafter to be made or had, by eny psone or psones beyng of full age of hoole mynde at large and not in duresse, to eny psone or psones, and all recouvees and execucions had or made, to be good and effectuell to hym pat it is so made had or yevyn unto, and to all other to his Use, ayenst the Seller feoffor' yevor' or g*unto' therof, and ayenst the Sellers feffours yevours or g*untours and his or their heires, claymyng the same onely as heyre or heires to the same Sellers feffours yevours or g*unto's, and evyche of theym, and ayenst all other havyng or claymyng eny title or intesse in the same oonly to the use of the same Seller Feoffour yevour or g*untour, Sellers feoffours yevours or g*untours, or his or their seide heires at the tyme of the bargeyn sale coven*nt yeft or graunte made; Savyng to evy psone or psones suche right title accion and intesse by reason of any yeft in the taill therof made, as they shuld have had if this Acte had not be made.

The Estate of Tenant in Tail saved.

dicell q̃ chune astate feoffement doon release g*unt leses & confirmacions des tres teñtes rentes vices ou enheritamentes faitz ou euez ou enapres estre faitz ou euez [ou en apres estre faitz ou euez '] p ascune psone ou psonez, esteantz de plein age de sain memorie a large & nient en duresse, a ascune psone ou psonez, et toutz recovees & execucions euez ou faitz soient bons & effectuelx a celluy a q̃ il est ensi faitz euez ou donez & a toutz aus a son oeps, encountre le vendour feoffour donour ou g*untour ent & encountre lez vendours feoffours donours ou g*untours & sez & lour heires enclaimantz ycelles tanq; soulement come heire ou heires as mesmes vendours feoffours donours ou g*untours & chune deux, & encountre toutz autrez aiantz ou claimantz ascun title ou intesse en ycelles tanq; soulement al oeps de mesme le vendour feoffour donour ou g*untour vendours feoffours donours ou g*untours ou sez ou lour ditz heires al temps del bargein vend coven*nt doon ou g*unt fait: Sav*nt a chune psone ou psonez tielx droit title accion & intesse p reason dascun doon en le taille ent fait si come ils avoir duissent si cest acte ne eust mye este fait.

II.
Rot. Parl. nu. 18.

An Act to free the Subiect' from Benevolenc'.

The Evils of a new Imposition, called a Benevolence.

THE King remembryng howe the Cõmens of this his Roialme by newe and unlawfull Invencions and inordinate Covetise, ageynst the lawe of this roialme, have be put to gret thraldome and importable charges and exaccõns, and in especiall by a newe imposicion named a benevolence, wherby dyvse yeres the Subgettes and Comens of this lande agaynst their Willes & fredome have paid greate Sõmes of Money to their almost utter destruccion; For divse and mony worshipfull men of this roialme by occasion therof were compelled by necessite to breke up their housholde and to lyff in greate penurie and wrechenesse their dett' unpaied and their childeryn unpferred, and suche memoriall' as they had ordeigned to be done for the welth of their soules were anentised and anulled, to the greate displeasure of God and to the destruccion of this roialme; Therfore the King woll it be ordeigned, by the advyse and assent of his lord' spuelx & tempelx and the Cõmens of this psent parliament assembled, and by the auctorite of the same, that his subgiett' and the Comynalte of this his Roialme fromhensfurth in nowise be charged by none suche Charge [exaccion '] or imposicion called benevolence, nor by suche lyke charge; And that suche exaccions called benevolences, afore this tyme takyn be take for no example to make suche or any lyke charge of any his seid subgiett' of this Roialme hereafter, but it be dampned and anulled for ever.

The Subjects of this Realm shall not in future be charged with Benevolences, or the like.

Item nre dit' le Roy remembrant coment lez Cõens de cest son Roialme p novelx & desloialx invencions & enordinate covetise, encountre la ley de cest Roialme ount este misez a graund vitute & enportablez charges & exaccions, & en especiall p une novell imposicion appelle Benevolence, pont divsez ans lez subgiettes & Cõens de cest tre encountre leur volentees & libtie ount paiez graundz sõmez de moneie a lour bien pres finall destruccion, qar divsez & plusours hõmez honorables de cest Roialme p encheson dicell furent compellez del necessite a dessolver lour hostielx & vivre en g*und penurie & miserie, lour dettes nonpaiez & leur enfantz nient pferrez et tielx memorialx quelx ils avoient ordeinez pur la salue de lour aulmes furent aniẽtisez, a g*und despleasure Dieu & la destruccion de cest Roialme; Pur qoi nre dit dit le Roi de ladvys & assent des ditz dit's (1) & Cõens en le dit plement assemblez & p auctorite dicell voet & ordeigne q̃ ses subgiettes & Cõialtee de cest son Roialme de cy enav*nt en null mane soient chargez p null tiel charge ou imposicion appelle Benevolence, ne p tiel semblable chargee, & q̃ tielx exaccions appellez Benevolence dev*nt cest temps prisez soient pris pur null example de faire tiel ou ascune semblable charge dascuns sez ditz subgiettes de cest Roialme enapres, mes soit il dampne & adnulle pur toutz jours.

ij.

III.
Rot. Parl. nu. 21.

An Act for baylyng of psons suspected of Felony.

On Arrests for Suspicion of Felony, every Justice of Peace shall have Power to bail.

FORASMOCHE as dyvs psones ben daily arested and imprisoned for suspecion of felonie, sumtyme of malice and sumtyme of light suspecion, and so kept in prison without baill or maynepris to their greate vexacion and trouble, it be ordeigned and stablisshed by auctorite of this psent pliament, that evy Justice of pe peas in evy Shire Citee or Towne, have auctorite

Item pur ceo q̃ divsez psonez de jour en autre sont arestuz & emprisonez pur suspecion de felonie, ascun foitz de malice & ascun foitz de legier suspecion, et ensi gardez en prison saunz baille ou mainprice a leur graund vexacion & trouble, Il est ordeigne & establie p auctor de cest psent plement, q̃ chune Justice del peas en chune Countee Citee ou Ville aiet auctor

iij.

[1] Omitted in the French Text and Old Translations.

[1] An erroneous Repetition.

[2] espuels & tempels *MS. Pat.*

& poiar p sa ou leur discrecion de lesser tielx prisoners & psones ensi arestuz en baille ou mainprice en semblable forme si come mesmes lez prisoners & psones ent furent enditez de recorde dev'nt mesmes les Justices en lour Session; Et q̃ Justices de peas aient auctorite denquerrer en leur Sessions de toutz mañs eschapez de chune psone arestuz & enprisonez pur felonie; & q̃ null Viscount ne Eschetour Baillif de Fraunchise ne ascune autre psone preigne ou sease lez biens dascune psone arestuz (1) dev'nt q̃ mesme la psone ensi arestuz & enprisonez soit convict ou atteint dautiel felonie accord'unt a la leie, ou autrement mesmes les biens autre maner lealment forfaitz, sur peine de forfeire le double value de les biens ensi prisez a celluy q̃ est issint endamagez en cell partie p accion de dette en cell partie destre pursue p semblable pcesse Jugement & execucion come est usuelment usee en autres accions de dette pursuez al cõen leye; et q̃ null essoin ou pteccion soit allouez en ascun tiel accion, Ne q̃ le defend'unt en ascune tiel accion soit admis de gager ou feere sa leye.

iv. Item pur ceo q̃ div's g'undez enconviencez & pjuries de jour en autre aveignent en div'sez Countees Dengleṫre p faulx p̈dites donez es enquisicions & enquerrez dev'nt Viscountes en lour Tournes p psones de null substance ne de avoir nient creignianz Dieu ne reproeve du mound, p encheson de qoi div'sez & plusours lieges du Roy des div'sez pties Dengleṫ p excitement & pcurement de leur malvaiz aymers sont enjuriousment enditez, & autres q̃ de droit dusent estre enditez p tielx excitement & pcurement moltfoitz sont esparez, cont'rie al cõen droit & boon conscience; En eschuer de qoi Il est ordeignez p nr̃e dit f' le Roy de ladvys des ditz f's & Cõens en le dit parlement assemblez & p auctorite del mesme, q̃ null Baillif ne autre Officer decy enav'nt reto'ne ou enpanelle ascune tiel psone en ascune Countie Dengleṫre destre prise ou mys en ou sur ascune tiel enquerre en ascun de les ditz Tournes mez tielx quelx sõnt de bon noune & fame & aiantz ṫres & teñtes de fraunk tenure deinz mesmes lez Countees al annuel value de xx s. au meyns ou autrement ṫres & teñtes tenuz p Custume de maner vulgarment appellez Copihold deinz les ditz Countees al annuell value de xxvj s. viij d. oustre toutz charges au meyns. Et si ascun Baillif ou autre Officer deinz lez ditz Countees en apres retourne ou enpanelle ascune psone contrarie a icest, celluy pdera pur chune psone qil ensy enpanellet ou retournet nient esteant de la sufficiente come est av'ntdit a tauntz de foitz come il ensi offende xl s. et le dit Viscount autres xl s. lune moite ent al Roy nr̃e Sov̈aigne f' laut' moite ent a tielx quelx suer voilent en cell partie, et q̃ chune hõme qi suer voet pur le mesme aiet leur sev̈alx accions de dette ent al cõen ley si bien encountre le dit Viscount come le dit Baillif et q̃ tiel & semble pcesse soit euez & usez en chune de mesmes les accions come est eue & use es autres accions al cõen ley et q̃ null pteccion ne essoin soit alloue en le mesme; Et q̃ chune tiel enditement dev'nt ascun Viscount en son Tourne autrement pris soit voide & de null effect; Cest acte de prendre effect a le primer jour du dit p̈sent parlement & nient dev'nt.

(1) ou enp'sonez *MS. Pet.*

and power by his or their discrecion to lete suche prisoners and psones so arested in baill or maynpryse, in like fourme as though the same prisoners or psones were indited therof of record afore the same Justicez in their Cession; And that Justice of peas have auctorite to enquere in their Cessions of all maner eschapes of ev̈y psone arested and imprisoned for felonye; and that no Shireff nor Eschetour Baillif of Franchise nor eny other psone take or sease the goodes of eny psone arested [for suspecion of felonie (1)] afore that ꝑe same psone so arested and imprisoned be convycte or atteint of suche felonye accordyng to the Lawe, or ellys the same goodes otherwise lawfully forfeited, uppon peyne to forfeit the dowbull Value of the goodes so takyn, to hym that is so hurt in that behalf, by accion of Dette in that partie to be sued by like pcesse Jugement and execucion as is usuelly used in other accions of Dette sued at the Comen lawe; and that non esson or pteccion be allowed in any suche accion, nor that the Defendaunt in eny suche accion be admitted to wage or doo his lawe.

Justices in Seſſions may inquire of Escapes of Persons imprisoned for Felony.

The Goods of Persons imprisoned for Felony shall not be seized before Conviction.

Penalty, Double Value thereof.

IV. *Rot. Parl. nu. 22.*

An Act for retornynge of sufficient Jurors.

FOR ASMOCHE as div'se greate inconvenienceez and pjuries daily happen in div'se Shires of Englond, by untrue verditeez yevyn in Inquisicions and enquerrez afore Shireffz in their To'nez by psones of noo substaunce ne havur not dredyng God nor worldez shame, by reason wherof div'se and mony of the Kyngṫ liegṫ of div'se parties of Englond, by excitacion and pcuryng of their evill Willers be wrongfully endited, and other that aught of right to be endited by suche excitation and pcuring ofte tymes be spared, cont'ry to the comyn right and to good consciens; in eschewyng wherof be it ordeigned by the Kyng oure Sov̈aigne Lorde, by thadvyce of the Lordes sp̈uelx and tempelx and comens of this p̈sent pliament assembled and by auctorite of the same, that no Balieff nor other officer fromhensforth retorn or enpanell eny suche psone in any Shire of Englond to be takyn (2) in or uppon any suche Inquere in any of the seid To'nez but suche as be of good name and fame, and havinge londez and teñtṫ of frehold withyn the same Shirez to the yerely value of xx s. at the leste, or ellys londes and teñtṫ holdyn by Custume of manere comynly called Copy holde withyn the seid Shirez to the yerely value of xxvj s. viij d. over all charges at the leste. And if any Bailly or other offic̈ within the seid Counteez hereafẗ retourne or enpanell eny psone cont'ry herunto, he to lese for ev̈y psone that he so empanelith or retourned not beyng of the sufficiante as is aforeseid as ofte as he so offendeth xl s. and the seid Shireffe other xl s. the oon halff therof to the Kyng oure Sov̈aigne Lorde, the other halff therof to suche as will sue in that behalf; and that ev̈y man that will sue for the same have their sev̈als accions of dette therof at the comyn lawe as well ayenst the seid Shireff as the seid Bailly, and that suche and like pcesse be hadde and used in ev̈y of the same accion or accions as be had and used in other accions of dette at the Comen lawe, and that no pteccion ne esson be alowed in the same; And that ev̈y suche inditement afore any Shireff in his To'ne otherwise takyn be voide and of noon effecte. This Acte to take effecte fro the first day of this p̈sent parliament and not afore.

Qualification of Jurors in Sheriff's Tourns.

Penalty on Bailiffs, &c. returning insufficient Jurors.

Indictments otherwise taken, shall be void.

(1) or imprisoned
(2) or put
} *Old Printed Translations.*

V. *Rot. Parl. nu.* 23.

An Act touching Feoffm" made to the Kynge to the use of others.

Lands whereof the King is enfeoffed, jointly with others, to Uses, shall vest in his Co-feoffees;

THE King callyng to his blessed remembr"unce the greate hurte trouble and charge that might ensue to his liege people by reason of div̄s feoffementz and states made to hym and to other psones jointly afore he was Kyng, of londes teñtz and other hereditamentz to the use and behooff of other psones & not to his use, and for to avoide suche hurtes trouble and charges that myght come to thoo psones to whose use suche feoffementz and estates was made, of his blessed disposicion & mere mocion woll by thadvise of his Lordes Sp̄uelx and Tempelx and the Cōens in this p̄sent pliament assembled and by auctorite of the same, that it be ordeyned establisshed and enacte, that suche possession right title and int̄esse as is or appteyneth to hym, of or in any londes teñtz or other hereditamentz, by reason of any suche feoffement or state made to hym and to other joyntly, to the use and behouff of any other psone or psones and not to his use, veste & be by the said auctorite holy in the other psone or psones with hym so enfeoffed or [had[1]] joint estate, to the same use and effecte for which they were so enfeoffed or hadde estate, in like wise as [thought[2]] he had never be enfeoffed nor hadd estate with the same other psone or psones. And over this be it ordeyned by the seid auctorite, that suche possession right title and int̄esse of and in any londes and teñtz or other hereditamentz wherof the King is sole seiased by reason of any feoffement or estate made afore he was King, to the use of any other psone or psones, veste and be in suche psone or psones and their heires to whose use he is so therof seased; savyng to ev̄y other psone or psones their right title and int̄esse in the same.

Lands, whereof he is solely seised to Uses, shall vest in the Cestui que Use.

Item nr̄e dit f^r le Roy appellant a sa benoit remembrance les g^undz damage trouble & charge queux puissent ensuer a son liege poeple p reason des div̄sez feoffementes & statez faitez a luy & as autres psones joinctement pdevant q̄ celuy fuist Roi, des p̄res teñtes & autres hereditamentes al oeps & behouf dautres psones & nient a son oeps, et pur eviter tielx damages trouble & chargez quelx purroient venir a les psones al use des q̄ueux autielx feoffementes & estates furent faitez, de sa benoit disposicion & mere mocion, p auctorite de son dit plement voet ordeigne & establist q̄ tiel possession droit title & int̄esse come est ou apperteigne a luy de ou en ascuns p̄res teñtes ou aut̄s hereditamentes p reson dascun tiel feoffement ou state faite a luy & as autres jointtement, al use & behouf dascune autre psone ou psones & nient a son use, vest & soit p la dit auctorite entierment en lautre psone ou psones ovesq̄ luy ensy enfeoffez, ou aiantz joinct astate a mesme le use & effecte pur quelx ils furent ensi enfeoffez ou avoient astate, en semble mañe si come il navoit jammes este enfeoffez ne navoit astate ovesq̄ mesme lautre psone ou psonez. Et outre ceo il est ordeine p la dit auctorite q̄ tiel possession droit title & int̄esse de & en ascuns p̄res & teñtes ou autres hereditamentes dez quelx le Roy est tantsoulement seasez p reason dascun feoffement ou estate fait av^nt qil fuist Roy, al use dascun autre psone ou psones vest & soit en tiel psone ou psones & lour heires al use dez queux il est ensi ent seisez; Sav^nt a chune autre psone ou psones leur droit title & int̄esse en les mesmes.

v.

VI. *Rot. Parl. nu.* 24.

An Act for tryall of matters in Court̄ of Pypowder held in fayres.

To the Kyng our So^vain Lord.

Recital of Petition, Rot. Parl. 17 Ed. IV. nu. 28.

[[1] PRAEN the Cōmens in this p̄sent pliament assembled, That wher in a statute made in the xvij yere of the reign of King Edward the iiij^th hit was ordeigned amonge other, that Where div̄s feires ben holden and kept in div̄s placis within this Realme, sōme by p̄scripcion alowed afore Justicez in Eire, and some by the g^unte of your noble pgenitours & p̄decessours, and to ev̄y of the same Feyres is of right pteynyng a Court of Pepowders to mynystre therin due Justice in that partie, in whiche Court it hath ev̄ be accustumed that ev̄y pson cōmyng to suche feires shulde have lawefull remedy, of all maner contractes trespas coven^ntes dettes and other dedis (*) made or doon within any of the same feires duryng the tyme of the same feires, within the Jurisdiccion of the same, and to be tried by mchauntes beyng at the same feires, which Courtes in thies daies byn mysused by Stuardes (†) Bailliefs Cōmissaries and other mynystres holdyng and rulynge the seide Courtes of the seid feires, for their singler pfit holdyng plee by pleyntes, aswell (‡) contractes dettes trespas and other dedes done and made out of the tyme of the seid feires or feire and

[Item nr̄e dit f^r le Roy p un peticion a luy fait p lez Cōens en son dit parlement assemblez ad entenduz q̄ come en le statute fait en le dise septisme an du reigne du Roy Edward le quart entre autres estoit ordeigne & establie[1]] * * *

vj.

* * * * *

* * * * *

[1] having *Old Printed Translations.*

[2] *erroneously for* though—*Old Printed Translations read* if.

[3] See Note to the French Text.

(*) or otherwyse (†) Under Stewardes } *Rot. Parl.* (‡) of } 17 *Edw. IV.*

[1] Instead of this short Preamble, the Act, as inrolled on the Parliament Roll, commences with a Recital, not entirely exact, of the Preamble to the Petition in *Rot. Parl.* 17 *Edw. IV. nu.* 28. whereon the Act 17 *Edw. IV. c.* 2. was framed. The enacting Part of the Act is also recited from the same Parliament Roll of 17 *Edw. IV*; the Statute Roll of that Year being probably lost or missing, in the Time of Richard III. See the Statute 17 *Edw. IV.* and the Notes there. The Old Printed Translations read, nearly in conformity with the French Text, as follows:

"Item, Our Sovereign Lord the King by a Petition made to him by the Commons of this Realm of England, in his said Parliament assembled, hath conceived and understand, that Whereas in a Statute made in the xvij. Year of the Reign of the noble King Edward the Fourth, amongst other things it was ordained, established, and enacted,"

q̄ a la primer jour de May adonqes pschein ven^nt null Seneschall South Seneschall Baillif ne Cōmissarie ne autre ministre dascuns Courtes des Peepoudrez apperteign^ntz as feires teigne plee sur ascun accion al sute dascune psone ou psones, sinon le pleintif ou pleintifs ou son ou lour Atto^neys en p̄sence del defend^unt ou defend^untes, si il ou ils ou lour Attournees ceo desiront, facent ſement sur le Seintz Ev^ngelies sur la declaracion q̄ le contract t̄spasse ou autre feet comprise en mesme le declaracion fuist fait ou cōmis deinz le feire temps del dit feire lou il preigne sa accion, & dedeinz les boundes & Jurisdiccion de mesme la feire, & mesq̄ le dit pleintif ou pleintifs p leur ſment afferme le mesme, q̄ le dit defend^unt ou defend^untz ne soit ou soient pent conclusez mez q̄ ceux poient respoundre & pleder al accion ou en abatement de les pleintes & de tendre issue, q̄ mesme le contracte trespas ou autre feete comprise en tiel declaracion sur quele le pleintif ou pleyntifs declare ou declarent ne estoit pas faitz ne cōmis dedeinz le temps del dit feire & Jurisdiccion del dit feire mes hors del temps de la dit feire ou (1) autres lieux hors de la jurisdiccion de mesme la feire solonq̄ la v̄itee en cell ptie; et sil soit ensi triez ou q̄ le pleintif ou pleintifs ou lour attourneye refusee ou refusent destre jurez en la fourme avantdit, q̄ donqes le defend^unt ou defend^untz soit ou soient quitez dimissez & deschargez en celle partie hors de celle Court, le partie pleintif de p̄ndre son av^ntage al cōen ley, ou autre lieu convenient come luy semble boon cest orden^nce nient contristeant; et q̄ chun Seneschall South Seneschall Baillif Cōmissarie ou autre Ministre ten^nt ou gov̄n^nt ascuns de les ditz Courtes qi face le contrarie de cest orden^nce forfacera pur chune defaute en celle partie Cent soutz, lune moite ent a n̄re ſ^r le Roy et lautre moite ent a celluy q̄ en cell parte voet suer sa accion sur cest orden^nce, p accion de dette en son ppre noun,

(1) as *Stat.* 17 *Edw. IV.*

Jurisdiccion of the same, wherof in trouthe they have no Jurisdiccion, surmittyng the contractes dettes trespas coven^ntes or other dedes to be doon within the tyme of the feires and within the Jurisdiccion of the same feires, where in trouth they were not so; And sumtyme uppon feyned playntes by ymaginacion [be[1]] evill disposed people to trouble theym to whome they owe evyll will, [sūme to thentent to make theym to lese their feire, and sūme[2]] to thentent that they shuld have for lucre, favorable enquestes of comers to the same feires where they take their accions, Wherby moche people comyng to the seide feires be grevously vexed and troubled be feyned accions, and also by accions of dettes trespasses dedes and contractes made and done out of the tyme of the seid feires or Jurisdiccion of the same, cont^ry to equyte & good consciens, wherby the lordes of the seid feires lose greate p̄fites by noon comynge of div̄s merchauntes to their feires, which for that [case[3]] absteyn theym, and also the cōmens for that [case[3]] ben worse ſved of suche stuff and m̄chaundise as els shuld come to the seid feires; Please it therfore youre Highnesse the p̄miss̄z concidered, by the advyce and assent of the Lordes Sp̄uelx and Tempelx in this your p̄sent pliament assembled, and by the auctorite of the same, to ordeign and to establisse[4] That from the fyrst daie of May [next cōmyng[5]] no Stiward Understyward Bailly Cōmissarie nor other Mynystre of [suche[6]] Courtes of Pepouders ([7]) hold plee, uppon any accion atte sute of any pson or psones, without the pleyntif or pleyntifs or his or their attorneis in p̄sence of þe defendaunt or defendauntes, if he or they or his or their attorneis desire it, make othe upon the holy Ev^ngelist uppon the declaracion, that the contract trespas or o[th]^r dede comprised in the same declaracion were made or doon w^tyn þe feire tyme of the seid feire where he taketh his accion, & withyn the boundes and Jurisdiccion of the same feire, and althaugh the seid pleyntif or pleyntifs by their othe afferme the same, that the seid defendaunt or defendaunt[e] be not concluded therby, but that they may aunswere and plede to the accion or in abatemente of the pleyntes and to tende an issue, that the same contract trespas or other dede, comprised in suche declaracion wheruppon the pleyntif or pleyntifs declaren, was not doon nor made within the feire tyme and Jurisdiccion of the seid feire, but out of the tyme of the feire or at other places out of the Jurisdiccion of the same feyre, after the trouth in that ptie; and if it be so tried, or that the Pleyntif or Pleyntifs or their attorney refusyn to be sworne in the fourme aforeseid, that then the defendant or defendauntes be quyte dismyssed and discharged in that behalff out of that Court, the pty pleyntyf to take his avauntage at the Cōen lawe or other place convenient as hym semeth good, this ordin^nce notwithstondyng; And that ev̄y Styward Understyward Baillif Cōmissarie or other Mynystre, holdyng and rulyng any of the seid Courtes, that doth the cont^ry of this ordin^nce shall for ev̄y default in that behalf forfeit an C. s. the on half therof to [your Highnes[8]] and the other half therof to hym that in that pty will sue his accion uppon this ordin^nce, by accion of dette in his owne name,

[1] of
[2] cause
} *Rot. Parl.* 17 *Edw. IV.*

[3] *Rot. Parl.* 17 *Edw. IV.* omits.

[4] See Note to French Text in preceding Page.

[5] then next following
[6] any
[7] pertaining to Fairs, should
[8] our sovereign Lord the King
} *Old Printed Translations.*

and that Writtes of pclamacion (1) in all goodly haste directe to evy Shiref of evy Shire of Englond to make this Ordinaunce to be pclaymed in evy [part 2] within his Shire, aswell within Fraunchise as without; And that the ordenaunce touching feires as is aforeseid shuld endure to the next pliament; Which ordinaunce is nowe exspired, and for ctayn the seid ordinaunce is full necessarie and requisite to endure for ev, and full pfitable to all the Cōens of this Roialme: Be it therfore ordeyned and establisshed be the auctorite of this psent pliament that the forseid ordin'nce be and stande in vertu and streyngħt, and a lawe to be executorie from the fest of the Anūciacion of our Lady next comyng ppetually after to endure.

Recited Ordinance 17 Edw. IV. made perpetual.

VII. *Rot. Parl. nu.* 25.

AN ACT for pclamacōn uppon Fynes levyed.

Recital of St. 27 Ed. I. stat. 1. c. 1.

WHERE it is ordeigned in the tyme of King Edward the fyrst by the Statute de finib; that notes and fynes to be levied in the Kinges Court afore his Justicez shold be openly and solempny radd and that plees in the measne tyme shulde cease and this to be doon by ij daies in the Weke after the Discrecion of the Justices, as in the same Statute more pleynly apperith; The Kyng consideryng that fynes ought to be of the grettist strengħ to avoide strives and debates & be fynall ende and conclusion, Woll it be ordeigned by thadvyse of the Lordes sp̄uelx and tempelx (3) in this p̄sent pliament assembled and by auctorite of the same, that after the Ingrossyng of evy fyne to be levied after the fest of Ester next cōmyng, in the Kinges Court afore his Justicez of the Cōmen place, of any londes teñt' or other hereditamentes, the same fyne be openly and solemply rad and pclaymed in the same Court the same ctme, and in iij ctmes of the yere next folowyng the same Ingrossyng in the same Court at iiij sevall daies in evy ctme; And in the [same 4] tyme that it is so redd and pclaymed all plees cesse; And ov that a t'nscript of the same fyne be sent by the seid Justices unto pe Justices of Assisez of pe Shire where the seid londes and teñt' ben, they to do rede & pclayme the seid fyne openly and solemply in evy their Cession of Assises to be holde the same yere, if thassises then hold, And all plees pe meane tyme to cesse; And also a like t'nscript of the seid fyne be sent to the Justices of Peas of the Shire where the said londes and teñt' ben, they to do make open and solempe pclamacion of the seid fyne in iiij genall Cessions of Peas to be holden the same yere; the seid Justices of Assises & Justices of Peas to ctifie the same pclamacion to the Justices of the Comen place the secund daie of retourne of the ctme then next folowyng; after which pclamacions doon and certified, the seid fyne to be fynall ende, and conclude aswell p'ves as est'unges to the same [except 5] Wymmen covt other then be parties to the seid fyne, and evy pson then beynge within age in prisone or out of this realme [or 6] not of hole mynde at the tyme of the seid fyne levied; And saving to evy psone or psones such right title clayme and int'esse as they have to or in the seid londes teñt' and other hereditament' tyme of suche fyne ingrosed; so that they p'sue their

How often Fines shall be proclaimed, in the Court of Common Pleas.

A Transcript of the Fine shall be sent to the Justices of Assise of the County where the Land lieth to be proclaimed there;

and a like Transcript to the Justices of the Peace;

The Justices of Assise, &c. shall certify the Proclamations to the Court of C.P.

Immediate Rights of Strangers saved, if pursued in Time.

et q̄ briefs de pclamacion ꝓroient fait en tout bon hast directz a chune Viscount de chune Countee Dengleterre de feere cest orden'nce destre pclamez en chune part deinz son Countee, sibien dedeinz fraunchise come dehors; Et q̄ lorden'nce touchant feires come est av'ntdit endureroit jesques al pschein plement; quelle orden'nce est ore expire, et pur certein la dit orden'nce est trop necessarie & requisite dendurer pur to's jours & trop pfitable a toutz les Cōens de cest Roialme: Il est pur ceo ordeigne & establie p auctorite de ceste p̄sent plement q̄ la suisdite orden'nce soit & estoise en vtue & force, & ley destre executorie a le feste de lannunciacion de nr̄e Dame pschein ven'nt ppetuelment apres dendurer.

Item come il soit ordeigne en le temps du Roy E. le primer p le statute de finib; q̄ notes & fines a levers en Court le Roy dev'nt sez Justices ꝓroient ovtement & solempnement lieuez, et q̄ plees en le meane temps cesseroient et ceo estre fait p deux jours en le Sepmaine solonq̄ la discrecion de les Justices, come en mesme le statute pluis pleinement appiert; Nr̄e dit f' le Roy considerant q̄ fines doient estre de la pluis greigno' force davoider estrives & debates & estre finall fine & conclusion, voet & ordeigne p ladvys de les f's Esp̄uelx & Temporelx & les Cōens en cest p̄sent plement assemblez & p auctorite del mesme q̄ apres lengrosement de chune fine a lever puis le feste del Paske pschein ven'nt en la Court du Roy dev'nt sez Justices del cōen Bank dascuns ꝓrez tenementez ou autres hereditamentes mesme le fine soit ovtement & solempnement lieuez & pclaimez en mesme la Court mesme le ctme, & en trois ctmes del an pschein ensuantz mesme lengrosement en mesme la Court as quatres sevalx jours en chune ctme, et en le mesme temps qil est ensi lieu & pclaime toutz pleez cessent; et oultre ceo une transcripte del mesme le fine soit envoiez p lez ditz Justices as Justices dassisez del Countee lou lez ditz ꝓres & teñtz sont, ils de feere lirer & pclaimer le dit fine ovtement & solempnement en chune leur Session dassises a teniers mesme lan, si lassisez adonquez teignent, & toutz plees le meane temps de cesser; & auxi une semble transcripte del dite fine soit envoiez as Justicez de peas del Countee lou les ditz ꝓres & teñtes sont, ils de feere faire ovte & solempne pclamacion del dit fine es quatrez genalx cessions de peax a teniers mesme lan; les ditz Justices Dassises & Justices de peas de ctifier mesme la pclamacion as les Justices del cōen Bank le secounde jour de reto'ne del ctme donqes pschein ensuant; apres quell pclamacion fait & ctifie le dit fine destre finall fin̄, & conclude si bien privez come est'ungez al mesme, forsprisez femmes covtez autres q̄ sont parties a le dit fine, et chune psone donqes estant deinz age en prison ou hors de cest Roialme ou nient de sain memorie al temps de le dit fine levez; Et sav'nt a chune psone ou psones autielx droit title claime & int'esse queux ils ount au ou en les ditz ꝓres teñtes & autres hereditamentes temps dautiel fine engrose; Issint q̄ ceux

vij.

1 be made *Old Printed Translations.*
2 Fair *Rot. Parl.* 17 *Edw. IV.*
3 and the Commons *Old Printed Translations.*
4 mesne *in the Margin of the Roll; in a more modern Hand.*
5 } Interlined on the Roll.
6 }

pursuont lour dit droit title claime ou intʳesse p voie daccion ou leal entre deinz cynq ans pscheinz apres la dit pclamacion ctefie: Et auxi savᵛnt a toutz autres psones tielx accion droit title claime & intʳesse en ou a les ditz tres teñtes & autres enheritementes queux accresteront remaindront ou descendront ou deviendront as eux, puis le dit fine engrose p force dascun doon en le taill ou p ascune autre cause ou mater eue ou fait devᵛnt le dit fine levez; Issint q̃ ceux pignent lour accion ou pursuent lour dit droit & title accordᵛunt a la leie deinz cynq ans proscheins apres tielx accion title claime ou intʳesse as eux accruez descenduz remaignez ou devenuz. Et q̃ les ditz psones & leur heires puissent avoir leur dit accion envs le pnour des pfites de les ditz tres & teñtes & autres hereditamentes temps del mesme laccion apprendiers. Et si mesmes les psones, al temps de tielx accion droit & title accruez descenduz remaignez ou devenuz as eux, soient covtz de Baron ou deinz age en prison ou hors de cest tre ou hors de sain memorie, Il est ordeigne p lauctorite avᵛntdit q̃ leur accions droit & title soient reservez & savez as eux & lour heires jusqes al temps ils veignent & soient a leur plein age hors de prison deinz cest tre descovtz & de sain memorie; Issint q̃ils ou lour heires preigneᵗ leur ditz accions ou lour leal entre accordᵛunt a leur droit & title deinz cynq ans pscheins apres q̃ils veignent & sont a leur pleine age hors de prison deinz cest tre descovtz & de sain memorie, et mesmes accions pursuent ou leur leall entre pignent ovecq effecte accordaunt a la leie. Et auxi il est ordeignez p lauctorite suisdit q̃ toutz tielx psones quelles sont covtez nient partie al fine et chune psone esteant deinz age en prison ou hors de cest tre ou hors de sain memorie al temps de lez ditz fines levez & engrosez & p cest act devᵛnt forsprisez, aiantz ascun droit ou title ou cause daccion as ascuns de lez ditz tres tenementz & autres hereditamentes, q̃ ceux ou leur heires preignent leur ditz accions ou leal entre accordaunt a lour droit & title deinz cynq ans pscheins apres q̃ils veignont & soient de plein age hors de prison discovtz deinz cest tre & de sain memoire, & mesmes les accions suont ou leur leal entre preignont & pursuount ovecq effect accordaunt al la leie; et si ils ne facent & pregnent pas leur accions & entre si come est avᵛntdit q̃ lors ils soient concludez p les ditz fines pur toutz jours en semblable fourme come ceux sont qi sont parties & privez a les dites fines. Et p la dit auctorite il est ordeignez q̃ chescun fine q̃ decy enapres tra levez es ascuns Courtez du Roy, dascuns Maners trez teñtes ou autres possessions, solonq les manᵈ usage & fourme q̃ fines ount estee levez devᵛnt la fesaunce de cest acte soit de semblable force effect & auctorite coᵐ fines ensy levez sont ou furent devᵛnt la fesaunce de cest acte, cest act ou ascun autre acte en cest plement fait ou affaire nient contristeant; et q̃ chescune psone soit a sa libtee de lever ascune fine en apres solonq son pleasure quelle il voet solonq la fourme contenuz & ordeinez en & p cest act ou solonq lez manᵈ & fourme avᵛnt temps usez.

seid right title clayme or intʳesse by wey of accion or lawfull entre within v. yeres next after the seid pclamacions ctified: And also saving to all other psones such accion right title clayme and intʳesse in or to the seid londes Teñtᶜ & other Hereditamentᶜ as shall growe remayne or descende or come to theym, after the seid fyne Ingrosed, by force of any yeft in the taill or by any other cause or matter hadde or made byfore the seid fyne levied; so that they take their accion or pʳsue their seid right & title accordyng to the lawe within v. yeres next after such accion right title clayme or intʳesse to theym accrued, discendid, remayned or come: And that the seid psones and their heirez may have their seid accion ayenst the pnoʳ of the pfites of the seid londes & teñtᶜ and other hereditementᶜ tyme of the same accion to be taken. And if the same psones, at tyme of suche accion right and title accrued discended remayned or cõme unto theym be covt de baron or within age in prison or oute of this Lande or out of hole mynde, That then be it ordeigned by the auctorite aforeseid that their accions right and title be reserved & savid to theym and their heires, unto the tyme they come and be at their full age out of prison withyn this lande uncovt & of hole mynde; so that they or their heires take their seid accions or their lawfull entre accordyng to their right and title within v. yeres next after that they come and be at their full age, out of prison, within this lande, uncovt, & of hole mynde, And the same accions pʳsue or their lawfull entre take with effecte accordynge to the lawe. And also be it ordeigned, by thauctorite aforeseid, that all suche psones as be covt, not pty to the fyne, and evy psone beyng within age in prison or out of this lande or out of hole mynde, at the tyme of the seid fynes levied & engrosed, and by this seid acte before except, havyng any right or title or cause of accion to any of the seid londes teñtᶜ and other hereditamentᶜ that they or their heires take their seid accions or lawfull entre accordyng to their right and title, within v. yeres next after they come and be of full age, out of prison, uncovt, within this land, and of hole mynde, and the same accions sue or their lawfull entre take and pʳsue with effecte accordyng to the lawe; And if they do and take not their accions & entre as is aforeseid, that then they be concluded by the seid fynes for evᵉ, in like fourme as they ben that be ptyes and pʳves to the seid fynes. And that it be ordeigned by the seid auctorite that evy fyne that herafter shalbe levied in any of the Kyngᶜ Courtes of any Manᵈs londes teñtᶜ or other possessions after the maner use & foʳme þ fynes have be levied afore the makyng of this acte, be of like force effect and auctorite as fynes so levied be or were afore the makyng of this acte, this acte or any other acte in this pʳsent pliament made or to be made notwithstondyng; And that evy psone be at his libte to leve any fyne hereafter after his pleasure whedyr he will after the fourme conteyned and ordeigned in and by this acte or after the maner and fourme afore tyme used.

The Rights of Strangers, accruing afterwards, saved.

Actions maintainable against the Pernor of Profits.

The Rights of Infants, Women Covert, &c. may be exercised within Five Years after such Disabilities are removed.

An Entry must be made or an Action taken within such Five Years;

Fines at the Common Law shall be of the same Force they were before this Act.

Fines may be levied according to this Statute, or as heretofore.

VIII. *Rot. Parl.* nu. 26.

An Act touchinge the order of dyinge and of Woll[e] and Clothes.

[[1] To the King oure Sov̄aigne Lorde Praien unto youre Highnesse youre true subgiett[e] and Cōmens in this p̄sent pliament assembled, that where in tyme passed this youre Realme of Englond hath greatly bē encresed and riched by the meane of true makyng and drapyng and also of true dying of Wollen Cloth, wherby a greate substaunce of the people of youre seid Realme have ben set on werk and not fallen to Idelnesse as dailly nowe they doo, but therby truly have goten their levyng, It is so nowe most g[a]cious sov̄aigne lorde that the Wollen clothes which in late daies have be made and yet dailly ben made within this youre realme ben unp̄fite and deceyvably made and wrought kepyng nother resonable lengh̄ nor brede; And the same Clothes so as it is aforeseid unp̄fitly made and deceyvably wrought afterward bē put to be shorne and afore be not fully wette; And many of the seid Clothes after they ben fully wette and shorn ben sett uppon Tayntours and drawen out in leyngh̄ and brede, that is to say sōme of the same Clothes beyng but of the lengh̄t of xxiiij yerdys ben drawen out into lenght of xxx[ti] yerdis, And in brede from vij quarters unto the brede of ij yerdys, the whiche Clothes so shorn or they be wett or ells drawen in lengh̄ or in brede as it is aforeseid, after that they receyve any wette they most of werrey necessite shrynk; And also the Clothmakers and other of yo[r] seid Realme oftyntymes when they make any course Clothes and also the Sellers of suche course Clothes, beyng bare of threde usen for to powder and caste flokkys of fynner Cloth uppon the same course Clothes to thentent to make the same Clothe to appere fyne and good; And also the seid Clothmakers and other put and caste Chalke uppon white Clothes to thentent to make the same Clothes to appere bett[r] then they ben:

And moreov̄ greate quantite of Wolles ben hadd out of this youre seid Roialme by Straungiers and other in Carak[e] Galeis and Shippes which ben sorted the bett[r] from the worse barbed and clakked, and therof is made moche lokkys and refuse, of the whiche the refuse in substaunce is lefte within this yewre seid Roialme and therof moche course Cloth is made w[t]in the same Realme, and so the fyne Wolles ben hadd out of this your seid Realme by the seid strayngiers and the course Wolles and refuse here lefte, by reason wherof there canne be no substaunce of fyne Drapery made within this your s.d Roialme, to the greate losse of youre said Highnesse in youre Custume in payng lesse Custume for the lokkys than for the hole woll yn flese, and also to the greate hurt and dekay of all your seid Realme in enpayryng of the seid Drapery:

Also, most g[a]cious Sov̄eigne Lorde, Diers within mony Citeys Burghes and Townes of this your seid Realme of Englond usen to dye greate quantite aswell of fyne Clothes as of course Clothes with Orchell and Corke brought from beyonde the See called Jarecork, the colours made with the which Orchell and Corke ben so diseyvable that the same Colours may in no wise abyde but faden away, to the greate hurt of all theym that were or occupye any suche Cloth so deceyvably died:

Also the seid Diers usen to dye many Clothes of dyv̄s colours and uppon the lystes of the same Clothes festen and sowe greate Risshes called bull Risshes to thentent to make the same Clothes to

[1] See Note to the French Text.

viij.

[[1] Item en le dit parlement furent mounstrez plusours enconvenientises deceites & deloialtees euez faitz & usez ([2]) en faisaunce de draps; Pur remoeuement des quelles Nr̄e dit s[r] le Roy de ladvys ([3]) des ditz s[r]s Esp̄uelx & Temporelx & a la request de les Cōens en le dit parlement assemblez & p auctorite del mesme ad ordeigne & enacte [4]]

[1]—[4] See Note 4.

[2] en cest dit realme dengleſe *MS. Pet.*

[3] & assent *MS. Pet.*

[4] Instead of the long Preamble to this Act as inrolled on the Parliament Roll, and printed in modern Editions of the Statutes, the Old Printed Translations read, nearly in conformity with the French Text, as follows:

"Item, In the said Parliament were shewed divers Inconveniences and Deceits had made and used in the said Realm of England in making of Cloths; For the avoiding whereof our said Sovereign Lord the King, by the Advice and Assent of the said Lords Spiritual and Temporal, and at the Request of the Commons in the said Parliament assembled, and by Authority of the same, hath ordained, established, and enacted"

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q̄ nulle psone faisour de draps nautre vende ne mette a vend, apres le fest de Seint Michell larchangel pschein ven^nt, ascun drap lanuz appellez brode cloth sinon av^nt mesme le drap soit pleinement enewez; et q̄ chune entier drap lanuz appellez brode cloth quele s̄ra fait apres le dit feste puis qil soit pleinement enewez prest al vend teigne & conteigne en longure xxiiij v̄ges, & a chescun v̄ge une pouz conteign^nt la laieur dun pouz le hōme, destre mesurez p la crest de mesme le drap̄, & en laieur ij v̄ges deinz les listes p tout la longeur del mesme; auxi q̄ chescun demy drap des ditz entiers draps affaires apres le dit feste puis sa pleine enewance p̄st al vend teigne & conteigne xij v̄ges en longeure au meins ovesq̄ les poucez desuisditz destre mesurez p la Crest & ij v̄ges en laieur deinz les listes, Issint toutz foitz q̄ mesme le demy drap̄ nexcede la longeur de xvj v̄ges; sur peine del trencheure de lentiere drap en trois pecez & del trencheure de le demy drap en deux peces, et auxi de pdre pur chune entier drap vj s. viij d. et pur chescune demy drap iij s. iiij d. apres le dit fest faitz venduz ou misez al vend nient pleynement enewez ou faitz puis le dit feste nient gard^unt leur mesure desuis ordeignez; et si le dit entier drap̄ [drap̄ [1]] soit pluis longe en mesure q̄ les ditz xxiiij v̄ges & lez poucez desuisditz, et le demy drap̄ del mesme soit pluis longe q̄ xij v̄ges ovecq̄ desuisditz pouces, q̄ lors lachatour de mesme lentiere drap̄ a paier pur taunt qil excede en la mesure de xxiiij v̄ges, et lachatour de le dit demy drap a paier pur taunt qu^nt il excede xij v̄ges, Issint toutz foitz q̄ le dit demye drap ne passe pas la longeur de xvj v̄ges come il est desuisdit: auxi q̄ toutz mañs draps appelles streites affaires puis le dit fest apres leur pleyn enewance p̄stes destre misez al vend teigne & conteigne en longeure douze v̄ges & les pouces solonq̄ la mesure av^ntdit, et en laieure une v̄ge deinz lez listes & p tout la longeur del mesme, sur peine del trencheure del dit streite en deux peces et auxi de p̄rdre pur mesme le Streite xx d: auxi q̄ chune drap̄ appellez karsey estre faitz & mys al vend puis le dit feste apres la pleine enewance prest al vend teigne & conteigne en longeure xviij v̄ges & lez

[1] An erroneous Repetition.

appere of oñ colowre and the listes of an other coloure wherthurgh the byers of the seid Clothes can ne may unneth understond but that the same Clothes ben died out of Wolle, to the greate hurte of you moost drad Sov̄aigne Lorde and of all youre true Subgiett̄ which shall were or occupie the same Clothes; and by occasion of the which unperfite and untrewe makyng dying and deceyvable delyng, merch^untes of strange Contrez which hath used to bye Clothes made and died in this your seid Realme unneth derr bye eny of the seid Clothes, to the greate rebuke and dishonoure of the same Realme & hurte of your Highnes & of all youre seid Realme; Wheruppon but if the rather a remedy be p'veid by youre most noble g^ce of werry likelyhode consequently shall ensue the destruccion of Drapery of all this your seid Realme, which God defende: Please it therfore yo' Highnesse of youre moost habundaunt grace by thassent of the Lordes s̄puelx and tempelx in this p̄sent pliament assembled and by auctorite of the same to ordeigne and enacte'] That no psone Clothmaker nor other selle nor put to sale after the fest of Seint Mycchell tharchaungell next cōmyng any wollen Cloth called brode Cloth [but if afore the same Cloth be fully wett[2]]; And that ev̄y hole wolen Cloth called brode Cloth, which shall be made after the seid feste after that it be full wett redy to the Sale, hold and conteyn in leenght xxiiij yerdis and to ev̄y yerde an ynche conteynnyng the brede of a mānes thombe, to be measured by the Crest of the same Cloth, and in brede ij yerdis within the lystes by all the leynght of the same; Also that ev̄y half Cloth of the seid hole Clothes, to be made after the seid fest, after his full wetyng redy to the Sale, holde & conteygne xij yerdis in leynght at the lest with the ynches aboveseid to be measured by the Creste, and ij yerdis in brede within the listes, so all wey that the same halff cloth excede not þe leynght of xvj yerdes; uppon peyne of cuttyng of the hole cloth in iij peses and of cuttyng of the half Cloth in ij peces, and also to lose for ev̄y hocle Cloth vj s. viij d. and for every half Cloth iij s. iiij d. after the seid feste made solde or put to Sale not fully wett, or made after the seid fest not kepyng their mesure above ordeigned; And if the seid hole Cloth be lenger in measure than the seid xxiiij yerdes and the ynches aboveseid, and the half Cloth of the same be lenger than xij yerdys with ynches aboveseid, that then the byer of the same hoole Cloth to pay for somuch as it excedeth in the measure of xxiiij yerdes, and the bier of the seid half Cloth to pay (') so much as it excedith xij yerdes, so alway that the seid half Clothe passe not the lenght of xvj yerdes as it is aboveseid: Also that all maner Clothes called Straytes, to be made after the seid fest, after their full wetyng redy to be put to Sale holde and conteigne in lenght xij yerdes and the ynchys after the measure aforeseid, and in brede a yerde w'yn the listes (*) by all the lenght of the same, uppon peyn of cuttyng of the seid Streite in ij peses, and also to lese for the same Straite xx d: Also that ev̄y Clothe called Carsey, to be made and put to Sale after the seid fest, after the full wetyng redy to the Sale hold and conteyne in leynght xviij yerdes and the

Broad Cloth shall be fully watered, before it be put to Sale.

The Length and Breadth of Whole Cloths and Half Cloths.

Penalty.

The Length and Breadth of Straytes.

The Length and Breadth of Kerseys.

[1] See Note [1] to French Text in preceding Page.

[2] unless the same Cloth be before fully watered [3] for [4] and } *Printed Translations.*

There are many other Variances in the Printed Copies, not justified by the French Text, nor by the Inrollment in Chancery.

ynches as is aforeseid, and in brede a yerde and the naile at the lest within the listes, uppon peyne of cuttyng of the seid Carsey in ij pecis and to lese for the same Carsey iij s. iiij d. all the said forfaitures paynes and losses to renne on the Sellers of the seid Clothes whiche shall be made contrary to this Acte. And that evy of the seid Clothes and half Clothes Straites and Carseis be parfitly and directly made [thrughly from that oon ende to that other :[1]] Also that afore the seid fest by [your[2]] Tresourer of Englond be pvided and ordeigned Seales to be impssed in lede, havyng [youre[3]] Armes of Englond on the oon side and on the other syde the Armes signe or tokyn of evy Citee Burgh or Towne within this Realme where ([4]) Cloth is made, havyng any suche armes signe or tokyn, for a merke and evident tokyn and knowlege of ([4]) Cloth made within evy suche Citee Burgh and Town of this Realme; and ov that Seales for evy Shire of this Reame for the sealyng of all maner Cloth made within evy Shire, out of the seid Citees Burghes or Townes of the same Shire, havyng on the oon side [your seid armes[5]] and on the other side the name of the Shyre therin inprynted. And that the Tresorer of Englond for the tyme beynge depute nor make, from the seid fest, eny psone or psones to be Aulner Sealer or Keper of Seale within any parte of this Reame, but such as be expte in Cloth makyng, and to be of the sufficiante of an C li. at the lest, tyme of the seid Deputacion; and that no Aulner Seler or kep of any Seale to be pvided as is aforeseid after the seid Fest, seale any of the seid hole Clothes halff Clothes Streites or Kerseys but such as shall be oonly made after the same fest within the Shire Citee Burgh or Towne wherof he shalbe deputed Aulner Seler or kep, uppon peyne to forfeit to [your Highnesse[6]] for evy hoole Cloth contrie sealed v. mrc, for every halff Cloth xxxiij s. iiij d. for evy Streite xx s. and for evy Kersey x s. Also that no man psone what so ev he be after the seid fest set nor drawe nor cause to be sett or drawen in lengh or brede within this [youre seid[7]] Realme of Englond, any maner of Wollen Cloth, after it be fully wett, by the meane of teynteryng or otherwise, uppon payne of forfaiture of the same Cloth. Also that no man what Condicion so ev he be within the seid Realme, after the seid fest, sett caste or putte uppon any maner Cloth any flokkys or eny other like deceyvable thyng, uppon peyne of xl s. for evy Cloth wheruppon any suche psone shall caste any flokkys or other thyng: Also that no Clothmaker nor other psone what so ev he be, after the seid fest, put or ley uppon any white Cloth or Kersey any Chalke, uppon the same payne. Also that no Sherman nor other psone what so ev he be, after the seid fest, shere nor cancell any Cloth within this [youre seid[7]] Roialme but if the same Cloth be afore fully wette, uppon peyne of forfeiture of xl. s. for evy Cloth as ofte as he so doth: Also that no maner psone, Straungier nor other, send nor convey any Wollen Cloth over the See, after the seid fest, but if the same Cloth be afore fully wett; and after the same Cloth so be fully wette that than in no

Seals of Lead to seal Cloth for every City, Town, and County where Cloth is made.

Aulnagers shall be Persons of Skill and Sufficiency.

Penalty, for Aulnager sealing Cloths not made within his Jurisdiction.

Cloth shall not be drawn out by tentering or otherwise, after the watering.

Penalty.

No deceitful Thing shall be put upon Cloth.

No Chalk shall be put upon white Cloth.

No shearing of Cloth not being fully watered;

Nor exporting thereof beyond Sea.

pouces come il est desuisdit, & en laeure une vge & le naile au meyns deinz les listes, sur peyne del trencheure del dit karsey en deux peces & de pdre pur mesme le karseie iij s. iiij d. toutz lez avntditz forfaiturez peines & pdes de currer sur les vendours de les ditz draps quels sront faitz contrarie a cest acte. Et q chune de les dits draps demy draps Streites & karseyes soit parfitment & direttement fait p my tout del une fine jusquez lautre: auxi q avnt le dit fest p le Tresorer Dengletre soient purveuez & ordeignez seales destre enpssez en plumb eiantz les armes du Roy Dengletre en lune coste, & en lautre coste les armes signe ou token de chune Citee Burgh ou Ville deinz cest Roialme lou draps est fait, eiant ascuns tielx armes signe ou token, pur merk & evident token & conisaunce del draps fait deinz chune tiel Citee Burgh & Ville de cest Roialme; et oustre ceo seales pur chune Countee cestuy Roialme pur ensealement de tout mans draps fait deinz chescun Countee, hors de les ditz Citees Burghs ou Villez del mesme le Countee, eiant en lune costee les ditz armes nre [7] le Roy et en lautre costee le noun del Countee en ycell enpssez. Et q le Tresorer Dengletre pur le temps esteant depute ne face, a le dit feste, ascune psone ou psones destre aulneour sealour ou gardein de Seale deinz ascun part cestuy Roialme, mez tielx quelx sont expertz en faisance de draps & destre de la sufficialtee de C li. au meins, temps de la dit deputacion; Et q null aulnour Sealour ou Gardeyn, dascun seale destre purveux come est avntdit, apres la dit feste, seale ascune de les ditz entiers draps demy draps Streites ou karseies, mes tielx quelx srount tantsolement faitz apres mesme le feste deinz le Countee Citee Burgh ou Ville de quele il sra deputez aulnour Sealour ou Gardein, sur peine de forfeire au nre [6] le Roy pur chune entier drap contrarie sealez v. marcz pur chune demy drap xxxiij s. iiij d. pur chun Streite xx s. et pur chune karseie x s. Auxi q null psone quel qil soit puis le dit fest mette ne traihe, ne cause destre mis ou traihez en longeur ou laieur deinz cest dit Roialme Dengletre, ascun man de draps lanuz, apres qil soit pleinement enewe, p moien del Tenturaunce ou autrement sur payne de forfaitur de mesme le drap. Auxint q null hme de quele condicion qil soit deinz le dit Roiat, apres le dit feste, sette gette ou mette sur ascun man draps ascuns flokkes ou ascun autre semble deceivable chose, sur peyn de qarant soulz pur chune drap sur quele ascune tiel psone get a ascuns flokkes ou autre chose: auxi q null feisour de drape nautre psone quele qil soit, puis le dit fest, mette ou gette sur ascun blance drap ou kersey ascun chalke, sur mesme la peine. Auxi q null Tondour nautre psone quele qil soit, puis le dit feste, tonde ne cancelle ascun drap deinz cest dit Roialme, sinon le drap soit avnt pleinement enewe, sur peine de forfeitur de xl s. pur chune drape si sovent come il ensi ferra: auxint q null man pson, [illegible] nautre, envoie ne convoie ascun drap launz oultre le meere, puis le dit feste, sinon mesme le drap soit avnt pleinement enewe; et puis q mesme le drap soit ensi pleinement enewe q lors en null maner soit mis ne

[1] throughout from one End to the other.
[2] the [3] the King's
[4] the [5] the King's Arms
[6] our Sovereign Lord the King [7] *omitted.*
} *Printed Translations.*

traihe en longeur ne laieur, sur peine de q̄rant soulz pur chune drap̄ contrarie a cest acte convoie ou envoie oultre le meere: auxint q̄ null man̄e psone deinz cest dit Roialme, puis le dit feste, retaile ascun drap ou draps lanuz lynur nautre sinon y soit av'nt pleynement enewe, et puis q̄il soit pleinement enewe en null man̄e soit mis ne traihe en longeur ou laieur, sur peyne de forfeitur̄ mesme le drap̄ ou le value ent, mesme la peine de currer sur le vendour de toutz tielx draps. Auxint nr̄e dit *f'* le Roy, en eschuer del graund fauxeine & deceipte quelx ount accruez & de jour en autre accruont p le moien des Tentures, ad p lassent & auctorite desuisditz ordeigne & enacte, q̄ null psone quel qil soit garde aiet ou occupie ascuns Tenture ou ascun autre chose en sa ppre meason ou lieu de sa habitacion, p quel drap̄ lanuez poet en ascune maner estre traihe hors en longeur ou laieur, sur peine de xx li. si sovent come il ensi ferra contrarie a cest acte; mez q̄ toutz Tentures queux decy enapres s̄ront usez ou occupiez, pur equacion del drap̄ tantsoulement apres qil vient de molin & dev'nt il soit roughez & pur null autre cause, sibien deinz la Citee de Loundrez come es aut̄s Citees Burghs & Villez de cest Roialme soient fichez es lieux ov̄tz; Et q̄ le Mair de Loundrez pur le temps esteant, & toutz aut̄s Mairs & Baillifs & autrez Gov̄nours dez Citeez Burghs Villez & Villagez de cest dit Roialme, diligealment surveient q̄ toutz draps queux s̄ront misez sur Tenturez ne soient treihez hors en longeur & laieur autrement q̄ est av'nt reherce. Auxi q̄ puis le dit fest null est'unge achate ascun laine, quel s̄ra envoie ou passera p lez streites de Marrok p Galeis Carrakes ou Niefs ou autrez vesseaux, sorte clakke ou barbe, Ne ascune laine de quele lokkes ou refuse s̄ra fait; mes q̄ mesme la laine soit come il est tondue & purement enrolle s'unz deceipte, & marchandizable solonq̄ la cress'unce del pays, saunz ascun sorter berder clakker ou lokkes ou refusee ent affaire come il est av'ntdit, sur peine de forfaiture mesme la laine & le double value ent. Pluis oultre nr̄e dit *f'* le Roy ad ordeigne & enacte p lauctorite desuisdit, q̄ null Tinctour nautre psone tiencte ou cause estre tinctez deinz cest dit Roialme Dengletre puis le dit fest ascun drap̄ lanuez oveqz Orchell ou Cork appellez Jarecorke, sur payne de forfaiture & pdicion de xl s. pur chune drap̄ qil ou ascuns autre pur luy ou a son use ensy tinctera ou causera estre tinctez; Ne q̄ null man̄ psone quel qil soit puis le dit feste vende ou mette a vend deinz cest dit Roialme Dengletre ascun tiel drap, le quel puis mesme le fest s̄ra tinctez oveqz Orchel ou Cork appellez Jarecork, sur payne de forfaiture mesme le drap ensi tinctez ou mis a vend contrariea cest acte, les peine & pdes de ceo toutz foitz de currer sur le vendour; Forsprise q̄ Cork fait deinz cest Roialme Dengletre poet estre usee [& [1]] tincture sur laine waidez, et auxi en tincture de tout tiel drap̄ q̄ est fait tantsoulement de laine waidez, Issint q̄ mesmes les laine & drap soient parfitment coittez & maderez; Forsprise auxi q̄ Cork fait en cest dit Rbialme poet estre mys sur drap̄ q̄ est parfitment coitte & maderez. Auxi q̄ null Tinctour

[1] en *Old Printed Copies.*

maner wyse ([1]) be set or drawen in leynght nor brede, uppon payne of xl. s. for ev̄y Cloth contrary to this Acte conveid or sent over the See: Also that no man̄ psone within this [youre said [2]] Roialme, after the seid feste, retaile any Wollen Cloth or Clothes lynyng or other, but if it be afore fully wette, and after it be fully wett ([1]) in no wise be set nor drawen in lenght or brede uppon payne of forfaiture of the same Cloth or the value therof, the same payne to renne upon the Seller of all such Clothes. [Please it also your noble Grace [3]] in eschewyng of the greate untrueth and disceyte the which ([2]) dailly groweth by the meane of Teyntours, by thassent and auctorite aboveseid [to ordeigne and enacte [4]] that no psone, what so ever he be, kepe have or occupye any Tayntō or any other thyng in his owne howse or dwellyng place, wherby Wollen Cloth may in any wise be drawen out in lenght or brede, uppon peyne of xx li. as ofte as he so doth cont'ry to this acte; but that all Tayntours which hereafter shall be used or occupied, for evenynge of Cloth onely after it cōmeth from the Mille and before it be roughed & for noon other cause, aswell within the Citee of London as in other Citees Burghes and Townes of this [youre [5]] Realme, be sette in open places; and that the Maire of London for the tyme beyng, and all other Maires and Bailliefs and other Governours of Citees Burghes Townes and Villages of [your [6]] said Realme, diligently overse that all Clothes that shalbe sett on Tayntours be not drawen oute in lenght nor brede otherwise than is afore reherced. Also that, after the seid feste, no Straungier by any woll, the whiche shalbe sente or passe thrugh the Streyt̄ of Marok by Carakes Galeis or Shippes or other Vessell̄, sorted clakked or barbed, nor any Woll wherof lokes or refuse shall be made; but that the same Wolle be as it is shorn and clene wounde without disceyte, and m̄chaundizable after the Countrie growyng, without any sortyng berdyng clakkyng or lokes or refuse therof to be made as it is aforeseid, uppon payne of forfaiture of the same Wolle and the double value therof. Firthermor [pleas it yo' noble g'ce to ordeign̄ and enacte [7]] by thauctorite aboveseid, that no Dyer nor other psone die or cause to be dyed within this [youre [4]] Realme of Englond, after the seid feste, any Wollen Cloth with Orchell or Cork called Jarecork, uppon payne of forfaiture & lesynge of xl. s. for ev̄y Cloth that he or any other for hym or to his use so shall die or cause to be dyed; nor no man̄ psone what so ev̄ he be, after the seid fest, sell or put to sale within the said Realme of Englond any suche Clothe, the whiche after the same feste shalbe dyed w' Orchell or Coorke called Jarecork, uppon payne of forfaitur of the same Cloth so died or put to sale contrary to this Acte, the payne and losse therof all wey to renne uppon the Seller; except that Coork made in this [your [3]] Realme of Englond may be used in dying uppon Wolle woded, and also in dying of all suche Cloth as is made only of Wolle woded, so that the same Wolle and Clothe be pfitly boyled and madered; Except also that Coork made in [your [6]] seid Realme may be put uppon Clothe that is pfitly boiled and madered. Also that no Dyer dye

No retailing of Cloth, not fully watered; nor drawing it out after it be watered.

None shall keep a Tenter in his House.

Tenters shall be set in open Places.

What Sort of Wool Strangers may buy, to pass through the Streights of Morocco.

No Cloth shall be dyed with Orchell, or Cork called Jarecork.

Penalty.

No Cloth so dyed shall be put to Sale.

Exceptions.

[1] it shall
[2] *omitted.*
[3] Also our said Sovereign Lord the King
[4] hath grown and
[5] hath ordained and enacted
[6] this
[7] our said Sovereign Lord the King hath ordained and enacted

} *Printed Translations.*

The Cloth and List shall be dyed with one Colour.

any Cloth within youre said Realme after the said feste, but that the seid Dyer dye the same Clothe and lyste therof with oon colowre, without [festyng [1]] or sowyng of any buille Risshes or lyke thynge uppon the listys of the same, uppon payne of forfaiture of xl s. for evy Cloth that he so shall dye contrary to this Acte:

Penalty.

And that no maner psone what so ev he be, put to sale w'in the said Realme, after the seid feste, any maner Cloth whiche after the same feste shalbe so deceyvably died, uppon peyne of forfaiture of the same Clothe or the value therof the same forfaiture and payne alwey to renne upon the Seller.

No Cloth so deceitfully dyed shall be put to Sale.

Also that if any of [youre seid [2]] Subgiett or other hereafter shall hapne to sease any Wollen Clothe otherwise made or died than is above said, that then the same [youre [3]] Subget or other bryng all the same Cloth or Clothes, so by hym seased, afore the Maier Baillief or other Govnowre of the Citees Burghes Townes or Vilages where it shall hapne any suche Seasure to be made (*) the same Clothe or Clothes, there to be jugged by the Discrecion of the said Maire Baillief or other Govnoure, callyng unto hym or theym suche psones as by his or their Discrecions shalbe thought convenient, wheder the same Cloth be otherwise made wrought or dyed than is accordyng w' the Actes above reherced;

Faulty Cloths seised, shall be brought to the Mayor or other Officer of Cities, &c. to be judged by their Discretion.

Penalties, and the Apportionment thereof.

And if it be demyd by the said Maire Baillief or other Govnoure, and other psones to theym or to any of theym as it is aforesaid called, the same Clothe to be made or died and putto sale contrary to the Actes abovesaid, That than the same Clothe so seased and by theym jugged as is abovesaid, [egally to be kytte [4]] in thre peces in the psence of the said Maire Baillief or Govnoure, whereof on pte to be delived into theschequyer by hym or theym that so shall sease the same Clothe or Clothes, [to thuse of your Highnesse,[5]] and the secunde parte therof to be delived to the Seasour of the seid Clothe or Clothes, and the thrid parte therof to be delived to the seid Maire Baillief or [other [3]] Govnoure to thuse of the Coialtee where they or any of theym ben Maire Baillief or Govnoure; [that [7]] on half of all other fynes forfaitures and penalties aforeseid and of evyche of theym to be [unto youre said Highnesse,[8]] and [that [7]] other be to hym or theym of [your [9]] Subgiett the whiche shall sease the same, or sue for the same by accion of Dette by Writte atte Comen Lawe by Bill or Playnte after the Custume of the Citee Towne or Port where it shall hapne hereafter any suche fynes forfaitures or pennalties to fall or be; And that the Defendaunt in any suche Accion be not admitted to wage or do his lawe, nor that any pteccion nor Esson de svice le Roy for any suche Defendaunt be allowed in the same.

Cloths, whereunto this Statute extendeth not.

Provided alwey that this Acte, or any thyng therin conteyned, extende not or be pjudicall of or to the makyng of any Wollen Clothe called Ray, nor of or to eny Cloth made in Whynchestre or Salisbury used to be set and joyned with Ray, a Clothe therof comonly used to be soold at xl. s. or within; nor of or to the makynge of eny Clothe called Vervise otherwise called Plounkett Turkyns or Celestrines w' [broode [10]] listes; nor to eny Clothes

[1] tacking [2] the King's [3] *omitted.*
[4] of [5] shall be cut [6] to the King's Use } *Printed*
[7] the [8] to our Sovereign Lord the King } *Translations.*
[9] the King's [10] laysed

tincte ascun drape deinz le dit Roialme, puis le dit fest, mesqe le dit Tinctour tincte mesme le drap & list dicell ovecqz une colour, saunz attacher or consuer dascuns bull Russhes ou chose semblable sur les listes del mesme, sur peine de forfeiture de qarant soulz pur chune drap qil ensi tinctera a contrarie a cest acte: Et q null man psone quel qil soit mette a vend deinz le dit Roialme, puis le dit fest, ascun man drap qi apres mesme le feste sra ensi deceivablement tinctez, sur pein de forfeiture de mesme le drap ou le value dicell; mesmes les forfaiture & peine toutz foitz de currer sur le vendour.

Auxint q si ascun de les Subgiettes du Roy ou autre de cy en apres aviendra de seasir ascun drap lanuz, autrement fait ou tincte q desuis est dit, q lors mesme le Subgiet ou autre amesne tout mesme le drap ou draps, ensi p luy seisiez, dev'nt le Mair Baillifs ou autre Govnour de les Citees Burghs ou Villes ou Villages lou il aviendra ascun tiel seasir estre fait de mesme le drap ou draps, illeoques ajugers p la discrecion de la dit Maire Baillif ou autre Govnour, appellant a luy ou ceux tielx psones come p sa ou leur discrecion semblera convenientez, quelle mesme [mesme [1]] le drap soit autrement fait ove ou tincte q est accord'unt ovesqz les actes desuis recitez; et sil soit juge p le dit Maire Baillif ou aut' Govnour, & autres psones as eux ou au ascun deux come il est av'ntdit appellez, mesme le drap estre fait ou tincte & mis au vend cont'rie a les actes desuisditz, q lors mesme le drap ensi seisie & p eux juge eome il est desuisdit destre trenche en trois peces en la psence de les ditz Maire Baillif ou Govnour, de quele une part destre delive en leschequer p luy ou ceux qi ou queux ensi seisera ou seisere' mesme le drap ou draps, al oeps du Roy, et second part dicell destre delive al seasour du dit drap ou draps, Et la tierce part ent destre delive a le dit Maire Baillif ou Govnour al oeps del Coialtee lou ceux ou ascun de ceux sont ou est Mair Baillif ou Govnour; lune moite de toutz autres fines forfaitures & penaltiees av'ntditz & de chune deux destre a nre f' le Roy, & q lautre soit a celluy ou ceux de les Subgiettez du Roy qi ou queux seisera ou seiseront les mesmes, ou pursuera ou pursueront pur les mesmes p accion de dette, p brief al coen ley, p bille ou pleint solonq la custome del Citee Ville ou Port lou il aviendra de cy enapres ascuns tielx finez forfaitures ou penalties de cheier ou estre; Et q le defendant en ascune tiel accion ne soit admis de gager ou feere sa leye, Ne q ascune pteccion ou esson de svice le Roy pur ascun tiel defend'unt soit alloue en le mesme.

Purveu toutz foitz q cest acte, ou ascun chose en ycell contenuz, nextende pas ne ne soit pjudiciall de ou a la faisure dascun drap lanuz appellez Ray, Ne de ou al ascun drap fait en Wynchestre ou Saresbury, use destre mis & jointez oveqz Ray, le drap ent coement usee destre venduz a xl s. ou dedeinz; Ne de ou a la faisure dascun drap appelle vervise autrement appelle plounkettes Turkyns ou Celestrices oveqz laises listes; Ne as ascuns draps appellez pakkyngwhitez,

[1] An erroneous Repetition.

Ne de ou a la faisure dascuns draps appellez vessees Cogware ou Worstedes; Ne a ou de la faisure dascuns draps appellez Florences oveq̄ Cremyll listes; Ne de ou a la feisure dascun drap lanuez appellez Sailyngware oveq̄ cremyl listes laisez listes, (') ; Ne de ou a la faisure dascun drap lanuez appellez Bastardes, ne dascuns draps lanuez appellez Kendales ne dascun drap lanue appelle Frizeware, ne al ascun deux, Ne a le faisour ou vendour dascuns deux; Issint q̄ mesmes les draps & chune deux pur lonour du Roy & pfit de cest Roialme soient vraiement duement & parfitment faitz accordaunt a la nature & feisure de chescun de les ditz draps.

called Pakkyng whites; nor of or to the makyng of any Clothes called Vessees Cogware or Worstedes; nor to or of the making of any Clothes called Florences with Cremyll listes; nor of or to the makyng of any Wolen Cloth called Saillyng Ware w' Cremyll listes brode listes or small listes; nor of or to the makyng of eny Wollen Clothe called Bastardes; nor of any Wollen Clothes called Kendales; nor of any Cloth called Friseware; nor to eny of theym, nor to the maker or utterer of eny of theym; so that the same Clothes and evy of theym for the King's honour and pfite of this Reame be truely duely and pfitely made accordynge to the nature and makyng of evy of the said Clothes.

ix. Item p' ceo q̄ nře dit f' le Roy p une peticion a luy baille en son dit plement p les Cōens Dengletre en ycell esteantz ad conceu & entendu, q̄ come marchauntz est'unges del nacion de Italie, si come Venecians Janueis Florentines Apuleins Ciciliens Lucaners Cateloins & autres de mesme la nacion, en graund nombre sont enhabitez & teignont hostielx si bien deinz la Citee de Loundrez come es aut's Citees & Burghs dedeinz cest Roialme, & preignont Warehouses & Celers (2) deceivablement pakkent meddlent & gardent jesq̄ al temps q̄ les prices ent soient g'undement enhauncez pur lour greindre lucre, & mesmes les wares & march'undisez adonqes ils vendont a tout maner poeple si bien deinz les portez as queux ils ameisnont leur ditz wares & mchandises come es aut's div's & plusours lieux deinz le dit Roialme si bien p retaile come autrement, Et auxi achatont en les ditz Portez & autres lieux a leur libtie les cōmoditees de cest dit Roialme & les vendont arere a lour pleasur deinz le mesme, auxi gen'alment & franchement come ascune des lieges du Roy fount, & graund part du moneie ent pven'nt nient enploient sur lez cōmoditees de le dit Roialme mes [le fount le fount (3)] oultre le meere p exchaunge as div's autres paijs, au graund damage du Roy en pdicion de sez custumez & a g'und povisshement de les ditz Subgiettes des queux ils achateroient les cōmoditees de cest dit Roialme; Et mesmes les mch'untes de Italie & autres mchauntes est'ungez sont hostes & p'ignont as eux poeple dautres nacions a sojourne oveq̄ eux, & de jour en autre achatont vendont & fount plusours privez & secretz contractes & bergeines ovesq̄ mesme le poeple, a lour graund encreace & pfit & a lenportable damage de les ditz Subgiettes du Roy & auxi cont'rie as div'sez Statutes en cell cas purveuz & ordeignez; auxi les ditz marchauntz de Italie achatont es div'ses lieux deinz le dit Roialme g'und quantite de laine drap lanuz & aut's mchandises de les Subgiettez du Roy, & part diceux ils vendont arere a les ditz Subgiettes, & autres deinz le dit Roialme a leur pluis greigno' av'ntage, et moult des ditz lainez ils deliveront a les drapers de ceo a feere drap solonq̄ lour pleasure;

(1) ou petitez listes *MSS. Cott. & Pet.*
(2) & en icels mettent lour wares & mchandisez quex ilz amesnont en le dit realme & ceux en lez ditz warehowsez & celers *MSS. Pet. Cott. & Hatt.*
(3) lez font *MS. Pet.*

IX.
Rot. Parl. nu. 27.
The Grievances done by Italian and other Merchants-Strangers, to the King and his Realm;

An Act touchinge the Marchaunt' of Italy.

[To the King oure Sovaigne Lorde. Praien youre Highnesse your true subgiett' and liege people of youre Realme of Englond, that where (1)] Merchauntes Straungiers of the Nacion of Italie, as Venicians Janueys Florentynes Apuleyns Cicilians Lucaners Cateloyns and other of the same Nacion, in greate Noumbre been enhabited and kepe householdes aswell within [your (2)] Citee of London as in other Citees and Burghes w'in this [youre (3)] Realme, and take Warehouses and Cellers, and therin put their Wares and Merchaundises the whiche they bryng into this [youre (4)] said Roialme, and theym in their said Warehouses and Cellars deceyvably pak medle and kepe unto the tyme the prices therof been greatly enhaunced for their most lucre, and the same Wares and Merchaundises than selle to all maner people aswell within the portes wherunto they bryng their said Wares and Merchaundise, as in other dyv's and many places generali withyn [youre said (5)] Realme as well by Retaill as otherwise; And also bye in the said portes and other places at their libte the cōmoditees of this [youre said (6)] Realme and sell theym agayne at their pleasure within the same Realme, as generaly and frely as any of your said Subgiett' doth, and a greate parte of the money commyng therof employ not uppon the Commoditees of this [your said (7)] Realme, but make it over the See by exchaunge unto div's other Contreis, to the greate hurt of [youre said Highnes, (8)] in lesyng of [your (9)] Custume and to the greate enpovyssyng of [yo' (10)] seid Subgiett' of whome they shuld bye the Cōmoditees of [youre said (11)] Realme; And the same Merchauntes of Italie and other Merchaunts Straungiers be Ostes and take unto theym people of other nacions to sojorne with theym, and dailly bye and sell and make many pryvy and secrete Contract' and Bargaynes with the same people, to their greate encrese and availe, and to the Importable hurt of [youre (12)] said Subgiett' and also contrary to div's statutes in that case pvided and ordeigned; Also the said Merchaunt' of Italie bye in div'se places within this [youre said (13)] Realme greate quantites of Woll wollen Cloth and other mchaundises of [your (14)] subgiett' and part of theym they selle agayne unto [your saide (15)] Subgett' and other within [youre said (16)] Realme to their most avantage, and moche of the saide Wolles they delyver unto Clothiers therof to make Clothe after their pleasures;

(1) Item, Because our said Sovereign Lord the King, upon Petition made to him in his said Parliament, by the Commons of England, hath conceived and understanden, that Whereas (2) the (3) his (4) *omitted* (5) this (6) the King (7) the King's (8) the same *Printed Translations.*

Moreover [most drad Sovaigne Lorde [1]] Artifycers and other Straungiers not born under [youre [2]] obeysaunce daily resorte and repaire unto [youre said [3]] Citee of London and other Citees Burghes and Townes of [your [4]] said Realme in greate noumbre, and more than they have used to doo in daies passed, and enhabite theym self within [youre [5]] said Realme with their Wyfes Children and Household, and wilnot take uppon theym any laborious occupacion as Cartyng and Plowynge and other like besynes, but use makyng of Clothe and other handcraftis and easy occupacions, and brynge and convey from the parties of beyonde the See greate substaunce of Wares and Merchaundises unto faires and merkettis and all other places of [youre [6]] Realme at their pleasure, and there [they selle [7]] aswell by retaille as otherwise as frely as any of [youre said [8]] Subgiettꝭ useth for to do, to the greate hurte and empovyssyng of [youre [9]] said subgiettꝭ and in no wise woll suffre nor take any of [youre [10]] subgiettꝭ to werk with theym, but they onely take in to their ꝯvice people born in their owne Countreis, wherby [your [11]] said subgiettꝭ for lacke of Occupacion fall to Idelnesse and been Theves Beggers Vagabundes and people of vicious lyvyng, to the greate trouble [of your said Highnesse and of all youre said Realme;[6]] And whan the Merchauntes and artificers Straungiers above reherced have gotyn within [youre said [12]] Realme, by bying and sellyng or by suche easy occupacions and handecraftes greate substans of goodes they departe out of [youre [13]] said Roialme unto suche parties of beyonde the See as like theym to doo, with the said substaunce of goodes, and there spende the same goodes oftentymes amonge [yo[r] [14]] advsaries and Enemies to the hurt of [you and youre subgiettꝭ [7]] and enpovesshyng of [youre said [15]] Realme and the Comens of the same; And thus by the occasion of the ꝑmisses the substaunce of thenhabitauntꝭ in the said Citees Burghes and Townes in late daies have fallen and dailly falle unto greate povte and dekay, to their lykely undoyng withoute [youre [16]] gracious helpe be unto theym shewed in this partie: [[8]Please it therfore your said highnes, of youre moste noble and habundaunt grace tenderly to consider the ꝑmisses, and theruppon by thadvice and assent of the Lords sꝑuelx and tempelx in this youre ꝑsent pliament assembled and by thauctorite of the same, to ordeigne and ꝓvide[8]] that all Merchauntꝭ of the nacion of Italie afore reherced not made deinseyn, which have nowe within this [your [17]] Realme Wares or Merchaundises brought from beyond the See, and before the feste of Ester next cōmynge shall have, do selle or bartre theym in grose and not by retaille to youre subgiettꝭ before the first daie of Maij that shall be in the yere of oure Lorde God M¹CCCC. lxxxv; And the monay cōmynge of the same Sale before the said fyrst daie of May within the same Porte or Portes where they have arryved, enploy uppon the Cōmoditees and Merchaundises of this [youre [18]] Realme, their resonable costes and expences alwey except and deduct; uppon payne of forfaiture of the value aswell of all the said Wares and Merchaundises kept and not solde afore the said first daie of May, or otherwise sold

Italian Merchants shall sell their Wares already imported, &c. in Gross, and employ their Money in Commodities of this Realm.

[1] *omitted* [2] the King's [3] the
[4] this [5] sell the same
[6] both of the King and of all his Realm
[7] our Sovereign Lord the King and his Subjects
[8] Our said Sovereign Lord the King, of his abundant grace, willing against the premises to provide remedy in this behalf, by the advice and assent of his Lords spiritual and temporal, and at the prayer of the Commons in the said Parliament assembled, and by authority of the same, hath ordained established and enacted

Printed Translations.

Enoultre artificers & autres estrangez nient neez desoubz lobbeisance du Roy de jour en autre resortent & repairont a la Citee de Loundres & autres Citeez Burghs & Villes del dit Roialme en grand nombre, & pluis qils a feere soloient es jo's passez, et ceux mesmes enhabitont deinz le dit Roialme ovesq, leur femmes enfauntes & housholdes ne voillent prendre sur eux ascun laborious occupacion si come Charetter ou arer & autres semblez bosoignez, meis usent faisure de drap & autres artifices manuelx & easiez occupacions, et amesnont & conveiont a les parties de pdela le meere grand substance des wares & ꝯchandises as feyres & ꝯchies & toutz autres lieux de cest Roialme a leur pleasure, & les illeosqes vendont si bien p retaille come autrement, si franchement come ascuns de les ditz Subgiettes du Roy usent a feere, a grand damage & empovisshment de les ditz Subgiettes du Roy, & en null maner veulent suffrer ne ꝓndre ascuns de les Subgiettes du Roy a over ovecq, eux, meis ils ꝓignent tantsoulement en leur service gentz neez en leure ꝑprez paiis, pount les ditz Subgiettes du Roy pur defaute doccupacon cheiont en ociosite & sont larons mendentes vagabondes & gentz de vicious vivre, a grand ꝑturbacon du Roy & de tout son dit Roialme; & qunt les ꝯchauntes & artificers estrangez desuis recitez ount gaignez deinz le dit Roialme, p empcion & vendicion ou p tielx easiez occupacions & artifices manuelx, grand Substance dez biens, ils alent hors del dit Roialme a tielx parties de la le meere come lo' plerra a feere ovesqz la dit substance des biens, & illeoqes expendont mesmes lez biens sovent foitz entre les advsaries & enemies du Roi, au damage nre dit Sovaign f' & ses Subgiettes & enpovisshement de son dit Roialme & les Cōens del mesme, et issint p loccasion de les ꝑmisses la substance des enhabitauntez en lez ditz Citees Burghs & Villes ore tard ount cheiez & de jour en autre cheient a grand povtie & decaie, a leur semblable defeisure sinon le gracious aide du Roy a eux ne fuisset monstre en cest partie: Nre dit f' le Roi de sa noble & haboundaunt grace voilant encountre les ꝑmisses purvoir de remedie en cest partie, ad de ladvys & assent des ditz f's Espuelx & Temporelx & al prier des ditz Cōens en le dit parlement assemblez & p auctorite de mesme le parlement ordeigne & purveu, q toutz marchauntz del nacion de Italie avnt recitez nient faitz deinzeins queux ount ore deinz cest Roialme wares ou ꝯchandises amesnez de la le meere, & devnt le fest de Pasq, pschein vennt avont, facent vendre ou bartre iceux en gros & nient p retaille as Subgiettes du Roy devnt le primer jour de May q sra en lan nre f' Dieu M¹ CCCC lxxxv. et la monoie del mesme le vende pvennt devnt dit prin jour de May deinz mesme le Port ou Portes lou ils arrivoient enploiount sur les cōmoditees & marchaundises de cest Roialme, leur rēnablez costes & expences toutz foitz exceptz & deductez, sur peine de forfaiture del value si bien de toutz les ditz wares & marchaundises gardez & nient venduz devnt le dit primer jour

de May, ou autrement venduz q̃ est desuis rehersee come de taunt de moneie q̃unt ensi ꝟra fait oultre p eschaunge contrarie a ceste acte. Et auxi q̃ toutz les mch̃untes de Italie, queux apres le feste del Pasq̃ pschein ven̄nt amesneront ascuns mchandises ou wares en cest Roialme Dengletre a venders, vendent ou bartrent lez ditz wares & mchandises en gros & nient p retaile a les subgiettes du Roy, sur peine de forfeiture del value des mesmes lez wares & marchandises (') quells ils come il est av̄ntdit amesneront apres le dit feste del Pasq̃ & barteront & venderont deinz le dit Roialme facent bartre ou vendre les mesmes deinz oept mois pscheins apres leur primer arrivall en cest dit Roialme en fourme av̄ntdit, et la monoie pvenant de ou p les ditz vendes ou barteringes & chũne deux enploient, & ovecq̃ ceo achatent les cõmoditees ou marchaundises de cest dit Roialme Dengletre deinz les ditz oept mois, en le dit Porte ou Portes lou ils primement arriveront, lour rẽnablez costes & expenses toutz foitz exceptz & deductz, et en null mane de feere ascune tiel moneie oultre p eschaunge; et q̃ les ditz marchauntz leur ditz wares & mchandises remain̄ntes nient venduz puis le fine de les ditz viij mois en null mane vendre ne bartre facent deinz le dit Roialme, meis carient & convoient les hors de mesme le Roialme dedeinz deux mois pscheins ensuantz apres les ditz oept mois, si vent & temps [& [2]] suffre veulent, et autrement si tost q̃ vent & temps eux suffre veulent [et autrement [3]] puis les ditz deux mois, sur peine de forfeiture si bien de taunt de moneie q̃unt ensi ꝟra fait hors de cest dit Roialme p eschaunge, come de lez ditz wares & marchaundises ensy venduz ou bartrez apres le fine de les ditz oept mois, nient cariez ne convoiez hors del dit Roialme en fourme av̄ntdit ou le value ent; les forfaitur̄ penaltie & perde de toutz les p̃missez toutz foitz encourgreront & ꝟront sur les ditz marchauntez de Italie feis̄untez contrarie a cest acte. Purveu toutz foitz qil ꝟra licite a les ditz mch̃untes de la nacion de Italie toutz tielx mchandises & wares & chũne part diceux, les quels apres le Fest del Pasche pschein ven̄nt ꝟront amesnez au ascun Port ou Portes de cest dit Roialme estre venduz, de convoier mesmes lez marchaundises & wares a leur libtie en ascun autre Port ou Portes ou autre lieu deinz cest dit Roialme, & illeoqes ceux de vendre come il est av̄ntdit, Issint q̃ ils vendent ou bartrent mesmes les marchaundises & wares deinz ceste Roialme dedeinz viij mois pscheins apres lour primer arrivall au ascun de les ditz Port ou Portes de mesme le Roialme. Et auxi q̃ null marchaunt estraunge de quelle paiis q̃il soit, soit hoste ou p̃igne a Sojourne ovesque luy deinz le dit Roialme Dengletre ascun march̄unt est̄unge nient esteant de mesme la nacion de quel il est, sur peyne de pdre & forfaire a chune temps qil ensi face xl li. Et q̃ null marchaunt est̄unge soit al hostiell ne sojourne ovecq̃ ascun autre marchaunt est̄unge nient de sa nacion ou paiis deinz le dit Roialme sur payne de xl li.

[1] There appears a manifest deficiency in this place, not supplied by any Manuscript or Printed Copy of the French Text.

[2] y *MS. Pet.* [3] omitted *MSS. Pet. & Cott.*

than ys above reherced, as of so moche money as so shall be made over by exchaunge contrary to this acte. And also that all the said Merchauntes of Italie, the whiche after the fest of Ester next cõmynge shall bryng any Merchaundises or Wares into this [your [1]] Realme of Englond to be sold, selle or bartre the said Wares & mchaundises in grose and not by retaile unto [youre [2]] subgiett̄, uppon payne of forfaiture of the value of the same Wares and mchaundises [otherwise sold than is above reherced; and that the said merchaunt̄ their said Wares and mchaundises [3]] whiche they as it is aforesaid shall brynge after the said fest of Ester, [and shall bartre and selle within yo' said Realme,[4]] do bartre or selle the same within viij monethes next after their first arryvall into this [youre said [1]] Realme in fourme aforesaid, And the money comynge of or by the said Sales or barterynge and ev̄y of theym enploy, and therewith bye the Cõmoditees or mchaundises of this said Realme of Englond, within the said viij monethes, in the said Porte or Portes where they shall fyrst arryve, their resonable costes and expenses alwey excepte & deduct, and in no wise to make any suche money over by exchange. And that the saide mchaunt̄ their seid Wares and mchaundises remaynyng unsold after thende of the said viij monethes in nowise do selle nor bartre within [youre [5]] said Realme, but cary and convey theym out of the same Realme within two monethes next folowynge after the same viij monethes, if Wynde and Weder will suffre it, And ell̄ as sone as Wynd and Wedyr wille serve theym after the said ij monethes, uppon payne of forfaiture as well of so moche money as so shalbe made [out of yo' said Realme[6]] by exchange, as of the said Wares and mchaundises so sold or bartred after thende of the said viij monethes not caried nor conveyed out of [youre [7]] said Realme in fourme aforesaid or the value therof; The forfaiture penaltie and losse of all the p̃misses alwey to renne and be uppon the said mchaunt̄ of Italie doynge contrary to this Acte. Provided alwey that it shalbe leefull to the said mchaunt̄ of the Nacion of Italie, all suche mchaundises and Wares and ev̄y part therof, the whiche after the fest of Ester next cõmyng shalbe brought to any porte or portes of this [youre [1]] said Realme to be solde, to convey the same mchaundises & Wares atte their libte to any other porte or portys or other place within this [youre said [1]] Realme, and there theym to selle as it is aforesaid; so that they selle or bartre the same mchaundises and Wares within this [youre [1]] Realme within viij monethes next after their first arryvall unto any of the said porte or portes of the same Realme. Also that no mchaunt straungier of what Contrey so ev̄ he be, be Oste or take to sojorne with hym within the said Realme of Englond any mchaunt straungier not beyng of the same Nacion that he is of, uppon payne to lese and forfaite at ev̄y tyme that he so doth xl li. And that no mchaunt straungier be at Oste nor sojorne with any op' mchaunt straungier not beyng of his Nacion or Contrey within the said Realme, uppon payne of xl li.

They shall sell their Wares in future, within Eight Months, and employ their Money in Commodities of this Realm.

Two Months allowed to them after the Eight Months, to carry away the Wares remaining unsold;

They may remove their Goods from one Port to another.

Merchants Strangers shall not be Hosts or Guests to each other, unless of the same Nation.

[1] *omitted* [2] the King's [3] to sell or barter, [4] the [5] over [6] this } *Printed Translations.*

[7] These words are omitted in all the Printed Translations, and some words afterwards incorrectly inserted, to supply the manifest deficiency of the sense.

No Italian Merchant shall sell Wool, or Woollen Cloth, bought within the Realm; nor deliver Wool to make Cloth of.

Also that none of the said ꝑchauntꝫ of Italie not made Deynseyn shall selle or bartre any Wolle Wollen Clothes or other ꝑchaundise within this [youre[1]] said Realme, whiche the same ꝑchauntꝫ of Italie shall bye within the same Realme; nor that the said ꝑchauntꝫ nor eny other for theym shall delyu̅e any Wolle to any psone to make Clothe of within the same Realme, but have and convey the same Wolle Wollen Clothe and other ꝑchaundises ou̅ the See by the Straites of Marrok, uppon payne of forfaiture of the Value of all the Wolle Wollen Clothe and other ꝑchaundises the which so by theym shalbe solde or delyu̅ed, in whos handes soeu̅ it shalbe founde, the forfaiture therof to renne and be uppon the saide ꝑchaunt straungier. Furthermore that no psone not born under yo[r] obeisaunce nor made deinsyn, of what nacion or contrey so eu̅ he be, the which shall cōme into this [yo[r][1]] seide Realme of Englond aft̅ the Fest of Est̅ next cōmyng, takyng uppon hym to be an Artificer or handcraftyman, take nor occupie any house or Chambre and theryn dwell or sojo[r]ne with any other Straungier not borne under [youre obeisaunce[2]] as it is aforeseid, nor ex̄cise nor occupie eny man̄ handcrafte or the occupacion of any handcrafty man within this [youre saide[1]] Realme of Englond; but that all suche psonnes which after the seid Fest of Ester shall come into this [yo[r] saide[1]] Realme and eu̅y of theym departe unto their owne Contreys agayn, or ells be servauntꝫ unto suche of [yo[r][2]] subgietts oonly as ben expte and connynge yn suche Fetys Craftys and Werkes as the seid Straungiers can occupie, uppon payne of forfaiture of all their goodes, the whiche shall come and dwelle in this [youre said[1]] Realme contrary to this Acte, in whose handes so eu̅ they shalbe founde. Also that no psone not borne under [youre[1]] obeisaunce nor made deinseyn beyng an Artificer or handcrafty man, after the said feste of Ester, nor noon other for hym or to his use, drape or make any Clothe or put any Wolle to werke to make Clothe of within the said Realme of Englond, uppon payne of forfaiture of the same Clothe draped or made contrary to this Acte. Also that all psones not borne under [youre[1]] obeisaunce beyng artificers and handcraftymen, atte daie of makynge of this Acte dwellynge or enhabited within this [youre[1]] said Realme, nor noon other suche artificers or handcrafty men whiche hereafter shall be dwellynge or enhabited within the same Realme, ꝑe whiche after the fest of the Añunciacion of our Lady next comynge shall use ex̄cise or occupie the fete of merchaundises of any maner of Wares within this [youre said[1]] Realme, selle or bartre the same Wares and ꝑchaundises in grose and not by retaill within the Porte Towne or Place where the same Artificers ben or shall be enhabited or dwellyng, and in noon other place, uppon payne of forfaiture of the value of all the Wares and ꝑchaundises solde contrary to this Acte. Also that no psone not borne under [youre[2]] obeisaunce nowe enhabited dwelling or kepyng howse or Chambre w[i]n this [youre said[1]] Realme and occupyinge any handcrafte or beynge an artificer or handcrafty man, after the Fest of the Anūciacion

No Alien shall occupy a House with another Alien, or be a Handycrafts-man, unless as a Servant to the King's Subjects.

Aliens shall not drape or make Cloth within the Realm.

All Alien Artificers shall sell their Wares in Gross and not by Retail.

[1] *omitted* [2] the obeisaunce of the King } *Printed*
[2] the King's } *Translations.*

Auxi q̄ null de les ditz march[a]untes de Italie nient fait Deinzein vendra ou bartera ascune laine draps lanuez ou aultre marchaundise deinz cest dit Roialme quelles mesmes lez marchauntz de Italie achateront dedeinz mesme le Roialme; Ne q̄ les ditz ꝑchauntes ne ascune autre pur eux deliveront ascune laine au ascun psone de feere drap̄ ent deinz mesme le Roialme, meis aient & convoient mesme la laine drap̄ lanuez & autrez march[a]undises oultre le meere p les Streites de Marrok, sur peyne de forfeiture del value de tout la laine drap̄ lanuz & autres ꝑchaundises les quelles ensi p eux ſront venduz ou deliverez, en quelconq̄s mainz ils ſrount trovez, la forfaiture dicell de currer & soit sur le dit march[a]unt estraunge. En oultre q̄ null psone nient neez desoubz lobbeisaunce du Roy ne fait Deinszein, de q̄conq̄ nacion ou paiis qil soit, le quel viendra en cest Roialme Dengleṫre puis la feste de Pasche pschein ven[a]nt, p̄ign[a]nt sur luy destre artificer ou handcraftiman, preigne ne occupie ascun meason ou chambre & en ycell demoerge ou sojourne oveq̄ ascun aut[e] est[a]unge nient neez desoubz lobbeis[a]unce du Roy come il est av[a]ntdit, ne ex̄cise ne occupie ascune maṅe artifice manuell ou loccupacion dascun handcraftyman deinz le dit Roialme Dengleṫre; meis q̄ toutz tielx psones quelx apres le dit feste de Pasche viendront en cest dit Roialme & cḥune deux departent & departe a leur ppres paiis arere, ou au̅ment soient ſv[a]ntes a tielx dez Subgiettes du Roy tantsoulement queux sont expertz & Scientz ou Scientificez es tielx feetez artez & ou̅aignes quelx lez ditz est[a]ungez savont occupier, sur peine de forfaiture de toux leur biens les queux viendront & demorgeront en cest dit Roialme contrarie a cest acte, en quelxconqes mains ceux ſront trovez. Auxi q̄ nulle psone nient neez desoubz lobbeisaunce du Roy nene fait Deinszein, esteant artificer ou handcraftyman, puis le dit feste de Pasche, ne null autre pur luy ou a son use, drape ou face ascun drap̄ ou mette ascune laine a ou̅aigne de feere drap̄ ent deinz le dit Roialme Dengleṫre, sur peyne de forfaiture de mesme le drap̄ drapez ou faitz contrarie a cest acte. Auxi q̄ toutz psones nient neez desoubz lobbeisaunce du Roy esteantz artificers & handcraftymen, al jour del faisaunce de cest acte dem[a]ntz ou enhabitez dedeinz cest dit Roialme, ne nulles au̅s tielx artificers ou handcraftymen q̄i enapres ſront dem[a]ntz ou enhabitez deinz mesme le Roialme, queux apres le fest del annunciacion de nr̄e Dame pschein ven[a]nt useront ex̄siceront ou occupieront le feete de ꝑchandise dascuns maners Wares deinz le dit Roialme, vendent ou bartrent mesmes les wares & marchandises en gros & nient p retaile dedeinz le port ville ou lieu lou mesmez lez artificers sount ou ſrount enhabites ou demurrantz, & en null au̅ lieu, sur peine de forfaiture del value de toutz lez wares & ꝑchandisez venduz contrarie a cest acte. Auxi q̄ null psone nient nee de oubz lobbeisaunce du Roy ore enhabite dem[a]nt ou gard[a]unt meason ou chambre deinz cest dit Roialme, & occupiant ascun artifice manuell ou esteant artificer ou handcraftyman, apres le feste del annunciacion de nr̄e Dame

pschein ven^nt pigne ascun apprentise servaunt ou ascune autre persone a ver ovecq luy ou a son use, sinon il soit son fitz ou sa file, autres q̃ al dit fest srount apprentises ou serv^ntes ovecq luy, sinon mesmes lez apprentises ou servauntes ensi apprenders soient subgiettes du Roy neez; sur payne de forfeiture & pdre pur chune apprentise ou servaunt prisez a contrarie xx li. la une moite dez toutz les ditz fines forfaitures & penalties & chune de ceux destre a nre s^r le Roy, et lautre moite destre a celluy ou ceux le q̃ ou queux seisera ou seiseront les mesmes, ou pursuera ou p'sueront pur les mesmes p accion de dette, p brief al cõen leye, p bille ou pleint solonq la custume del Citee ou Ville lou il aviendra en apres ascuns tielx fines forfaiturez ou penalties de cheier & estre, et q̃ le defend^unt en ascun tiel accion ne soit admis de gager ou feere sa ley, Ne ascuns pteccion ou esson de service le Roy pur ascun tiel defend^unt soit allouez en le mesme. Purveu toutz foitz q̃ cest acte ou ascune part dicell, ne ascune autre acte fait ou affaire en le dit plement, en null maner extende ou soit pjudiciall ascun destourbance damage ou empediment au ascun artificer ou marchaunt estraunge, de quell nacion ou paiis il soit ou sra, de ou pur amesn^nce en cest Roialme ou vendicõn p retaille ou autrement dascuns mans livres escriptez ou enpressez, ou pur lenhabitacion deinz le dit Roialme pur mesme lentent, ou au ascun escriven alluminour liour ou enpssour autrement dit imprintour de tielx livres, quelx il ad ou ava a vendre p voie de marchandise, ou pur leur dem're en mesme le Roialme pur lexercicion de les ditz occupacions; cest acte ou ascune part dicell nient contristeant.

x. Item q̃ come en le parlement nadgairs tenuz a Westm le vintisme jour de Januarie lan vintisme second du Roy Edward le quart, estoit ordeigne & establie p auctorite de le dit nadgaires plement, q̃ null marchaunt estraunge naultre, apres le feste de Pasche adonqs pschein ven^nt, amesneroit en ceste Roialme Dengletre destre venduz ascuns corses ceinctures Ribandes laces Calle Silke ou Coleyn silke filez ou ovez, sur peyne de forfeiture dicell ou del value dicell en quelles mains ceux srount trovez, lune moite del dit forfeiture destre a nre s^r le Roy et lautre moite destre a celluy ou ceux de sez subgiettes q̃ ou queux seisera ou seiserount les mesmes, ou pursuera ou pursueront pur les mesmes p accion de dette p brief del cõen leye p bille ou pleint solonq la custume de la Citee ou Vill lou il aviendra enapres ascun tiel forfaitur de cheier ou estre, Et q̃ le defend^unt en ascun tiel accion ne soit admis de gager ou feere sa leye, Ne q̃ ascun pteccion ne essoñ en le service de Roy pur ascune tiel defendaunt soit alloue;

of oure Lady next cõmynge take any appntice svaunt or any other psone to wirke w^t hym or to his use, but if he be his sone or his doughtier, other than atte the said fest shalbe Appnic or servauntc with hym, but if the same Appnic or s'vauntc so to be taken ben [youre[1]] subgiettc born; uppon payne to forfaite and lose for evy appntice or s'vaunt taken to the contrary xx li. That oñ half of all the said fynes forfaitures and penalties and iche of theym to be [unto youre said highnesse[2]] and that other half to be unto hym or theym the which shall sease the same or sue for the same by accion of dette, by writte at Cõmen lawe, by bille or playnte after the Custume of the Citee or Towne where it shall hapne hereafter any suche fynes forfaitures or penalties to fall and be; And that the defendaunt in any suche accion be not admitted to wage or do his lawe, nor that any pteccion or essoñ de svice le Roy for any suche defendaunt be allowed in the same. Provided alwey that this Acte or any part therof, or any other Acte made or to be made in this psent pliament, in no wise extende or be pjudiciall any lette hurte or impediment to any Artificer or mchaunt straungier of what Nacion or Contrey he be or shalbe of, for bryngyng into this Realme, or sellyng by retaill or otherwise, of any man bokes wrytten or imprynted, or for the inhabitynge within the said Realme for the same intent, or to any [writer lympner bynder or imprynter[3]] of suche bokes, as he hath or shall have to sell by wey of mchaundise, or for their abode in the same Reame for the excisyng of the said occupacõns; this Acte or any parte therof notwithstondyng.

Aliens shall take none but Subjects, or their own Children, for Servants.

Apportionment of Forfeitures.

This Act shall not extend to Importers of Books, or to any Writer, Limner, Binder, or Printer.

An Act touchinge the bringing in of Silke Lacc Ribandc, &c.

X. *Rot. Parl. nu.* 28.

[TO the right wise and discrete Cõmens in this psent parliament assembled; Moost humbly shewen unto your discrete Wisdoms the Kynges true lieges aswell men as women of the Citee of London and other Citees Townes and places of this Realme of the hole Crafte of Silkewerke, That where[4]] in the Parliament late holden at Westm the xx^ti daie of Januarie the xxij^ti yere of Kyng Edward the fourth, it was ordeigned and stablisshed by thauctorite of the said late pliament, that no mchaunt straungier, nor other, after the fest of Ester then next cõmynge, shuld bryng in to this Realme of Englond to be solde eny corses girdelis ribandys laces calle sylk or coleyn silk throwen or wrought, uppon payne of forfaiture therof or of the value therof in whose handes they shalbe found, the one half of the said forfaiture to be unto the Kinge oure said Sovaigne lorde and the other half to be unto hym or theym of his Subgiettc the whiche shall sease the same, or sue for the same by accion of Dette, by Writt at Cõmen Lawe, by bill or playnte after the Custume of the Citee or Towne where it shall happen hereafter eny suche forfaiture to fall or be; And that the Defendaunt in eny such accion be not admitted to wage or do his Lawe, nor that eny pteccion nor Essoñ in the svice of the King for any suche defendaunt be allowed;

Recital of the Statute 22 E.IV. c. 3. prohibiting certain Articles of Silk to be brought into this Realm.

[1] the King's [2] to the King
[3] scrivener allumynour reader or printer } *Printed Translations.*
[4] Item, Where

The said Statute 22 E.IV. c. 3. continued for Ten Years.

the said Acte to endure for iiij yeres then next ensuynge the said feste of Ester; [That it may please youre said Wisedoms to praie the Kyng oure Sovaigne lorde to ordeigne [1]] by auctorite of this psent pliament, that the said Acte and Ordenance be and stonde gode vaileable and effectuell unto thende of pe seid iiij yeres, and from thende of the seid iiij yeres unto the ende and tme of x. yeres then next ensuynge: [at the revence of God and in the Way of Charite.[2]]

XI.
Rot. Parl. nu. 30.

An Act touchinge Bowyers.

The excessive high Price of Bowstaves;

[TO the full honorable and discrete Cōmens in this psent parliament assembled; Mekely shewen unto youre discrete wisdoms your besechers [3]] the Bowyers inhabitantz within Citeez Burghes and Villages of this noble Realme of Englond, occupying Artillary to theym belonging for the sure tuicion and defence of the seid Realme, that where in tymes paste good and hable stuffe of Bowestaves aswell by Englisshe mchauntz as by Straungiers hath beñ brought into this said Reame, by the whiche the said inhabitaunts Artillers myght competently lyve upon suche stuff as they than bought of Bowestaves at xl s. the C., or xlvj s. viij d. atte mooste, It is so nowe, that by the [subtile meanes [4]] of Lumbardz usynge to divse portes in this Realme [[5]the Crafte of Bowiers aforesaid is sore mynusshed and likly to be uttirly undone, And therby the londe greatly enfebled, to the greate Jeopdie of the same and greate comforte to the Enemyes and advsariez therof: For by the seducious confederacy of the said Lumbardz [[6]] bowestaves ben nowe at so outrageous price, that is to wit at viij li. the C. where they were wont to be solde but at xl s. and also they wil not suffre any garbelyng of theym to be made, but selle good and bad at so excessyf price togedyr ungarbeled, that by liklyhode within shorte tyme this Realme is like to lacke bothe stuff of Artillary and of Artificers of the same, without a pvision of due remedy in this behalf be the more spedely found and hadde: [[7]It may therfore please your discrete Wysdoms to pray the Kinge oure sovaigne Lorde that he of his grace especiall with thassent of his lordes spuelx and tempelx and Comens in this his psent parliament assembled and by auctorite of the same, to ordeigne establisse and enacte [8]] that noon of thoo mchauntz of Venice, nor other that use to repeyre into this [youre [2]] Reame with mchaundisez of thoo ptiez, brynge nor convey into this said Realme any mchandisez, but yf the same mchaunt and mchauntz bryng with evy Butte of Malvesy and with evy But of Tyre x bowestaves good and hable stuff, upon peyn of forfeyture of xiij s. iiij d. for evy But of the said Wynz so brought and conveid, And not the said nombre of Bowestaves with the same Butt; The oon half of the said forfaiture to [you [9]] sovaigne Lorde and the other moite to the partie that will sue therfore. And that no suche bowestaves be sold ungarbelled, and but to suche psone or psonez as be borne and shall be borne under the Kingz obeysaunce; this Act to begyn to take effect at the fest of Seint Michell next comynge.

Ten Bowstaves shall be brought into this Realm with every Butt of Malvesey and Tyre.

Bowstaves shall not be sold ungarbelled; nor to any but Natives.

[1] Our said Sovereign Lord the King that now is, at the prayer of the said Commons, hath ordained [2] *omitted*
[3] Item, It was showed in the said Parliament by [4] seditious Confederacy
[5] Wherefore our said Sovereign Lord the King, by the Assent of the said Lords Spiritual & Temporal, at the prayer of the said Commons, in the said Parliament assembled, and by Authority of the same, hath ordained established and enacted, [6] our

Printed Translations.

le dit acte dendurer pur quatrez ans adonqes pschein ensuantz le dit feste de Pasche: Nre dit sovaigne f' le Roy qorest al prier de sez ditz Cōens ad ordeigne p laucto[te] de cest psent plement q le dit acte & ordenance soit & estoise boon vaillable & effectuell jesq le fine de lez ditz quatres ans (') jesq le fine & tme des x ans adonqes pscheins ensuantz.

xj.

Item monstre fuist en le dit plement p les Bowiers enhabitauntz deinz les Citees Burghs & Villagez de cest Roialme Dengletre, occupiantz artillarie as eux regardauntz pur la defence de cest Roialme, q come en temps passez bone & able Stuffe de Bowestaves, sibn p marchauntz Engloisez come estraungez, eust estee amesne en le dit Roialme, p quell les ditz enhabitauntz artillers porroient competentment vivre sur tiel Stuff quel ils achatoient de Bowestaves a xl s. le Cent ou a xlvj s. viij d. au pluis haute; Ore est il ensi q p la seducious confederacie de les Lombardes usantz as divs Portes de cest Roialme les Bowestaves ore sont a si outerageous price, cest assavoir a viij li. le Cent, lou ils soloient est venduz meis a xl s. et ensement ils suffrer ne voilent ascun garbelment diceux estre fait, meis vendont bons & mals a si excessif price ensemblement nient garbelez, q p semblance en brief temps cest Roialme est semblable de failer si bien de Stuff dartillarie come des artificers del mesme sinon due remedie en cest parte soit pluis hastifment trovee & eue: Nre dit f' le Roy de lassent dez ditz f's Espuelx & Temporelx & a la prier de les Cōens en le dit plement assemblez & p aucte del mesme, ad ordeigne establie & enacte q null de lez mchantes de Venice, nautre q use de repairer en cest Roialme ovecq mch[a]undisez diceux parties, amesne ne convoie en cest dit Roialme ascuns mch[a]undisez, sinon mesmes lez mchaunte & mch[a]untes amesnent ovesq chune but de Maluesie & ovesq chune But de Tyre, dix Bowestaves bons & able Stuff, sur peyne de forfeiture de xiij s. iiij d. pur chune But de les ditz vines ensi amesnez & convoiez & nient le dit nombre des Bowestaves ovesq mesme le But; lune moite del dit forfaiture a nre dit f' le Roy & lautre moite al partie q pur ceo suer voet. Et q nulles tielx Bowestaves soient venduz degarbelez, et forsq a tiel psone ou psones qe ou quels est ou sont & ra ou ront neez desoubz lobbeisaunce du Roy: Cest acte de commencer & prendre effect al fest de Seint Michel pschein ven[a]nt.

[1] Et del fyn de lez ditz quatre anz [illegible]

xij. Item monstre fuist en le dit plement p les artificers du dit Roialme Dengleterre, sibien de la Citee de Loundrez come dauts Citees Villes Burghs & Villagez mesme le Roialme, cestassavoir Cincturers Fesours des [pountes[1]] Pinners Bursers Gaunters Cotelers Bladesmythes Blaksmythes Fesours des esperons Peinctours Batours dor Sellours Lorimers Fusours Feisours des Cardes Hurers Wyremongers Textours Horners Botelmakers & Copersmythes, q̃ come ils soloient en temps passe estre g^a^undement misez en ouaigne & occupiez en les ditz artes pur la sustenaunc̃e de ceux mesmes leur femmes enfauntes appntises & serv^a^ntz, & plusours auts Subgiettes du Roy; Or est il ainsi q̃ p marchauntes estraunges Deinzeins & autres sount amesnez de les parties de la le meare estre venduz deinz le dit Roialme si plusours des Wares, quels porroient estre ouez & forgez p les artificers desuis rehercez, q̃ pent les gentz des pays est^a^unges lou les av^a^ntdit wares sont faitz g^a^undement sont occupiez & encreases, & les ditz artificers trop enpouez & de jour en autre dekeient, & saunz la grace du Roy as eux monstre en cest partie semblez destre destrutz pur defaute doccupacion: Nre dit f^r^ le Roy les pmisses considerant de ladvice & assent des f^r^s Espuelx & Temporelx & a la prier de sez Cõens en le dit plement assemblez & p auctorite dicell ad ordeigne & purveue, q̃ null marchaunt estraunge, apres le Fest del Pasche ore pschein ven^a^nt, amesne en cest Roialme Dengleterre destre venduz ascuns mans ceinctures ne ascuns herneisez ouez pur ceinctures pointes laces de quir Burses Pouches Espinges Gaunces Cotelx hangers forces pur Taillours Forcettes appelles vulgarment Scisors andirons Cobbardes teneils furces pur fue Gredirons Stoklokkes Clefs Hynges & garnettes espurons mirrours depeinctez papiers depeinctez Forcers depeinctez ymages depeinctez draps depeinctez ascun [cebatuz[2]] ou arge^t^ batuz ouez es papiers pur peinctours Selles Sadeltrees Harnes pur chevaux boces moleins vulgareme^t^ appellez Bittes estriveux Bocles Cheynes clous Dorpetir vulgarme^t^ appellez laton nayles with Iron Shankes Turrettes Chaundelers estantz Chaundelers pend^a^untz Stoppes p^r^ eaue sacrez vulgarment appellez Holywater Stoppes Chafyng disshes lavours pend^a^untz aneus p^r^ curteins cardes pur laine, Cardes de Roan forsprises, claspes pur Robes vulgarement appellez ([3]) forgowenes Bocles p^r^ Solers broches Champnoils vulgareme^t^ appellez belles, forprisez haukes belles, Culiers destain & plumbe Cheines de Wyre sibien de laton come de fer Chaundelers de fer Grates hornes p^r^ lanternes, ou ascuns de les suisditz Wares prestment forgez & ouez appteign^a^ntz a les artes desuis

[1] pointez
[2] or batuz
[3] claspes
} *MS. Pet.*

AN ACT agaynst Straungers Artificers. XII. *Rot Parl. nu.* 29.

[[1] To the right wise and discrete Cõmens in this present parlement assembled.

SHEWETH unto youre greate Wisdoms the King^e^ true Subgiett^e^ and liege people the Artificers in greate nombre of this Royalme of Englond;[1]] aswell of the Citee of London and other Citees Townes Burghes and Villages of this Roialme, that is to say Gurdelers Poyntmakers Pynners Pursers Glovers Cutlers Bladsmythes Blacksmythes Sporiours Goldebeters Peyntours Sadelers Lorymers Founders Cardemakers Hurers Wiremongers Wevers Horners Botelmakers and Copersmythes, that where as they have been wont in tyme passed to be greatly sett on Werke and occupied in these said Craftys for the susten^a^nce of theym self their Wyfes Children App^a^ntices and covenaunt svaunts and many other the Kynges Subgiett^e^ [[2] and have be wont to be sett awerk and occupacion to their ppur use by the whiche they have pspered and honestly gottyn their lyvyng,[2]] It is so nowe that by mchaunts Straungiers deinzens and other ther be brought from the parties of beyonde the See to be solde within this Roialme so many of the said Wares the whiche myght be wrought by the Artificers above reherced, that therby the people of straunge Contreis, where the forceid Wares be made, been huggely occupied encressed and greatly prospere [[2] and dailly encrese by the making of the same, aswell to the pfyte of their Prynces as of theymself;[2]] and the Artificers aforesaid of this seid Realme, [[2] the whiche were wont to make the said Wares and gete their lyvyng honestly by the same at all tymes been contributaries with other the King's Subgietts in all Cõen Charges in evyche of his Citees Townes Burghes and Villages of this said Realme,[2]] ben greatly empovesshed, and dailly dekeyn, [[2] that they be bothe unhable to bere eny suche ferther charge or to gete their convenient lyvyng;[2]] And w^t^out the King^e^ good grace [and youre discrete Wisdoms[2]] be shewed unto theym in this behalf they be likely in shorte tyme to be utt^a^ly undon for lake of occupacion: [[2] Please it therfore yo^r^ said discrete Wisdoms tenderly to considre the pmisses, to pray the Kynge oure Sovaigne lorde by thadvyse and assent of the lordys spuelx and tempelx in this psent pliament assembled and by auctorite of the same, for to ordeyne and pvide[1]] that no mchaunt Straungier, after the fest of Ester nowe next cõmynge, brynge into this Realme of Englond to be sold any man Gurdels nor eny Harnes wrought for Gurdels Poyntes laces lether purses Pouches Pynnes Gloves Knyves Hangers Taillourshires Scisors Andyrons Cobbard^e^ Tongges Fireforkes Gredyrons Stok lokkes keys hynges and garnett^e^ Spores peynted glasses paynted Papers paynted forcers paynted ymages paynted Clothes any beten gold or beten silver wrought in papers for Payntours sadels sadeltrees hors harnes [boces[4]] bittes sterops bokels cheynes laten nayles w^t^ Iron Shankes Turrett^e^ stondynge Candelstykes hangyng Candelstik^e^ halywater stoppes Chafynge disshes hangynge lavers Curteyn Rynges Cardys for Wolle except Roan Cardes Claspes for Gownes bokels for shoes broches belles except haukes belles spones of Tyn and lede Cheynes of Wire aswell of Laton as of Iron Candelstikk^e^ of Iron [plate[4]] grates [hures[4]] and lantern hornes, or eny of these forsaid Wares redy made and wrought

Certain Merchandises shall not be imported ready wrought.

[1] Item, It was shewed in the same Parliament by the Artificers of the said Realm of England,
[2] *omitted.*
[3] Our said Sovereign Lord the King, considering the premises, by the advice and assent of the Lords Spiritual and Temporal and at the prayer of the Commons in the said Parliament assembled and by authority of the same, hath ordained and provided
[4] botes, boots,
} *Printed Translations.*

pteynyng to the Craftes above specified or enyof theym; upon payne of forfaiture of all the Wares and of evy of them so brought in to this Realme to be contrarie to this Acte, or the value of theym, in whose handes they or eny of them shall be founde; the oon half of suche fynes forfeitures and penalties and of yche of theym be unto the King our Sovaine lorde, And that other half to be unto hym or theym of the Kinges Subgiett' the whiche shall sease the same, or sue for the same by Accion of Dette, by Writte or bill at cōen lawe, by byll or pleynt after the Custume of the Citee or Toune where it shall happen hereafter eny suche fynes forfeitures and penalties to fall and bee; And that the Defendaunt in eny suche accion be not admitted to wage or do his Lawe, nor that eny pteccion or Essoñ de vice le Roye for eny suche defendaunt be allowed in the same.

Penalty.

especifiez ou ascun diceux; sur peyn de forfeitur de to^s les Wares & de chune diceux ensi amesnez en cest Roialme destre contrariant a cest acte, ou le value diceux, en quelx mains ceux ou ascun diceux srount trovez; lune moite de tielx fines forfaitures & penaltees & de chune deux soit a nre f^r le Roy, & q̃ lautre moite soit a celluy ou ceux dez Subgiettes du Roy q̃ seiseront ou seisera les mesmes ou pursueront ou pursuera pur les mesmes per accion de dette p brief ou bille al cōen ley, per bille ou pleint solonq̃ la custume del Citee ou Ville lou il aviendra enapres ascuns tielx fines forfeitures & penalties de cheier & estre; & q̃ le defendaunt en ascune tiel accion ne soit admis de gager sa ley, Ne q̃ ascun pteccion ou essoñ de service le Roy pur ascune tiel defendaunt soit alloue en le mesme.

XIII. *Rot. Parl.* nu. 31.

An Act for the Content' of a Butt of Malmesey.

['TO the Kinge oure Sovaigne Lorde. Shewen unto your highnesse, lamentably compleynyng youre humble Cōens of this yo^r p̃sent pliament assembled, in the name of theym self and of all your other humble Cōens of this youre honorable Realme, that Whereas Buttes of Wyne called Maluesey were wont in greate plentee to be brought in to this youre said Realme to be sold before the xxvij and xxviij yeres of the Reigne of Henry the syxte, late in dede and not of right King of Englond, and also in the same yeres, And than div's of the Buttes hilde in mesuare vij^xx galons apece, And div's hilde vj^xx xij galons apece, And the leste of theym hilde vj^xx vj galons apece, And than a Man mignt bye and have of the mchaunte strangier seller of the said Malueseys by meane of the seid plentee of theym for l s. or liij s. iiij d. atte the most a butte of suche Wyne, he takinge for his payment therof ij. partes in Wollen cloth wrought in this youre said Realme and the iij. parte in redy money: It is so, Sovaigne lorde, that by the sotell and crafty meanes of such psones Straungiers as have the Sale of suche Wynes the whiche have been made denizeins within this youre seid Realme have caused the Butt' of Malueseys lateward' brought into this your seid Realme to be solde for to be sore abregged and mynysshed of the said Mesure so largely, That a Butte of their Malueseyes at this day scantly holdith in measure v^xx viij galons; And besides that they knowinge as it semith what quantite of such Wyne may serve yerely to be solde within this youre said Realme, where they were wont to brynge hider yerely greate quantite and plentevously of suche Wyne to be solde after the prices aforeseid, of their craftynesse use to brynge no more hider nowe in late daies but onely as wolle scantly sve this Realme a yere; wherethurgh they have enhaunced the Price of the same Wynes to viij m^rc a butte, redy money and no Cloth, to the greate enrichyng of theym self and greate disceite losse hurt and damage of you Sovaigne lorde and of all yo^r Comens of this your said Realme; in consideracion of whiche hurtes and Damagis aforeseid and for the reformacion of the same, Please it youre highnesse of youre moost bountevous and benygne grace, by thadvise and assent of youre lordes sp̃uelx and tempelx and of youre Comens in this youre p̃sent pliament assembled, for to ordeyngne enacte and establisshe in this youre p̃sent pliament and by auctorite of the same,']

[Item sur grevous compleint fait a nre dit f^r le Roy en le dit plement p les Cōens dicell de defaute des mesures des Buttes de Maluesie & autres vesseaulx des Vines & Oile, mesme nre f^r le Roy de ladvys & assent des ditz f^rs Esp̃uelx & Temporelx & a la supplicacion de les ditz Cōens en le dit plement assemblez & p auctorite del mesme ad ordeigne enacte & establie'] xiij.

[1] See Note to the French Text.

[1] Instead of the long Preamble to this Act, as entered on the Parliament Roll, and printed in modern Editions of the Statutes, the Old Printed Translations read, in conformity with the French Text, as follows:

"Item, upon grevous Complaint made to our Sovereign Lord the King, in the said Parliament, by the Commons of the same, of the Defaults of Measures of Butts of Malmesye and other Vessels of Wines and Oil; Our said Sovereign Lord the King, by the Advice and Assent of the said Lords Spiritual and Temporal, and at the Supplication of the said Commons in the said Parliament assembled, and by Authority of the same, hath or dained, established, and enacted,"

q̃ null mañ marchaunt nautre psone quele qil soit del feste de Seint Michell Larchangell ore pschein ven^nt enav^nt, amesne ne face estre amesnez en le dit Roialme ascun But de Maluesie destre venduz sinoun il conteigne en mesure au meyns la veil mesure vj^xx & vj galons; ne ascuns mañs vesseaulx ovesq̃ ascuns maners Vines quellez qil soient & de q̃conq̃ paiis q̃ils soient, ne ascuns maners vesseaulx de Oile, sinoun les vesseaulx de celles Vines & Oile, conteignent & teigne lassises & mesures cy ensuantz; cest assavoir chescune Tonell de conteigner xij^xx & xij galons, & chescune Pipe de conteigner vj^xx & vj galons, & chescune Tercian de conteigner iiij^xx & iiij galons, & chescune Hoggeshede de conteigner lxiij galons, & chescune Barell de conteigner xxxj galons & dimy, & chescune Roundelet de conteigner xviij galons & dī, accordaunt al auncien assise & mesure de mesmes lez vesseaulx usez deinz cest Roialme. Et q̃ toutz lez Vesseaulx des Vines & Oile amesnez en le dit Roiał aꝑs le dit Fest destre venduz ne soie^t misez au vend aꝑs mesme le Fest tanq̃ ils soie^t bien & vraieme^t gauges p le Gaugeour du Roy ou p son sufficient deputee, sur peine de forfaiture a nr̃e dit s^r le Roy de to^s tielx Vines & Oile ensi venduz a lencontrarie de cest p̃sent orden^nce, ou aultreme^t del value des mesmes. Et en case q̃ ascun mañe psone de quell paiis q̃il soit de cest temps enav^nt vende au ascune du liege poeple du Roy p' ascun price assigne en certeyn, ascun Tonell But Pipe Tercian Hoggeshede Barell ou Roundelet dascun mañe Vine ou Oile, fautant ascun chose del dit assise ou mesure, q̃ le vendour allouera & rebatera de mesme le price al achato^r de tiel Vine ou Oile t^unt de moneie q^unt tiel defaute solonq̃ la rate amountera, sur payn de forfait^re a nr̃e dit s^r le Roy le value de to^t le Vine & Oile ensi venduz alencont^rie de ceste orden^nce, ascun prive coven^nt ou contract fait ou estre fait ent^re lachato^r & vendo^r al cont^rie de cest orden^nce en null mañe contristeant.

Item co^e le Clergie del pvince de Caunt̃burs & Dev̄wik ount devaunt cest temps g^untez as pgenito^s nr̃e s^r le Roy div̄s foitz en lour convocac̃ons dismes destre levez de lour biens & possessions, & aꝑs q̃ mesme la g^unt soit c̃tifie en leschequer du Roy & les nouns de les Collecto^s pur le mesme, q^unt les ditz Collecto^s apparont dev^nt les Barons de leschequer & entront en leur accompt pur la dit disme, q̃ donc̃s les ditz Collecto^s sovent foitz sount chargez vexez & troubles ovesq̃ billes misez p autres psonez env̄s eux, pur autres causes & matiers q̃ pur la dit cause touchaunt le dit accompt, & p occasion del mesme ils sovent foitz cheiont a g^und povisseme^t, & causēt le dit accompt estre deux ou trois ans pendaunt & les dismes nient contentz, a g^und damage nr̃e dit Sov̄aigne s^r le Roy & les Collecto^s avantditz: Il est pur ceo ordeigne & establie p nr̃e dit s^r le Roy les s^r's, Esp̃uelx & Temporelx & les Cōens

that no maner m̄chaunte nor other psone what so ev̄ he be, from the fest of Seynt Mygell tharchaungell nowe next cōmynge forthwarth brynge nor make to be brought in to this [youre said [1]] Realme eny Butte of Malvesey to be solde but if it hold in mesure atte the leste [the seid olde mesure of [1]] vj^xx vj. galons, nor eny maner Vessel̄ with any maner Wynes what so ev̄ they be and of what mañ Contrey so ev̄ they be, nor eny maner Vesselles of Oyle, but if the Vessellis of thoo Wynes and Oyle conteyne and holde thassises and mesures here folowynge that is to witt; ev̄y Ton to holde xij^xx xij galons; and ev̄y Pipe to hold vj^xx and vj galons, and ev̄y Tercian to hold iiij^xx and iiij galons, and ev̄y hoggeshed to holde lxiij. galons and ev̄y barell to holde xxxj galons and an half, and ev̄y Rondelet to holde xviij galons and an half, accordyng to thauncient assise and mesure of the same Vessell̄ used within this [youre said noble [1]] Realme. And that all the vessellys of Wyne and Oyle brought into this [youre said [1]] Realme after the seid feste to be solde, be not put to Sale after the same feste till they be well and truely gauged by [your [2]] Gaugiour, or by his sufficient Deputee, upon payne of forfaiture unto [you Sov̄aigne lorde [3]] of all suche Wynes and Oyle so solde to the contrarie of this p̃sent orden^nce or ellys of the value of the same. And in case that any mañ psone of what Contrey so ev̄ he be from this tyme forthward selle, to eny of [youre [2]] liege people for eny price assigned in certayn, eny Ton Butte Pype Tercian Hoggeshede Barell or Rondelet of any maner Wyne or Oyle fautynge any thynge of the said Assise or Mesure, that the Seller shall allowe and rebate of the same price, to the byer of suche Wyne or Oyle, as moche Money as suche Defaute by the rate shall amounte unto, uppon payne of forfaiture unto [you [4]] Sov̄aigne lorde ([3]) the value of all the Wyne and Oyle so solde to the contrary of this Orden^nce; eny prive coven^nte or contracte made or to be made betwene the byer and the seller to the contrary of this Ordenaunce in nowise withstondyng.

Contents of Butts of Malvesey, and Vessels of Wine and Oil.

Vessels of Wine and Oil shall be gauged.

Allowance to Buyers for short Measure.

An Act for Dysmes graunted in the pvinces of Canterbury and Yorke.

XIV.

Rot. Parl. nu. 32.

Collectors of Dismes sued in the Exchequer for other Matters;

([4]) WHERE the Clarge of the pvynce of Caunt̃bury and of Yorke haise be fore this tyme graunted to the King̃ pgenitours at div̄se tymes in their convocac̃ons Dymes to be levied of thair goodes & possessions, and after the same graunt be c̃tified in to the King̃ Escheker and the names of the Collectours for the same, when the said Collectours apperes before the Barons of the Escheker and entres into thair Accompt for the said Dyme, that the said Collectours are oftyn tymes charged vexed and troubilled with billes putt by other psones agayns theym, for other Causes and maters than for the said Cause touchyng the seid Accompt, and by occasion of the same they fall ofte tymes to greate povyshement, and causes the said Accompt to be ij or iij yere hangyng, and the said Dymes not content, to the greate hurt of oure said Sov̄aigne Lorde and to the Collectours aforesaid: It is therefore ordeigned and establisshed by the King his lordes sp̃uelx and tempelx and the Comens

[1] *omitted.* [2] our [3] the King's [4] Item } *Printed Translations.*

Collectors of Dismes shall not be bound to answer Bills at the Suit of private Persons in the Exchequer, filed by reason of their accounting;

in this p̄sent pliament assembled, that from henseforth yf any Dyme or Part of a Dyme be graunted by the p̄vynce of aither of the said Clargez to the King oure So̅vaigne lorde or to his heyrez, that after the said c̄tificate retorned into the Escheker of the said Dyme or part of a Dyme, and the Names of the Collectours for gederynge of the same, that if the said Collectours come by p̄cesse before the said Barons of the said Escheker and entre into their Accompt, that they shall not be bounde to aunswere bill or billes thar laide agayns theym by reason of the said Entre into their Accompt, for no ma̅ of cause but onely for the matier towchyng the said Accompt: Provided alwey that if the said Accomptant be sued in eny other Court by Writt bille or pleynt, that he shall take no privylege of the said Escheker, by reason of the said Accompt, for eny Sute as is afore reherced.

But, if sued in other Courts, they shall take no Privilege of Exchequer.

en le dit pleme assemblez, q̄ decy enav^nt si ascun disme ou part del disme soit g^unte p la p̄vince de chescun de les ditz Clergies au Roy n̄re dit So̅vaigne f^r ou a sez heires, q̄ ap̄s le dit c̄tificat reto^rnes en lescheqer p^r la disme ou p̄t de disme, & les nouns de les Collecto^s p^r collect del mesme, q̄ si les ditz Collecto^s veigno^t p p̄cesse dev^nt lez ditz Barons del dit Eschequer & entront en lo^r accompt, q̄ils ne ſront mye obligez de respondre bille ne billes illeoqes mise ou mises en̅s eux p reason del dit entre en lo^r accompt, p^r null ma̅e cause mes t^unt souleme^t p^r la matier toucha^t la dit accompt: P^rveu to^s foitz q̄ si le dit accompt^unt soit suez en ascun autre Court p brief bille ou pleint, qil prendra null privilege del dit Eschequer p reason du dit accompt pur ascune suite come dev^nt est rehersee.

XV.
Rot. Parl. nu. 33.

AN ACTE for adnullinge t̄res patent̄ made to Elizabeth late Wyfe of Sir Jo: Grey.

(1) FOR certayn greate causes and consideraco̅ns, touchynge aswell the suertie of the moost Roiall p̄sone of the King oure So̅vaigne lorde Richard the thrid, as of this his Realme, by thadvyce and assent of the lordes sp̄uelx and tempelx and the Comens in this p̄sent parliament assembled and by auctorite of the same, [It be[2]] enacted ordeigned and stablisshed, that all t̄res patent̄ Stat̄ Confirmacions and Actis of Parliament of any Castellys Lordshipps Manours landes teñt̄ fermes feefermes fraunchises libtiez or hereditament̄ what so ev̄, made at any tyme to Elizabeth late the Wyf of f^r John Grey Knyght, and late callyng herself Quene of Englond, by what soev̄ name or names shee be called in the same, bee from the first daye of May last passed forward uttrely voied adnulled and of no force ne effect in the Lawe. And that noon p̄sone or p̄sones be charged, to the Kyng oure said So̅vaigne lorde, ne to the said Elizabeth, of or for any Issues proffitt̄ or Revenues of any of the said Lordships Manours Castels Land̄ Teñt̄ fermes hereditamentes, nor for eny trespasses or medlyng in the same, nor for eny bysuertye by eny p̄sone or p̄sones to hir or to hir use made for the same, afore the said fyrst daie of May last passed; but be therof, ayenst [oure said So̅vaigne lorde[2]] and the said Elizabeth utterly discharged and acquited for ever.

Item pur certeins g^undes causes & consideracions touchauntz la suertie del treshaulte p̄sone n̄re So̅vaigne f^r le Roi Richard le tierce, come de cest son Roiat, de ladvice & assent de lez f^s Esp̄uelx & Temporelx & les Co̅ens en cest p̄sent pleme^t assemblez & p auctorite del mesme, Il est enacte ordeigne & establie, q̄ toutz t̄res patentez statez confirmaco̅ns & actes du pleme^t des ascuns Chastelx Seigno^ries Manoirs t̄res teñtes fermes (1) fraunchises libertees ou hereditamentes qeconques, faitz au ascune temps a Elizabeth nadgairs f̄me de f John Grey Chevaler, & ore & tarde appellant soy mesme Roigne Dengle̅re, p q̄counq, noun ou nouns el soit appellez en les mesmes, soient a le primer jour de Maij darri̅e passez en av^nt toutoutrement voidez adnullez & de null force ne effect en la ley. Et q̄ null p̄sone ou p̄sones soit charge ou soient charges a n̄re dit So̅vaigne f^r le Roy, ne au dite Elizabeth, de ou pur ascuns issuez p̄fitez ou revenuz dascuns de les ditz Seignouries Manoirs Chastelx t̄res teñtes fermes hereditamentes, ne pur ascun t̄spas ou entremettance en les mesmes, ne pur ascun bisuertie p ascune p̄sone ou p̄sones a elle ou al use delle fait pur les mesmes, dev^nt le dit primer jour de May darri̅e passez; mes soit & soient dicell en̅s n̄re dit So̅vaigne f^r & la dit Elizabeth toutoutrement descharge & acquite deschargez & acquitez pur toutz jours.

XV.

All Letters Patent, made to Elizabeth late Wife of Sir John Gray, and calling herself Queen of England, annulled.

All Persons discharged, against the King and the said Elizabeth, in respect of any Issues or Profits, &c.

[1] Item [2] It is } *Printed Translations.*
[1] the said King

[1] fee fermez *MSS. Pet. & Cott.*

Expliciunt statuta Regis Ricardi tercij.

End of the Statutes of King Richard the Third.

STATUTES OF KING HENRY THE SEVENTH.

Anno 1° HENRICI, VII. A.D. 1485.

*Ex MS. Petyt.**

HIC INCIPIUT STATUTA
Regis Henrici Septimi anno p'mo edita.

(1)ENRY p le grace de Dieu Roy Denglit̃ & de France & f' Dirland au pliament tenuz a Westm̃ le septisme jour de Novembr lan du reigne du Roy Henry le septisme puis le conquest p'mer:

Au plesur de Dieu tout puissant bien publique pspite & suertie dicest realme Denglit̃e a la singler comfort de toutz lez subgett̃ du Roy del mesme & [de remoevdmēt [2]] de toutz ambiguitez & questions, del assent dez f'z espuelx & temporels et a la request dez Cōens il est ordeigne establie & enacte p auct̃o te du dit pliamēt q̃ lez enheritaunces dez Corones dez Realmes Denglit̃re & de Fraunce ove toutz p̃emynence & dignite roiall a ycest app'ten'nt et toutz autr̃ f'iez au Roy regardant oultre le mere ovesq̃ lez app'ten'ncez a yceux en ascun maner duez ou pteignantz soient estoient remaignent en le [tres noble [3]] pson nr̃e dit Sov̄aigne f' le Roy Henry le septisme & en lez heirz̃ de son corps loialmēt issantz ppetuelment ovesq̃ le grace de Dieu ensy dendurer & en nulls aut̃z.

[1] A Blank left for the Letter H.—Henry *MS. Hatt.*
[2] en remouement } *MS. Hatt.*
[3] s̃ loiall }

HERE BEGIN THE STATUTES
Made in the First Year of King Henry the Seventh.

HENRY by the Grace of God, King of England and of France, and Lord of Ireland, at the Parliament holden at Westminster the Seventh Day of November, in the First Year of the Reign of King Henry, the Seventh after the Conquest.

Ex Rot. Parl. 1 Hen. VII.

TO the Pleasure of Almyghty God the welthe pspitie and Suertie of this Realme of Englond to the synguler comforth of all the Kyngs Subgett̃ of the same and in avoydyng of all ambiguyties and questions, [Be it [1]] ordeyned estabilisshed and enacted by auctorite of this p̃sent pliament that thenheretaunc̃ of the Coronnez of the Realmes of England and of Fraunce, w^t all the p̃emynence and dignytie Roiall to the same pteynyng, and all other Seigniuriez to the Kyng belongyng beyond the See w^t thapp'tenaunc̃e therto in any wise due or pteynyng, be rest remayne and abyde in the most Royall pson of oure nowe Sov̄ain Lord King Henry the vij^th and in the heires of his body laufully comyng ppetuelly with the Grace of God so to endure & in noon other. Titulus Regis.

[1] *with the Assent of the Lords Spiritual and Temporal, and at the Request of the Commons, It is*

* The Statutes of this First Year, and of the Third Year, of this King's Reign, have hitherto, as far as has been discovered, been printed in English, in all Collections of the Statutes at large: The French Text now printed, of the Statutes of both these Years, is taken from the *Petyt Manuscript* No. 8. in the Inner Temple Library, compared with and corrected, by the various Readings in the Notes, from the *Hatton Manuscript* 10. [*Catal. MS. Angl.* 4135.] in the Bodleian Library.

In *Lib. Scacc. Westm. XI.* and many other Manuscripts, the Statutes of these Years are entered in English, agreeing with the Old Printed English Copies, and in Form with the French Text as now printed, beginning as in the succeeding Page, 500; The English Text, of all the Acts contained in the Statute, is now printed from the Inrollment on the Roll of Parliament of this Year: Such Variations as occur in *Lib. Scacc.* wherewith the Old Printed Copies in general agree, are inserted in the Notes. The French Text does not contain what are inserted in *Lib. Scacc.* and the Printed Copies, as the concluding Chapters of this and the Third Year; Those Chapters, having heretofore been printed as they appear in *Lib. Scacc.* are now printed from that Source, as part of the Statute, and also from the Inrollment of the correspondent Acts on the Parliament Rolls, in conformity with the Method pursued in the preceding Chapters of each Session.

Ex Lib. Scacc. Westm. XI.

THE KYNGE our Sovereyn Lorde Henry, the Seventh after the conquest, by the Grace of God Kyng of Englonde and of Fraunce, and Lorde of Irlonde, at his parliament holden at Westmynster the seventh daye of Novembre in the first yere of his reigne; To thonour of God and Holy Chirche, and for the comen profite of the Roialme, by thassent of the Lordes Spirituell and Temporell and the Comens in the said Parliament assembled, and by auctorite of the sayd Parliamente, hath do to be made certein Statutes & ordenaunces in maner & fourme folowyng.

Ex Rot. Parl. 1 Hen. VII.

I. *Rot. Parl. nu. 66.*

AN ACT that the Demaundant in a forme downe shall have his accõn agaynst the pner of the pffytt℄.

Demandants in Formedon shall have their Action against the Pernors of Profits of Lands, whereof others are enfeoffed to their Use.

(1) WHERE dyvers of the Kyngs Subject℄ havyng cause of accion by formedowne in the Descendr̃, or els in the remayndr̃ by force of any taill, of and for londes and Teñt℄, ben defrauded and delayed of their seid Accions and oft tymes without remedy, by cause of feffement℄ made of the same londes and Teñt℄ to psones unknowen, to thentent that the Demaund*unts shuld not knowe ayenst whom they shall take their accion, [Be it [2]] ordeyned stablisshed and enacted by the Advyce of the Lordes sp̃uelx and tempell℄ and the Comons in [this p̃sent [3]] parlement assembled and by auctorite of the same, that the Demaund*unt in ev̈y suche cas have his accion ayenst the pno' or pno's of the pfitt℄ of the Lond℄ or Teñt℄ demaunded, wherof any psone or psones ben enfeffed to his or their use; And that the same pno' or pno's, named as Ten*nt or Ten*nt℄ in the said Accion, have the same Vouchers and there lien theruppon eyde pryer and all other avauntages, as the same pno' or pno's shuld have hadde if they were ten*nt℄ in dede, or as their feffees shuld have hadde if the same Accion hadde ben conceyved ageyns theym; And if it fortune any psone to decesse, so havyng feffees to the use of hym or of his heires, the seid heire beyng w'in age ayenst whom suche Accion is brought as pno', then the same heire have his age in the said Accion conceyved ayenst hym, and all other avauntages, as if his Auncestre hadde died seised of the seid londes and teñt℄ so in demaund. And also [be it [4]] ordeyned by the seid auctorite that all recov̈es as shalbe in any of suche accions agayn such pno' or pno's [of the pfitt℄ of the seid londes and teñt℄ be of like force and effect agayn such pno' or pno's [5]] and their heires, and their said feffees and their heires, and the Cofeffees of the seid pno's and their heires, as though the seid pno' or pno's were ten*nt℄ in dede, or feffes to their use or their heires as is aboveseid, of the frehold of the seid londes and teñtes at any tyme of the seid accion used.

In those Actions such Pernors shall have the same Vouchers, &c. as if they were Tenants in Deed, or as their Feoffees would have had, if sued.

Recoveries in such Actions shall have like Force, as if against the Tenants in Deed, or their Feoffees.

IV. *Rot. Parl. nu. 67.*

AN ACTE for Busshopps to punnysh Priest℄ and other religious men for dishonest lyffe.

(3) FOR the more sure and likly reformacion of Preestis Clerkys and religious men culpable or by their demerites openly noised of incontinent lyvyng in their bodies contrarie to their ordre [Be it [2]] enacted ordeyned and

[1] Firste that
[2] It is
[3] the sayd
} *Lib. Scacc.*

[4] These Words are erroneously omitted from *Lib. Scacc. XI.* and all Printed Copies:—Rast. 1618. and subsequent Editions attempt to supply the Deficiency by an erroneous Insertion of the Words "shall be as good to the Recoverers and their Heirs," before the subsequent Words "as though," &c.

[5] Item *Lib. Scacc.*

Nr̃e s℄ le Roy Henry puis le conquest septisme a son pliamẽt tenuz a Westñ le septisme jour de Novembr lan de son reigne p'mer all honour de Dieu & de Seint Esglice & p' la cõen pfit del Realme del assẽt dez s℄z esp̃uels & tempels & cõenz esteantz en le dit pliamẽt et p auctorite de ñ le pliamẽt ad fait faire ẽteinz estatutz & orden*ncez en la forme que ensuist.

Prim̃mẽt q̃ come div̈sez subgett℄ du Roy aiantz cas daccion p formedon en le descender ou autremẽt en le remainder p force dascun taill de & pur p̃rez & teñtez, sont defraudez & delaiez de lour dit accõns & sovent foitz s*unz remedie, p cas dez feoffementz faitz de ñz lez p̃rez & teñtez as psons nient conuz ou disconuz, a lentent q̃ lez đdantz ne dussent conuscer encontr̃ quex ilz p̃nderont lour accõn; Il est ordeigne establie & enacte p ladvise dez seigno'z esp̃uels & tempels & lez cõens en le dit pliament assemblez & p auctorite del mesme, q̃ le đdant en ch̃un tiel case aiet sa accõn enconter le pno' ou pno'z dez pfit℄ de lez p̃rez ou teñtez demaundez, dez quex ascun psone ou psonez sont enfeffez a son ou lour oeps; Et q̃ ñ le pnour ou pno'z, nome ou nomes come ten*nt ou ten*ntz en la dit accõn, aiet ou eient ñz lez vouchers & lour lien sur ceo aied praier & toutz aut̃z av*ntagez come ñ le pnour ou pnours dussent ou dusseint aver ewe sils fuissent tenantz en fait, ou come lour feoffez duissent avoir ewe si ñ laccõn eusset este attempte ou consceu encontre eux; Et sil aveigne ascune pson a decesser ensy aiant (1) al use de luy ou de cez heir℄, le dit heir esteant deinz age encontre quell tiel accõn est p'se come pno', donc̃s ñ le heir aiet sa age en la dite accõn conceu encontr̃ luy & toutz aut̃z av*ntagez si come son auncestr̃ eusset moruz seisi de lez dc̃ez p̃rez & teñtez ensy en demaunde. Et auxi il est ordeigne p le dit auctorite, q̃ toutz recov̈ez quels front en ascun de tiels accõns encontr̃ tiel pnour ou pnours [de lez pfitz de lez dc̃ez p̃rez & teñtez, soient de semblable force & effecte encontre tiel pnour ou pnours [2]] & lour heir℄, & lour dc̃ez feffez & lour heir℄, & lez [enfeffez [3]] dez dc̃ez pnours & lour heir℄, sicome le dit pnour ou pnour℄ fuisset ou fuissent tenantz en fait ou feffez a lour use ou lour heir℄ come est desuisdit del f*unktenur de lez dc̃ez p̃rez & teñtez al ascun temps del dit accõn usee.

Cam. p'mũ.

Ĩm pur la pluis (3) & verisemble reformacion dez Prestres Clerkes & ho*s religiousez coupablez ou p lour demerites ov̈tement diffamez del encontinẽt vivre en lour corps contrarie a lo' Ordre, Il est enacte ordeigne &

ij. (4)

[1] The Word 'feoffees' appears to be omitted in the MSS.

[2] The Insertion of these Words, in conformity with the Parliament Roll, affords favorable Evidence of the Authenticity of the French Text of this Statute.—See Note [4] to the English Text.

[3] erroneously for 'cofeffez.'

[4] Cap. IV. *Lib. Scacc.* [5] sure *MS. Hatt.*

establie del advise & assent dez ſ'z espuels & tempels & cōens en le dit pliament assemblez & p laucto[te] del mesme, q̄l soit loiall a toutz erchevesq̄s & Evesq̄s, & autr̄ Ordinaries aiantz episcopall jurisdiccōn, de punier & chastiser tiels presters Clerkſ & ho[es] religiousez [ceantz [1]] dedeinz lez boundez de lour jurisdiccōn quels ſront convictez devant eux, p exāiacion & auter loial proof requisite p le ley del Esglice, de advoutrie fornicacion incest ou auscun auter carnall incontinencie, p cōmittance de eux agarder all prison illoq̄s a dem'er p tiell temps co[e] semblera a lour discrecōns ꝯveniāt p' la qualite & quantite de lour trespas; Et q̄ nul de lez ditz Erchevesq̄s & aut̄z ordinarez av'ntditz soient pur ceo ([2]) tout outremēt ent discheges en ascuns de lez causez av'ntdcez p ṽtue du cest Acte.

established by the Advyse and Assent of the Lordys spuell and tempell and Cōens in [this p̄sent [1]] parliament assembled and by auctorite of the same, That it be laufull to all Archebisshops and Bisshops, and othre Ordinaries havyng episcopall jurisdiccōn, to punnysshe and chastice such preestis clerkys and religious men beyng within the boundys of their jurisdiccōn, as shall be convicte afore theym, by examinacion and other lawfull proeff requisite by the lawe of the Churche, of Avoutrie fornicacion inceste or eny other flesshely incontinency, by cōmyttyng theym to Warde and prisoun there to abide for suche tyme as shalbe thought to their discrecions convenient for the qualite & quantite of their trespasses; And that noon of the seid Archebisshops Bisshoppis or other Ordinariez aforeseid be therfore chargeable of to or uppon any accion of fals or wrongfull imprisonement, but that they be utterly therof discharged in ony of the Cases aforeseid by ṽtue of this Acte.

Bishops, &c. may punish Priests for Incontinency; by Imprisonment.

iij. Itm de lavise de lez ſ'z espuelz & temporels & a la prier dez cōens en le dit pliament assemblez & p auctorite dicell il est enacte ordeigne & establie, q̄ nul pteccion soit en ap̄s allowable ne alowe en la co't dev'nt le Mair Constablez & compaigne de Marchantz del Staple au Calays, ([2]) ne en la Court dev'nt le Mair & cez cofrerez de m̄i la ville de Caleys, ne en ascun auter Court ou Courtſ deinz m̄i la ville ou marches illeosq̄s, en ascun ac̄ion p'sue ou enap̄s estre p'sue p ascunz de lez ditz m̄chantz lo' factorz ſv'ntz ou Atto'neys encontre ascunz de lez ditz m̄chantz lo' factours ſv'ntz & Atto'neys.

III.
Rot. Parl. nu. 68.

No Protection before the Mayor of the Staple or other Court at Calais, in Actions between Merchants.

AN ACTE that noe pteccōn shalbe allowed before the Mayor of the Staple at Callys.

[[2]TO the honorable wise and discrete Comons in this p̄sent parlement assembled; Please it yo' great Wisdomes to pray the King oure Soveraign lorde that he by thadvyce of the Lordes spuall and tempall and you his Cōmons in this p̄sent plement assembled and by auctorite of the same, It be[2]] enacted ordeigned and establisshed that no proteccion be herafter allowable ne allowed in the Courte before the Maire Constables and Felishipp of m̄ch'untſ of the Staple at Calais, ne in the Courte before the lieuten'nt Constables and feliship of m̄ch'untſ of the same Staple, ne in the Courte before the Maire and his Brethern of the same Towne of Calais, nor in any other Courte or Courtes w'in the same Towne or Marchies their, in any accion sued or hereafter to be sued, by eny of the seid m̄chauntſ their Factours ſv'ntes or Atto'neis ayenst any of the seid m̄ch'untſ their factours ſv'ntſ or Atto'neis.

iiij. ([3]) Itm q̄ come en temps passe div̄s g'untez ount este faitz p le Roy Edward le iiij[te], sibn p cez trez patentz come p actez du pliament, es div̄sez m̄chantz est'ungez neez dehors cest Realme destre deinzins, p quel ilz ount & enjoient tiels franchesez & libteez come font deinzins neez deinz cest Realme, sibien en abatemēt de lour custōme quel ilz dussent porter si ilz ne furent nulz deinzins co[e] en achate & vende de lour m̄chandise, a lo' g'unde availe & lucre, & sovent foitz soeffrent aut̄r est'ungez nient deinzins [de semblablement [4]] deskipper & carier g'unde & notable substance de m̄chandise en lour nouns, p le quell lez ditz bnz sont [fraudez [5]] de Custome en semblable maner co[e] ilz fuerent bnz dun Deinzin, lou de droit ilz doient paier custome come bnz destranger, p la quel ils sont g'undement avancez en riches & avoir; & p[o] q̄ ilz sont ensy enriches pur le pluis greindre parte ilz conveient lour m̄z ovesq̄ lour dcez bnz en lour ppre pays, as quex ilz sont nat'elment neez, a la g'unde empov̄isshemēt du cest Realme, & a la g'unde damage & defraude de Roy en paiemēt de cez custumez:

II.
Rot. Parl. nu. 69.

Aliens made Denizens shall pay Aliens' Customs.

AN ACTE that Denysons shall paye Custome and Subsidy.

([3]) WHERE in tyme past dyvers graunt̄ſ have be made by Kyng Edward the iiij[th], aswell by his lres patent̄ſ as by Act̄ of parlement, to dyvers Merchaunt̄ſ Straungers born owt of this realme to be denesyns, wherby they have and rejoice such fredomes and libties as doth denesyns born within this realme, aswell in abatement of their Custome which they shuld bere if they were no Denesyns as in biyng and sellyng of their Merchaundise, to their grete avail and luker, and oft tymes suffre other Straungers not denesyns deceitefully to ship and cary grete and notable substaunce of m̄chaundise in their names, by the which the seid goodes be freed of Custome in likewise as they were goodys of a Denesyn, where of right they owe to pay Custome as the good̄ſ of Straungers, by the whiche they be gretely avaunsed in richesse and havour; and after they be so enriched for the moste parte they convey their self with their seid good̄ſ unto their owne Contreys wherin they be naturally born, to the grete impov̄isshyng of this Realme and to the grete hurt and defraude of the the Kynḡſ Highnesse in payment of his Customes:

[1] esteantz *MS. Hatt.*
[2] Erroneous Omissions here in both MSS.
[3] Cap. II. *Lib. Scacc.*
[4] deceivablement *MS. Hatt.*
[5] francs *MS. Hatt.*
[1] the said *Lib. Scacc.*
[2] Item, The Kynge our Sovereyne Lorde, by thadvyse of the Lordes Spirituell & Temporell and at the prayer of the Comens in the said Parliament assembled, and by auctorite of the same, hath *Lib. Scacc.*
[3] Item *Lib. Scacc.*

Wherfore [be it [1]] enacted stablisshed and ordeyned by the Advice of the Lordes spuall and temporall and the Comons in [this p̄sent [2]] parlement assembled and by auctorite of the same, that ev̄y psone made or herafter to be made Denesyn pay for his m̄chaundise like Custome and Subsidie, as he owght or shuld pay afore that he were made Denesyn, any tres patent̄ or other ordynaunce by parlement or otherwise contrarie to this made notwithstondyng.

Si il est enacte establie & ordeigne de ladvise dez ſ'z espuels & tempels & lez cōenz en le dit pliamēt assemblez et p auct^o^ dicell, q̄ chun pson fait ou en ap̄s estre fait deinzin paie pur cez m̄chandises semblable custome & subsidie, si come celuy doit au durroit paier dev^nt q̄il fuist fait deinzin, ascunz tres patentz ou autr̄ ordin^nce p pliament ou aut̄ment a contrarie a cesty fait nient contristeant.

VIII. *Rot. Parl. nu.* 70.

For the Reparation of the Navy, Wines of Guienne and Gascony shall be imported only in the Ships of Englishmen, &c.

An Acte agaynst bringing in of Gascoigne Wyne, except in English, Irysh, or Welchmens Shipp̄.

[[3] TO the right wyse and discrete Cōens in þis present parlement assembled; Please it youre grete Wisdomes to call to your remembr^a^unce [4]] of the grete mynishyng and decaye that hathe ben now of late tyme of [youre [4]] Navie w'in this Reame of Englond, and ydelnesse of the Mariners w'in the same, by the whiche this noble Reame w'in short pcesse of tyme, w'oute reformacion be had therin, shall not be of habilite and power to defend it self, Wherfore [please it your grete Wisdomes to pray the Kyng oure Sov̄aine Lord that he by thadvice of his lords spuell and temporell and of you his Comons in this p̄sent parlement assembled and by auctorite of the same it be [5]] enacted ordeyned and establisshed that no man̄ psone of what degre or condicion that he be of, bye nor sell w'in this seid Reame Irlond Wales Caleis or the m̄ches therof or Berwyk, from the fest of Michelmasse next now cōmyng, eny man̄ Wynes of the growyng of the Duchie of Guyen or of Gascoigne, but such as shall be aventured and brought in an Englisshe, Irisshe or Walshmannys Shippe or Shippes, and the Maryners of the same Englisshe Irissh or Walshemen for the more parte, or men of Caleis or of the Marches of the same; and that upon peyn of forfeiture of the same Wynes so bought or sold contrarie to this Act, the oon half of that forfeiture to be to [the Kyngs̄ grace [6]] and that other half to the fynder of that forfeiture: This Act and Ordynaunce to endure betwex this and the begynnyng of the next pliament, savyng allwey to the Kyng [all [7]] hys p̄rogatyve.

Iīm en le pliament av^nt̄dit il fuist appell a remembrance le g^a^unde diminucion & decaie q̄ ad este de temps ore tarde de le Navie deinz cest Realme Dengl̄e, & occiosite ou [odiste [2]] de lez mariñs deinz le ñi, p le quell le dit Realme dedeinz brief pces de temps s^a^unz reformacion en ceo ne seroit dabilite & poiar soy ñi a defender, sur quey all preier de lez cōens de ladvise de lez ſ'z esp̄uels & tempels en le dit pliamēt assemblez et p auct^o^ dicell, Il est enacte ordeigne & establie, q̄ null maner pson de quel degree ou condic̄on q̄ qil soit achate ne vende deinz cest dit Realme Ireland Gales Caleis ou lez Marches de ceo ou Berewik, a la feste de Seint Michell ore pschyn veignāt, ascunz man̄s vines del cressaunce del Duchie de Guyen ou de Gascoine, mez tiels q̄ ſront aventures & amesnez en nieff ou nieffs dez homez englois irrois ou galois, & lez mariñ de ñz lez homez englois irrois ou galois pur le greinder parte, ou homez de caleis ou de lez marches dicell; & ceo sur peyn de forfeture dez ñz lez vines ensy achatez ou venduz contrarie de cest acte, lune moite de cell forfetur destre a nr̄e ſ^r^ le Roy & lauter moite [a la trouver [3]] de cell forfeiture: cest acte & ordin^nce dendurer penter cy & le comencemēt de p̄chin pliament; sav^nt toutz jourſ̄ au Roy ([4]) sa p̄rogative. v. ([1])

V. *Rot. Parl. nu.* 71.

Tanners.

[TO the Kyng oure liege Lord; Praien the Comons in this p̄sent parlement assembled [8]] that where Tanners in div̄sez parties of this [youre [9]] Reame usen w'in theym self the mystere of curriyng and blakkyng of lether insufficiently, and also lether insufficiently tanned, and the same lether so insufficiently wrought, aswell in tannyng as in coriyng and blakkyng, they put to sale in div̄se feires and markettys and other places to grete deceyte and hurte of [youre [9]] liege people: And also where it was ordeyned and stablisshed at the parlement holdyn at Westmynster the second yere of the reigne of Kyng Henry the vj^th^ amongſ̄ other, that no Cordewener nor noon other to his use shuld occupie the mistere of a Tanner while he occupied the mistere of a Cordewener

Recital of St. 2 H.VI. c. 7.

Iīm q̄ come Tanners es div̄ses pties dicest Realme usent deinz soi ñz le mestier de coriance & noirance dez quirs insufficialmēt, & auxi quirs insufficialmēt tannez, Et ñz lez quirs si insufficialment ov̄ez si þn en tannuī come en coriance & noirance [& lō [6]] mittent a vend as div̄sez feires & marches & aut̄s lieux, a g^a^unde desceite & damagez dez liege people du Roy: Et auxi come il estoit ordeignez & establie, au pliament tenuz a Westñi lan ij^de^ du reigne le Roy Henry le sisme enter auters, q̄ null Cordewaner ne null auter a son use occupieret le mestier de Tanner durant le temps q̄il occupia la mestier de Cordewaner sur payn vj. ([2])

[1] It is [2] the said
[3] Item in the said Parliament it was called to remembraunce [4] the
[5] at the prayer of the sayd Comyns, the Kynge our Sovereyne Lord, by the Advyse of the Lordes Spirituell and Temporell, in this sayd present parliamente assembled, and by Auctorite of the same, It is
[6] the Kynge our souereyne lorde
[7] *omitted.* [8] Item [9] the King's
} *Lib. Scacc.*

[1] Cap. VIII.
[2] Cap. V.
} *Lib. Scacc.*

[2] udiste [3] a le trouvour
[4] tout [6] ils
} *MS. Hatt.*

de forfetur̃ de ch̃un quire issint p luy ou p ascun aurer a son oeps tanne vj s. viij d. Et q̃ ch̃un Tanner duissoit auxi forfaire pur ch̃un quire p luy tanne insufficialment vj s. viij d. sicome en ñ lesta' pluis pleinemēt appiert; Nr̃e dit Sov̄aigne le Roy del advise & assent de lez dc̃ez f'z sp̃uels & tempels & a la praier de lez cōens en son dit pliamēt assemblez & p auct^te de ñ le pliamēt, en eschuer de tiels deceiptes, ad ordeigne & establie, q̃ le dit ordeign^nce fait en le dit an ij^de du Roy Henry le sisme soit & estoise en son pleyn force & vertue & soit mise en due execucion en toutz pointz. Et oustr̃ ceo del advise assent & auct^te suisditz ad ordeigne & establie, q̃ null tanner tanq̄ come il occupie le mestier de Tanner, ne null auter a son oeps, a la fest de lascencion nr̃e f' pschyn ven^nt, use le mestier de Coriour, ne face noir null quire destre mise a vende, sur peyn de forfaiture pur ch̃un quire p le dit Tanner issint coriez vj s. viij d; Et q̃ null Coriour dez quirs p̃igne sur luy de corier ascun hyde de quir mez tiel quel est sufficialment tanne, sur peyn de p̃der pur ch̃un hyde issint corie, iij s. iiij d; une part de lez ditz forfaitur & peyns a celuy q̃ ceo trovet & provet ceo, dev^nt ascunz Justicez de peas ou dev^nt Mair Bailiff Viscount ou Viscountz ou autre Chieff Gov̄nour dascun Cite Burgh ou ascun Ville de lez Cynk Portz; Et lauter moite de lez dc̃ez forfaiturez & & peynes hors dez Citeez Boroughz ou lez villez de lez v. portez au Roy nr̃e Sov̄aigne f'r; Sav^nt a ch̃un f' sp̃uel & temporell & as toutz aut̄s liegez du Roy lour franchisez pur ascun chose le mesme conc̄nant; Et dedeinz Citeez Boroughz & Villez de lez dc̃ez v^te portez a la cōialtie ñz lez (') Boroughz & Villez. Et q̃ null tanner a le dit feste del ascension ne null auter a son oeps mette ascun quir a vende, en ascun feire ou m̄che ou en ascun auter lieu, forsq̄ rouge si come il vient del tanne, sur peyn de forfetur de ñ le quir; & cel forfaiture es tiels lieux come est av^nt dc̃e trove destre divisez en maner & forme av^ntdc̃ez. Et auxi q̃ nul Coriour occupie la mestier de tanner tanq̄ come il occupie la mestier dun Coriour, sur peyn de forfaiture pur ch̃un hyde p luy issint tanne ou p ascun auter a son oeps vj s. viij d; la un moite de ceo au Roy nr̃e Sov̄aigne f', Et lauter moite a ce q̃ voiet suer pur ceo en son p̃pre noun p acc̄on de dett all cōen ley ou p plaint en ascun Citee Burgh or Ville de lez cynk portz av^ntdc̃es. Et q̃ null tanner a le dit fest tanne ascunz peals de [barbiez[2]] sur payn de forfaiture de xx d. pur chune peal de barbize issint p luy tannez. Et q̃ lez Justicez de peas en ch̃un Countie, & Mairs & aut̄s gov̄nours deinz lez dc̃ez Citeez Boroughz & Villez, aient poiar denquerer oier & f̄ier toutz lez dc̃ez defautez, Et de metter cest orden^nce en ch̃un article en due execucion.

[1] Citeez *omitted in both MSS.*

[2] berbizes *MS. Hatt.*

under payne of forfeiture for ev̄y Hyde so tanned by hym or by eny other to his use vj s. viij d. And that ev̄y Tanner shuld also forfeite for ev̄y hide by hym tanned insufficiently vj s. viij d. as in the same Statute more pleynly apereth; [That it may please youre[1]] noble g^ce by thadvice and assent of the Lordes sp̃uelx and temporelx (2) in this p̃sent parlement assembled and by auctorite of the same parlement, in eschuyng of all such disceites, [to ordeigne and stablisshe[3]] that the seid orden^nce, made in the seid second yere of Kyng Henry the vj, be and stonde in his full force and strengh & be put in due execucion in all pointz. And ov̄ that, by the seid advice assent and auctorite [to ordeyne and stablissh[3]] that no Tanner whiles he occupieth the mistere of a Tanner ner noon other to his use, frome the fest of Ascension of oure Lord next comyng, use the mistere of a Coriour nor blak no leder to be put to Sale, under the payne of forfeiture for ev̄y hyde by the seid Tanner so coried vj s. viij d; And that no Coriour of lether take upon hym to cory eny hyde of lether but suche as is afore sufficiently tanned, upon peyne to lese for ev̄y hyde so coried iij s. iiij d. the oon parte of the seid forfeiture and peynes to hym that fyndeth it and proveth it before eny Justice of Peax or before Maire Baillif Shiref (4) or other chief Governour of eny Cite Burgh or any Towne of the v. Port̄; and the other half of the same forfeiture and peynez oute of Citees Burgh̄s or the Townes of the said v. Port̄ to [you Sov̄aign Lord[5]]; Savyng to ev̄y lord sp̃uell and tempell and all other the Kynges liege people their fraunchises for any thyng conc̄nyng the same; and within Citees Burgh̄s and Tounes of the seid v. Port̄ to the use of the Cōialte of the same Citees Burgh̄s and Townes. And that no Tanner from the seid fest of Ascension, nor noon other to his use, put eny lether to sale, in eny feire or market or in eny other place, but rede as it cōmyth from the tanne, upon peyn of forfeiture of the same lether; and that forfeiture, in suche places as is aforseid founden, to be devyded in man̄ and fourme aforseid. And also that no Coriour occupie the mistere of a Tanner whiles he occupieth the mistere of a Coriour, upon peine of forfeiture for ev̄y hyde by hym so tanned or by eny other to his use vj s. viij d; The oon half therof to [you sov̄ayn Lord[5]] and the other half to hym that wyll sue therfore in his owen name, by accion of dett at the cōen lawe or by pleynte in eny Cite Burgh or Toune of the v. Portes aforeseid. And that no Tanner fro the seid fest tanne eny Shepes Skynnes upon peyne of forfeiture of xx d. for ev̄y Shepes Skynne so by hym tanned. And that the Justices of Peas in ev̄y Shire, and Maires and other Gov̄nours w'in the seid Citees Boroughs & Tounes, have power to enquere here and det̄myn all the seid defaut̄ and to put this Orden^nce in ev̄y article in due execucion.

No Tanner shall be a Currier. Penalty. No Currier shall curry any Hides but such as are tanned. Penalty. No Tanner shall sell other than red Leather. Penalty. No Currier shall be a Tanner. Penalty. No Tanner shall tan Sheep Skins.

[1] The Kynge our said Sovereigne Lorde, of his
[2] and at the prayer of his Comens
[3] hath ordeyned and stablished
[4] or Shirreffees
[5] the Kyng, our Sovereyne Lorde

Lib. Scacc.

VI. *Rot. Parl. nu.* 72.

AN ACTE that certayne psons w^th^in Sanctuary shall not have any accons brought agaynst them.

[TO the Kyng oure Sovayn Lord. Please it your Highnes[1]] by the advyse and assent of [youre[2]] lordes spuell and tempall and the Comons in this [youre[3]] psent parliament assembled and by auctorite of the same [that it be[4]] ordeigned establisshed and enacted that all and syngler psonez comyng nowe late with [your[3]] Highnez frome beyond the See into thys [youre[3]] Roialme takyng [your[3]] partie and querell in recovyng and opteignyng of [youre[3]] (c) just title and right to this [youre[3]] Roialme of Englond; And also that all other suche male psone or psonez beyng in sentwarie or in hedell for [youre[3]] querell and title aboveseid, and all other psonez beyng in the feld in bateill and fvyng [youre[3]] grce takyng [youre[3]] pte and querell ayenst [youre[3]] ennemys ther, be utterlie discharged quyte and unpunysshable for ev, by Wey of accion or otherwise by cours of [youre[3]] lawes of this [yo'[3]] Roialme or othirwise, of or for eny man murdre sleyng of men or of takyng or dispoylyng of goodez or eny other trespasez, don by theym or eny of them of or to eny psone or psonez of this [youre[3]] Roialme beyng with [youre[3]] enemy Richard late Duc of Glowcestr Usurpo[r] of this [youre[3]] Roialme ayenst [youre[3]] most Roiall psone [youre[3]] Baner displayed in the same feld, and in the day of the seid feld: And that for any goodez taken or trespassez doon besidez the day of the feld, by any of the psonnez being w[t] the King or in Seyntuary or hydell as is aforeseid, from the fest of Assumpcon of our lady last past unto the fest of Seynt Michell then next ensuyng, to eny of the sv[nt] Councelo's Officers or Ministres of the seid late Duke, non accion be mayntened ne mayntenable ayenst them or any of them w'out the Kingf speciall licence in that behalve opteyned. Provided alwey that this psent acte extend not ne in eny wyse be avaylable to eny psone or psonez above specified of in or for eny murdre or rape of eny othir [that[3]] was don the day of the seid feld, or of eny dissin comytted or done by theim or eny of theim in eny wyse. Provided also that this Acte extende not nor be pjudiciall to any psone or psones, which had the saufgard of the Kyng oure Sovereign Lorde gnall or speciall, for eny robberyes trespasses or any other injuriez don or comitted to theym or any of theym, aftir the seid saufgard made under his prive seale or signet or other warant sufficient. Provided alwey that this Act ne noon other Act in this psent parliament made or to be made be not hurtfull ne pjudiciall unto Elizabeth Wyndesore Wedowe late wyf of Thomas Wyndesore Esquier, Edward Cheseman and f John Cokett, Prest, executours of the testament of the seid Thomas Wyndesore, of or for any robberie trespasse or other offence doon unto the seid Thomas in his lif; but that the seid Elizabeth, Edward and John Cokett may have and pursue accion or accions, ayenst all man psone or psones jointly and sevally, for the seid Robberies Trespasses and offenses and eche of them, by what soevir name or names the seid Thomas Wyndesore the seid Elizabeth Edward Cheseman & John Coket was or be named; This Act or any other Act in this psent pliament made or to be made notwithstondyng.

A Pardon of Murders, Homicides, Trespasses, &c. committed, by the Adherents of the King, against those of Richard Duke of Gloucester;

not to extend to Murders, &c. of others, nor to any Disseisins;

nor to be prejudicial to Persons having the King's Safeguard;

nor to the Executors of Thomas Wyndesore.

[1] Item by the Kynge our said Sovereyne Lord [2] the [3] his [4] It is [5] the Kynges [6] than } *Lib. Scacc.*

[f] *said—See pa.* 499.

Iim de ladvise & assent dez f'z espuels & tempels & lez cons en la dce pliament assemblez & p auctorite dicell, Il est ordeigne & establie & enacte q toutz & singulers psons, venntz ore tarde ovesq nre Sovaigne f' le Roy, q ore est, de p de la le meer en cest realme, pignntz la parte & quarell nre dit Seignior le Roy en recovermt & opteignement de son dit juste title & droit a cest son realme Dengliter, Et auxi q toutz auz tiel maner psone ou psonez ceantz en seintuarie ou en hedell pur le quarell & title desuisdcez, & toutz auz psons esteantz en le champ en batell & svientz au Roy, pignntez sa partie & quarell encontre cez enemyes illeoquez, soient (a) ousterment dischargez quitez & nient punisshablez pour toutz jourz, p vois daccion ou autment p course de ley de cest Realme ou auterment, de ou pur ascun maner murdre ou tuer dez homez, pruise ou despoiler dez bnz, ou ascunz auz trespassez faitez p eux ou ascun de ceux de ou all ascune psone ou psonez cestuy realme, esteant ou esteantz ovesq son enemye Richard nadgairs Duc de Gloucestr Usurper de cest Realme, encounter la psone du Roy son bannier desplaiez en ni le champ & en le jour del dit champ: Et q pur ascunz bnz psez ou trespassez faitz, derere le jour del champ, p ascunz de lez psonz ceantz ovesq le Roy ou en Seintuarie ou hidell co est avntdit, a la fest del assupcion de nre Dame darrein passe tanq all fest de Seint Michell adonqs pschyn ensuant, as ascunz de lez fvntz Counceilours Officers ou Ministrez del dit jadis Duk, null accon soit maintenue ne maintenable encountre ceux ou ascun de eux, sunz especiall licence du Roy en cell parte opteignez. Pveu to[t] joz q cest psent acte nextende pas ne en ascun maner soit vaillable all ascun psone ou psonez desuis especifiez, de en ou pur ascun murdre ou rape dascun autre q fuist fait le jour del dit champ, ou dascune disseisine comise ou fait p eux ou ascun de eux en ascun maner. Pveu ensemt q ce acte nextende p ne soit pjudiciall a ascun psone ou psonez quel ou quels avoit ou avoient la safgard nre Sovaigne f' le Roy gnall ou speciall, pur ascun robberiez trespassez ou ascuns auz enjuriez faitz ou comys as eux ou ascuns de ceux, aps la dit safgarde faitz desoubz la prive seale ou signett ou auter garrant sufficient. Pveu toutz foitz q ce acte, ne nul auter acte en cest psent pliament fait, ou estre fait, ne soit damageous ne pjudiciall au Elizabeth Wyndesore vewe, jadis feme du dit Thomas Wyndesore Esquier, Edward Cheseman & Sir John Cokett prester, executoz del Testamt du dit Thomas Wyndesore, de ou pur ascun robberie trespas ou aut offence fait all dit Thomas en sa vie; mais q lez ditz Elizabeth Edward & John Cokett puissent avoir & psuer accion ou accons, encontre toutz maners psone ou psones jointmt ou sevalmt, pr lez dcez robberiez trespassez & offences & chun de eux, p qconq noune ou nouns le dit Thomas Wyndesore lez dcez Elizabeth Edward Cheseman & John Cokett fuist ou furent ou sont nosme ou nosmez; cest acte ou ascun auter acte en le dit psent pliament fait ou estre fait nient contristeant.

vij. (1)

[a] Cap. VI. *Lib. Scacc.* [b] tout *MS. Hatt.*

viij. (1) Ītm pur ceo q̄ dev^nt cest temps div^sez ordin^ncez & estatuitz ont este faitz, es div^sez pliamentz tenuz en cest realme, pur la punisshemēt denordinantes & illoialx delealx chaceaunces ou chacers es forestes parkes & garennes deinz le dit realme, quells statuitz & orden^ncez nient contristeant div^sez psonez au graunde nombre, ascunz ovesqz visages depeintez ascunz ovesqz visours & autrement disgisez a lentent ilz ne f̄roient cognuz, riotousement & en maner de guerre arraiez ont sovent foitz es jo's tardes chacez, si Ītm p noet come p jour, es div^sez forestes parkes & garennes es div^sez lieus du cest realme, & en especiall en lez Countiez du (2) Surrey & Sussex, p colour de quell ount ensuez en temps passe graundez & haynousez rebellions insurrecc̄ons riotes robberiez murders & aut^z enconveniencez, a la pvocacion & example dez riotousez & malement desposez psones du cest realme en tiel maner doffender; quels ne poient pas estre duement puniz dev^nt cest temps accordaunt a lez ditz statuitz orden^ncez & leies du cest realme, p cause lez dc̄ez mesfaisours p reson de lour dc̄ez visages depeintes visours & aut^s disgisement ne poient pas estre cognuz: N̄re dit Sov^aigne f^r le Roy en consideracion de lez p̄missez de ladvys & assentz de lez f^z espuels & temporels & a la preier de lez Cōens en le dc̄e pliamēt assemblez & p auctorite dicell, ad ordeigne establie & enacte, q̄ a c̄hun tiel temps q̄ enformacion serra fait, dascun tiel deloiall enchaceance ou enchacer en apres destre fait, au ascun de Councel le Roy ou ascun de lez Justicez de sa pees del Countie lou ascunz tiels chacers ou chaceaunces f̄rount faitz, dascun̄ psone destre suspecte ent, q̄ donc̄s y soit loiall all ascun de ñi le Concell ou Justice du peas au Roy a q̄ tiell enformacion f̄ra fait, de faire un garrant, all Viscount de tiell Countie ou all ascun constable bailiff ou autre officer deinz ñi le Countie, de prendre & arrester ñi la psone ou psones de q̄ ou de quex tiell enformacion f̄ra fait, et davoir c̄e ou ceux dev^nt la faisour del dit garrant ou ascun autre du dit Counceil du dit Roy ou Justicez de Peas de ñi le Countie; Et q̄ le dit Counseillour du Roy ou Justice de sa peas, dev^nt q̄ ou quex tiell psone ou psones serra ou f̄rount amesnes, p sa discrecion aiet & aient poiar dexaminer luy ou ceux issint [amesnez [3]] dev^nt Counseillo^r ou Justices, dez ditz chaceaunces chacers et de lez ditz faisours en celle part; Et si ñi le psone voluntiermēt concele lez dc̄ez chacers ou chaceaunes, ou ascun psone ovesq̄ luy defectif en ceo, q̄ donc̄s ñi le concelement soit encontre c̄hun tiel psone ensy concelant felonie, et ñi le felonie destre enquise & det̄myn come aut^s feloniez deinz cest realme ount usez estre; Et si celuy donq̄ confesse la verite & de tout ceo il f̄ra examine & sciett en cell part, q̄ lors ñiz lez offensez de chaceauncez ou chacers p luy faitz soient come encountre le Roy forsq̄ trespas finable, p reason de ñi la confession, all pschyn generall Cessions de Peas a teniers en ñi le

[1] Cap. VII. *Lib. Scacc. &c.*

[2] Kent *omitted in both MSS.*

[3] amesne ou amesnez *MS. Hatt.*

AN ACTE agaynst unlawfull hunting in Forest^s & Park^s. VII. *Rot. Parl. nu.* 74.

[TO the Kyng our Sov^aigne Lord; Preyen the Comons in this youre p̄sent parliament assembled that[1]] Forasmoch as afore this tyme div^s orden^nc^s and statut^s have been made in div^se parliament^s holden in this [youre[2]] Roialme for the punnic̄on of inordynate and unlawfull huntyng^s in Forest^s pkes and Warennes w^in [youre[3]] seid Realme, which statut^s and orden^nc^s notw^stondyng div^s psons in grete nombre, som w^t paynted faces som w^t Viso's and otherwise disgised to thentent they shuld not be knowen, riotously and in man̄ of Werre arraied, have often tymes in late daies hunted, aswell by nyght as by day, in div^s Forest^s Parkes & Warrenes in div^s plac^s of this Royalme, and in esp̄eall in the Counties of Kent Surr̄ and Sussex, by colo^r wherof have ensued in tymes past grete and heynous Rebellions insurrecc̄ons Riouttes Robberies murdres and other inconvenienc^s, to the provocacion and exsample of riotouse and evyll disposed psons of this Realme in such wise to offende; which offenc^s coude not be duely punysshed afore thys tyme accordyng to the seid Statut^s Ordenn^nc^s and lawes of this [youre[3]] saide Realme, because the seid mysdoers by reason of their seid paynted fac^s viso's and other disgisyng^s coude not be knowen: [Please it therfore youre moste[4]] noble and habundaunt grace in consideracc̄on of the p̄misses by thadvis and assent of the Lord^s sp̄uell and tempell [and Cōmons in this youre p̄sent[5]] parliament assembled and by thauctorite of the same, (6) that atte ev̄y such tyme as enformacc̄on shalbe made, of eny such unlaufull huntyng^s hereaft^r to be done, to eny of [youre[7]] Counsell or to eny of the Justices of [youre[7]] peax of the Countie where eny such huntyng^s shalbe had, of eny psone to be suspect therof, that then it be laufull to eny of the same counseill or Justices of [yo^r[8]] peax to whom suche enformacc̄on shalbe made, to make a Warraunt, to the Shirif of such Countie, or to eny Constable Baillif or other Officer w^in the same Countie, to take and arrest the same psonne or psonnes of whom such enformacc̄on shalbe made, and to have him or theym afore the maker of the seid Warrant or eny other of [your[7]] seid Counseill or Justices of [youre[8]] Peax of the same Countie; And that [youre said Counsello^r or Justices of youre peas[9]] afore whom such psone or psones shalbe brought, by his discrecc̄on have power to examyn hym or theym so brought afore the seid Counseillour or Justices, of the seid huntyng^s and of the seid doers in that behalf; And if the same psone wilfully concele the said huntyngs or any psone w^t hym defective therin, that then the same concelement be, ayenst ev̄y suche psone so concelyng, Felonye, and the same felonye to be enquered of and det̄myned as othir felonyes w^in this Realme have used to be; And if he then confesse the trouthe & all that he shalbe examyned of and knoweth in that behalf, that then the same offences of huntyngs by hym done be as ayeinst [you[10]] Sov^ayn Lord but trespasse finable, by reason of the same confession, at the next gen̄all Sessions of the Peax to be holden in the same Countie by [youre[7]]

Mischiefs arising from hunting in Forests, &c. in Disguise.

Offenders may be brought before any of the King's Council or Justices of the Peace, by Warrant;

Counsellors or Justices may examine all such Offenders.

Offence, if wilfully concealed, Felony;

if confessed, Trespass, finable only.

[1] Item [2] *omitted.* [3] the
[4] The Kynge our said Sovereyne Lorde, of his
[5] at the supplicacion of the Comens in the said
[6] hath ordained established and enacted } *Lib. Scacc.*
[7] the Kynges [8] his
[9] the said Counseillour or Justyce of Peas
[10] the Kynge our

Rescue of Offenders arrested, Felony.

Justices of the same Sessions ther to be sessed; And if eny rescusse or disoubeisaunce be made, to eny psone havyng auctorite to do execucion by eny such Warraunt, by eny psone the which so shuld be arrest, so that thexecucõn of the same Warraunt therby be not had, that then the same rescusse and disoubeisaunce be felonye enquerable and determynable as is aforesaid. And ov' this it [be'] enacted and establisshed by the said auctorite that if eny psone or psones hereafter be convicted of any such huntyngꝯ w' paynted faces viso'ed or otherwise disgised to thentent they shuld not be knowen, or of unlaufull huntyng in tyme of nyght, that then the same psone or psons so convicted have like punicõn as he or thei shuld have, if he or they were convicted of felonye.

Persons convicted of hunting in Disguise or by Night punishable as for Felony.

VIII. [*See pa.* 502.]

IX. *Rot. Parl. nu.* 73.

AN ACTE agaynst Marchaunt Straungers for bringing into this Realme Gyrdellꝯ Rybons Lacꝯ &c.

[² TO the right wise and discrete Cõens in this p̄sent pliament assembled, most humbly shewen unto youre grete Wisedoms the Kyngꝯ true lieges, aswell men as women, and other Citees Townes and Places of this Reame of the hole craft of Silk Werk,²] That where in the parliement late holden at Westñ the xx^ti day of January the xxij yere of Kyng Edward the iiij^the it was enacted ordeyned and stablisshed by auctorite of the seid late parliament, upon many and grete consideracõns and lamentable complayntꝯ conteyned in the same acte, that no mch'unt straunger nor other after the fest of Estern than next cõmyng, shuld bryng into this Reame of Englond to be sold eny Corses Gyrdellꝯ Rybandes laces Calle Sylk or Coleyn Sylk throwen or wrought, upon peyne of forfeyture therof or of the value therof in whos handꝯ they shalbe founde, the oon half of the seid forfeiture to be unto the Kyng oure Sov̄ain lord and that other half to be unto hym or them of his subgettꝯ the which shall sease the same, or sue for the same by accion of dette by Writte at Cõen lawe by bill or playnt after the custome of the Citee or Toune where it shall happen herafter eny suche forfeyture to fall or be; And that the Defend'unt in eny suche accion be not admytted to wage or doo his lawe, nor that eny protteccion nor essoyne in the s̄vice of the Kyng for eny suche defend'unt be allowed; The seid Acte to endure for iiij yeres then next ensuyng the seid fest: the which Acte afterward in the parliament holden by Richard the iij^de, late in dede and not of right Kyng of Englond, was graunted and ordeyned to be and stonde good availlable and effectuell unto thende of the seid iiij yeres, and from thende of the same iiij. yeres unto the ende and t̄me of x. yeres thanne next ensuyng; The whiche seid iiij yeres conteyned in the seid first acte shall fynyssh and expire at the fest of Estern the whiche shall be in the yere of oure Lord M¹ CCCC lxxxvij: [That it may please youre seid Wisedoms to pray the Kyng oure Sov̄ain Lord to ordeyne by auctorite of this p̄sent pliament³] that the seid acte and ordenⁿnce as for the hole braunche of the seid acte and ordynⁿnce, as fer as toucheth or concȳneth these p̄misses, be and stonde good available and effectuall unto thende of the seid iiij yeres, & from thende of the same iiij. yeres unto thende and terme of xx^ti yeres thanne next ensuyng; Notwithstondyng eny acte ordenⁿnce graunt or proviso in this p̄sent parliament made or to be made to eny mch'untez straungers or other: [atte reverence of God and in wey of charite.⁴]

Recital of Statute 22 E. IV. c. 3. against importing certain Silk-works.

continued by 1 R. III. c. 10

The first-mentioned Act continued for Twenty Years.

¹ is ² Item
³ The Kyng our said Sovereyn Lorde that now is, by auctorite of this his aforesaid Parlement, hath ordeyned } *Lib. Scacc.*
⁴ *omitted.*

Countie, p Justicez du Roy de ñz lez Cessions illeouq̄ destre assessez; Et si ascun rescous ou disobeisance soit fait, all ascun psone eiaunt auct^te de feer execucion p ascun tiel garrant, (¹) le quel ensy serra arrest, issint q̄ lexecucõn de ñ le garrant p ent ne soit eue, q̄ adonq̄s ñ le rescous & desobeisaunce soient felonie enquerablez & detiablez come est av'ntdce. Et oustre ceo il est enacte & establie p la dit auct^te, q̄ si ascun psone ou psonez soit ou soient convicte ou convictez de ascunz chaceauncez ou chacers tiels, ovesqz visages depeintez visours ou aut'ment disgisez a lentent ilz ne frount pas cognuz, ou de delael chacer en temps de noet, q̄ lors ñ la psone ou psones ensi convictes aiet ou aient semblable punisshemēt come celuy ou ceux arroiet ou arroient si celuy ou ceux fuist ou furent convicte ou convictez de felonie.

Īm monstre fuist en la dit pliament p lez foials lieges du Roy, si bien (²) comme femmes du cest realme, de lentier art ou mestier dov̄eigne du Soy, q̄ come en la pliamēt nadgairz tenuz a Westñ lan vintisme sc̄de du Roy E. le iiij^te, estoit enacte ordeigne & establie p auct^te de le dit nadgairs pliamēt, sur plusours & graundes consideracõns & lamentablez complaintz contenuz en ñ lacte, q̄ null marchant estrange naultre, ap̄s la fest de pasche adonq̄s pschyn ven'nt, amesneront en cest realme Dengliſe destre venduz ascuns corsez ceincturez ribandes laces calles silke ou coleyn silke filez ou ov̄ez, sur peyn de forfaiture dicell ou del value dicell en quellz mayns ceux frount trovez, lune moite del dit forfeture destre a nr̄e f' le Roy & lauter moite destre a celuy ou ceux de cez subjettꝯ q̄ ou quex seisera ou seiseront lez ñz, ou pursuera ou pursueront p' lez ñz p accõn de dett p br̄e a la cõen ley p bill ou plaint solonq̄ la custome de la Citee ou Ville lou il aviendra en apres ascun tiell forfeture de chier ou estre; Et q̄ le defendant en ascun tiell accõn ne soit admys de gager ou faire sa ley, ne q̄ ascun ptecõn ne essoin en la fvice du Roy pur ascun tiell defendant soit allowe; le dit acte dendurer pur quatrez anz adonq̄s pschyn ensuantz le dit fest: le quell acte puis ap̄s, en le pliamēt tenuz p Richard le iij^de nadgars en feet & nient de droit Roy Dengliſe, estoit g'unte & ordeigne destre & estoier bon vaillable & effectuall tanq̄ all fyn de lez dc̄ez quatres ans, Et del fyne ñz lez quat̄s ans tāqz all fyn & t̄mes de [ditz³] ans adonq̄s pschyn ensuantz: lez quex ditz quat̄s anz contenuz en le dit p'mer acte finieront & expireront a la fest de pasche q̄ serra en lan Nr̄e f' [M¹ CCCC lxxvij⁴]: Nr̄e dit Sov̄aigne Seignio' le Roy q̄ ore est, a request de cõens av'ndc̄ez, ad ordeigne p auct^te de cest p̄sent pliament, q̄ lez dc̄ez acte & ordin'nce come pur lentier braunche dez ditz acte & ordenance, taunt q'unt ytouche ou concerne cestz p̄missez, soient & estoient bons vaillablez & effectuels tanqz all fyn de lez dc̄ez quat̄s ans, Et del fyne ñz lez quat̄s ans tanqz all fyne & t̄me de xx. ans adonq̄s pschyn ensuantz; nient constristeant ascun acte orden'nce graunt ou p̄mise, en le dit pliament nr̄e dit Sov̄aigne f' le Roy q̄ ore est, fait ou estre fait as ascuns marchantz est'ungez ou aut̄s.

ix.

¹ p ascun psone *MS. Hatt.* ² homez *omitted in both MSS.*
³ *erroneously for* 'dix' ⁴ M¹ CCCC. lxxxvij. *MS. Hatt.*

Expliciunt Statuta apud Westm' edita anno primo Henrici septimi.

Ex Lib. Scacc. Westm. XI.[*]

Revocacion of Kyng Richardis Acte ayenst Italiens.

x. Item, The Kyng our said Soverayne Lord understondyng, by a supplicacion put unto his Highnes in this his said Parliament by the Marchauntes of Italye residente in this hys sayd Reame of Englonde, that where by an Acte of Parlemēt made in the Parliament of Richarde late pretendynge hym to be Kynge of Englonde the thirde, holden at Westmynster the firste yere of his reigne, it was ordeyned & provyded that all Marchauntz of the nacion of Italie afore rehersed not made Denizeins, whiche than had or shold have wythin this Reame Wares & Marchandises brought from beyonde the See and byfore the fest of Ester than next ensuyng shold have, shold doo selle or bartre theym in grose and not by retaille to the Kyngis subgettis afore the firste daye of Maye that thenne sholde be in the yere of our Lord God M CCCC lxxxv. and the Money comynge of the sale byfore the said first day, within the same Porte or Portes where they arryved, enploie upon the Cōmoditees & Marchandises of this Reame, their resonable costes and expenses alwaye excepte and deducted, upon peyne of forfeiture of the Value aswell of all the said Wares and Marchaundisez, kepte & not solde afore the saide firste day, or otherwyse solde than is above sayd, and of soo moche money as sholde be made over by exchaunge contrarie to the said acte; And that all the said Marchauntes of Italye, the whiche after the saide feste of Ester brought ony Marchaundisez or Wares into this Reame to be solde, sholde (1) or bartre the same Wares and Marchaundises in grose and not by retaile unto the Kynges Subgettes, upon peyne of forfeiture of the value of the same Wares and Marchaundises otherwyse solde; And that the saide Marchauntes ther sayd Wares and Marchaundises, whiche they sholde bryng after the sayd feste of Ester, sholde doo bartre or selle the same within viij monethes nexte after their first arrival into this Reame in fourme afore saide, and the Money comynge of or by the said sales or bartrynges of theim and every of theim employ, and therwyth bye the Cōmoditees or Marchaundisez of this Reame of Englond within the said viij monethes, in the same Porte or Portes where they sholde first arryve, their resonable costes and expenses alwaye excepte and deducted; And that they sholde in noo wyse make ony suche money over by exchaunge; And the saide Marchauntes, their saide Wares and Marchaundises remaynynge unsolde, after thende of the saide viij monethes in no wyse shold selle nor bartre within the said Reame, but sholde carye & conveie theym oute of the same Reame wythin ij monethes than next folowynge after the said viij monethes if wynde and wether will serve it, And els as soone as wynde and weder wolde serve hem after the saide two monethes, upon peyne of forfeiture as well of as moche money as shold be made out of this saide Reame by exchainge, as of the saide Wares and Marchaundises soo solde or bartred after thende of the said viij monethes not caried ne conveyed

(1) sell *Printed Copies.*

X.
Rot. Parl. nu. 20.

Recital of St. 1 Ric. III. c. 9 imposing Penalties as to Sales by Foreign Merchants, and Application of the Produce by them, &c.

P̄ mcatorib3 Italie.

TO the most Xp̄en Prince the King of England and of Fraunce and to the right noble Lordes sp̄ualx and temporalx in this p̄sent parliament assembled: In moste humble wise besechen youre most noble Grace, the merchauntes of Italie residentz in this youre noble Royalme of Englonde, that where by an Acte of Parliament made in the Parliament of Richard late p̄tendyng hym to be King of England the thirde, holden at Westm̄ the first yere of his reigne, it was ordeyned and provyded that all Merchauntes of the nacion of Italie afore rehersyd not made Denyzens, whiche than had or shuld have within this Realme Wares and Merchaundises brought from beyonde the See and before the fest of Ester than next ensuyng shuld have, shulde do selle or bartre theym in grose and not by retaile to the Kinges Subgettes afore the first day of May that then shuld be in the yere of our Lord God M' CCCC lxxxv. and the money cōmyng of the same Sale before the seid first day, within the same Porte or Portes where thei arryved, employe upon the commoditees and m̄chaundises of this Realme, their resonable costes and expenses alwey except and deducted, upon peyne of forfaiture of the value as well of all the seid Wares and Merchaundises, kept and not sold afore the seid first day, or otherwise solde than is abovesaid, as of so moche money as shuld be made over by exchaunge contrary to the seid Acte; And that all the seid Merchauntes of Italy the whiche after the seid fest of Ester brought any Merchaundises or Wares into this Reame to be solde, shuld selle or bartre the same Wares and Merchaundises in grose and not by retaile unto the Kinges Subgettes, upon peyne of forfaiture of the value of the same Wares and Merchaundises otherwise solde; And that the seid Merchauntes their seid Wares and Merchaundises, whiche thei shuld bryng after the seid fest of Ester, shuld do bartre or selle the same within viij monethys next after their first arryvall into this Realme in fourme aforesaid, and the Money comyng of or by the seid Sales or Bartrynges of theym and ev̄y of theym employe, and therwith bye the commoditees or merchaundises of this Realme of England within the seid viij monethis, in the same Porte or Portes where they shuld first arryve, their resonable costes and expenses alwey except and deducted; and that thei shuld in no wise make any suche money over by exchaunge; and that the said Merchauntes, their seid Wares and Merchaundises remaynyng unsolde, after thende of the seid viij monethys in no wise shuld selle nor bartre within the seid Realme, but shuld carie and conveie theym oute of the same Realme within ij monethes than next folouyng after the seid viij monethes if wynd and weder wold serve it, and els assone as wynde and weder wold serve hem after the seid ij monethes, upon peyne of forfaiture aswell of asmoche money as so shuld be made oute of this said Realme by exchaunge, as of the seid Wares and merchaundises so solde or bartred after thende of the seid viij monethes not caried ne conveied

Re exporting of Goods remaining unsold;

[*] See, as to this Chapter, the concluding Part of the Note at the beginning of this Year, ante page 499.

Ex Rot. Parl.

oute of this seid Realme in fourme aforeseid or the value thereof, the forfaitures penaltee and losse of all the p̄misses to renne and be upon the seid Merchauntes of Italye doyng contrary to this Acte: And also that no Straunger of what Contrey so ev̄ he were shuld oste or take to sojourne with hym w'in this Realme of England any Merchaunt Straunger, not beyng of the same nacion that he shuld be of, upon payne to forfaite and lose at ev̄y tyme that he so did, xl li; And that no Merchaunt Straungier shuld be at Oste ne sojourne with any other Merchaunt Straunger not beyng of his Nacion or Contrey within the seid Realme upon peyne of xl li: And that no Straunger shulde bye any Wolle, the which shuld be sent or passe thrugh the streites of Marrok by Galeies Carrakes or Shippes or other Vesselles, sorted clakked or barbed, nor any Wolle wherof lokkes or refuse shuld be made, But that the same Wolle shuld be as it was shorne and clene wounde, withoute any sortyng barbyng or clakkyng or lokes or refuse therof to be made as it is aforeseid, upon peyne of forfaiture of the same Wolle and the double value therof; as by the same acte more pleynly may apere: Also that the seid Merchauntes of Italye shuld have and conveye their Wolle Wollen Clothe and alle other their Merchaundises over the Streites of Marrok upon peyne of forfaiture of the same; as by the same Acte pleynly apereth: That it may please yo' Highnesse by thadvyse of youre Lordes sp̄uelx and temporelx and Comons in this present parliament assembled and by auctorite of the same to ordeyne stablisshe and do to be enacted, that the abovesaid forfaitures penalties seisours and accions comprised in the seid actes and everiche of hem, be revoked voide annulled and of no strengh against almaner p̄sones; except and reſved onely to yo' Highnesse to be at liberte to have and enjoye almaner seisours forfaitures and penaltees in the seid actes specefied; And that it be leeful to youre Highnesse to graunt to youre seid besechers youre lres of saufconduyt and lres patentf surely to be enjoyed, accordyng to the tenours therof, the aboveseid Acte and Actes notwithstondyng, in as ample wise as thogh thei had nev̄ be had nor made.

Residence of Foreign Merchants;

1 R. III. c. 8. Refuse Wool.

1 R. III. c. 9. exporting Wool by Aliens;

The Penalties in the said recited Acts repealed.

Ex Lib. Scacc. Westm.

out of this said Reame in fourme aforesaide or the value therof, the forfeytures penalte and losse of al the premysses to renne and be upon the saide Marchaunts of Italie doyng contrarie to this acte: And also that noo Straunger of what countrey soever he were shold oost or take to sojourne with hym wythin thise Reame of Englonde ony Marchaunt Straunger, not beyng of the same nacion that he sholde be of, upon peyne to forfeite and lose at every tyme that hee so dyde xl li; And that no Marchaunte Straunger sholde be at ooste ne sojourne with ony other Marchaunt Straunger not beyng of his nacion or contrey within the saide Reame, upon peyne of xl li: And that noo Straunger shold bye ony Wolle, the whiche shold be sent or passe thrugh the streyttes of Marrok by Galayes or Carekes or Shyppes or other vesselles, sorted clakked or barbed, Nor ony Wolle wherof lockes or refuse sholde be made, but that the same Wolle shold be as it were shorne and clene wounde, wythout ony shortyng barbynge or clakkyng or lokes or refuse therof to be made as it is aforesayd, upon peyne of forfeiture of the same Woll and the double value therof; as by the same acte more playnly may appere: Also that the saide Marchauntz of Italy sholde have and conveye their Wolle Wollen Cloth and all other their Marchandises over the streittes of Marrok upon peyne of forfeiture of the same; ([1]) acte pleynly appereth: The Kynge our said Sovereyne Lorde by thadvyce of the Lordes Spirituell and Temporell and Comens in this present parliamente assembled and by auctorite of the same, hath ordeyned stablished and doo to be enacted, that the abovesaid forfeitures penaltees seisours and accions comprised in the said Actes and everiche of hem, be revoked voide annulled and of noo strengthe agaynst all maner persones; excepte and reserved oonly to the Kyng to be at libertie to have and enjoye all maner seisours forfeites and penaltees in the said actes specified; And that it be liefull to the Kyng to graunt to his saide besechers his lettres of saufconduit and lettres patentes surely to be enjoyed accordyng to the tenours therof, ([2]) abovesayd acte and actes notwithstondyng, in as ample wyse as though they had never be had nor made.

[1] as by the same
[2] the
} *Printed Copies.*

Anno 3° HENRICI, VII. A.D. 1487.

*Ex MS. Petyt.**

INCIPIUNT STATUTA apud Westm̃ edita anno regni Regis Henrici Septimi post Conq̃m Angl tercio.

j. (1)OSTRE Seignio' le Roy Henry p la grace de Dieu Roy Dengliter & de Fraunce & f' Dirland le septisme, a son pliament tenuz a Westm̃ le novesme jour de Novembre lan de son noble reigne tierce, al lhonour de Dieu & de Seint Esglice & pur la cõen bien de cest son Realme, del advise & assent de lez Seignio'z espuels & temporels & lez cõens en le dit pliament assemblez & p auct'e de m̃ le pliament, ad ordeigne & establie certeinz statuitz & ordenncez en maner & fo'me icy aps ensuantz.

Primermẽt nr̃e dit Sovaigne f' le Roy remembrant comẽt p delealx maintenances, donacions dez livez signes & tokyns, & reteindrez p endentures pmises smentes escriptez ou aut'ment, embrasiariez de cez subgettz, desloiall demeasner dez Viscountz en faisure dez panels & aut's deloials reto'nez, p pruise dargent p jurrez, p graunds riottz & deleals assemblez, la polacie & bon govnaile de cest realme est bien pres subdue, & p' noun punicion de cestez enconveniencez & p occasion de lez pmissez null chos poiet estre trove p enquerrie, pount lez loies de la tre puissent pnder petit effecte, a lencrece dez murdrez & robberiez pjuries & nounsuerties de toutz vivantez & pdes de lour tres & biens, a g'unde despleisure Dieu tout puissant: Pur ceo il est ordeigne pur le reformacion de lez pmissez p auct'e du dit pliament, q̃ le Chaunceller & Tresorer Denglit're pur le temps esteantz & Gardein du du Prive Seall, ou deux de ceux appellant a luy un Evesqz & Seignio' tempell del honorable Counseill du Roy, Et lez deux Chieff Justices du Bank le Roy & cõen Bank pur le temps esteantz, ou aut'z deux Justicez en lour absence, sur bill ou enformacion baille a [la [2]] Chaunceler, pur le Roy ou ascun auter, encountre ascun psone pur ascun malveis avoir dev'nt reherce, aient auctorite dappeller dev'nt eux p tre ou p've seall lez dcez mesfaisours & ceux ou aut'z p lour discrecion p quex la verite poiet estre conuz dexaminer

[1] A Blank for the Letter N.—Nostre *MS. Hatt.*
[2] le *MS. Hatt.*

Ex Lib. Scacc. Westm. XI.

The Seconde Parliament, holden the thirde yere of Kyng Henry the vij[the].

THE Kynge our Sovereyne Lord Henry by the grace of God Kynge of Englonde and of Fraunce and Lord of Irlonde the vij, at his Parliamente holden at Westminster the ix. day of Novembr in the thirde yere of his noble reigne; To the worship of God and holy chirche and for the comen wele of this his Reame, by thadvys and assente of the Lordes Spirituell and Temporell and the Comens[a] in the saide Parliamente assembled, and by auctorite of the same Parliamente, hath ordeyned and established certeyn statutes and ordenaunces in maner and fourme as hereafter ensueth.

Ex Rot. Parl. 3 *Hen. VII.*

P Cam̃a Stellat̃.

I. *Rot. Parl. nu.* 17.

AN ACTE geving the Court of Starchamber Authority to punnyshe dyvers Mydemeanors.

(1) THE Kyng oure (2) Sovreygn Lord remembreth howe by onlawfull maynten'nc' gevyng of lyves signes and tokyns and reteyndres by endentur pmyses othes writyng or otherwise, enbraciaries of his subgett', ontrue demeanyng' of Shrevys in makyng of panell' and other ontrewe retournes, by takyng of money by jurryes, by greate riotts and unlawfull assemblez, the polacye and good rule of this realme is almost subdued, and for the nowne punyshement of this inconvenienc̃ and by occasion of the pmyssis nothyng or lityll may be founde by enquerry, wherby the Lawes of the lond in execuc̃on may take litell effecte, to the encres of murdres robries pjuries and unsuerties of all men lyvyng and losses of their lond' and good', to the greate displeas̃ of Allmyghty God [Be yt therfor[3]] ordyned for reformacion of the pmysses by thauctorite of [this [4]] pliament, That the Chaunceller and Tresorer of Englond for the tyme beyng and Keper of the Kyngs pryvye Seall, or too of theym, callyng to hym a Bisshopp and a tempall Lord of the Kyng' most Honorable Councell, and the too chyeff Justices of the Kyng' Benche and Comyn Place for the tyme beyng, or other too Justices in ther absence, uppon bill or informacion put to the seid Chaunceller, for the Kyng or any other, ageyn eny psone for eny mysbehavyng afore rehersed, have auctorite to call before theym by Wrytte or Pryvye seall the seid mysdoers, and theym and other by ther discressions to whome the trouthe may be knowen to examyn,

The Evils arising from Maintenance, and other Misdemeanours;

Jurisdiction over the same, upon Bill or Information, given to certain great Officers, &c.

[1] First
[2] Therefore it is
[3] said
[4] the saide
} *Lib. Scacc.*

* See Note at the beginning of the Statute 1 Henry VII. ante pa. 499.

and such as they fynd therin defectiff to punyssh theym after their demerite, after the forme and effecte of Statutes therof made, in like maⁿ and forme as they shuld and ought to be punysshed if they were therof convycte after the due ordre of the lawe. And ov that [be yt also [1]] ordygned by thauctorite aforseid, that the Justices of the Peas of evy Shire of this Realme for the tyme beyng may do take by ther discressions an enquest, whereof evy man shall have lands and tenite to the yerly value of xl s. at the leest, to enquere of the concelemente of other enquests, taken afore theym and afore other, of such maters and offence as ar to be enquered and psented afore Justices of the Peas, wheroff complaynt shall be made by bill or billes aswell within fraunches as without; and yff eny such concelement be found of any enquest as is afore rehersed had or made within the yere [afore [2]] the same concelement, evy psone of the same enquest to be amercied for the same concelemente by discression of the same Justicez of the Peas; the seid amerciaments to be cessed in playn Sessions.

Inquests by Justices of the Peace, to inquire of the Concealment of other Inquests.

[II.]* *Rot. Parl. nu.* 21.

AN ACTE agaynst Murderers.

The Causes why Murders be committed.

(3) THE Kyng remembryng hou murders and sleyng of his subjette dailly encreace in this land, the occasions wherof ben divs, oon that men in townes where suche murders happ to fall and been doon, will not attach the murderer, where the lawe of the land ys that yf eny man be slayne in the day and the felon not taken, the Townshipp wher the deth or murder is done shalbe amced; and yf eny man be wounded in pill of deth the ptie that so woundeth shuld be arrested and put in suertie, till pfyte knowlech be had whether he so hurt shuld live or die; and the Crowner upon the viewe of the body dede shuld inquire of hym or theym that had don that deth or murder, of their abbeto's and concento's, and whoo were psent when the deth or murdre was doon, whedir man or woman, and the namez of them that were psent and soo founde to enrolle and ctifie; Which lawe by negligence ys disused, and therby grete boldnes ys goven to sleers and murdrers; and ov this it ys used that within the yere and day after eny deth or murdre had and doon the [felon [4]] shuld not be dtmyned at the Kyngt sute, for savyng of the ptie sute, wherin the ptie is oftymes slowe and also aggreed with, and by thend of the yere all ys forgoten, which ys another occasion of murder; And also he that will sue eny appell must sue in ppre psone, which sute ys long and costlowe that yt makyth the ptie appellant wery to sue: For reformacon of the pmysses, the Kyng oure Soveygn Lorde by thassent of the Lordt sptuell and tempall and the Comens in [this psent [5]] pliament assemblid and by auctorite of the same, will, that evy Crowner excise and doo his office accordyng to the lawe as ys afore rehersed: and that yf eny man be slayne or murdred, and therof the murderers sleers abbettours mayntenours and confortours

Coroners shall exercise their Office according to Law.

[1] It is
[2] after
[3] Item,
[4] felouñ
[5] the saide
} *Lib. Scacc.*

& tiels quels ilz trovent en ceo defectifs de punier ceux solonqz lour demeritez, joust la fo'me & effecte dez statuitz ent faitz, en semblable maner & fo'me sicome ilz dusent & doient estre puniez si ilz furent de ceo convictez solonqz la due ordre de la ley. Et oustre ceo il est ordeigne p laucto'te av'ntdit, q lez Justicez de peas de chun Countie de cest Realme pur le temps esteantz, puissent faire pnder p lour discrecion enquest, dount chun hōme ava tres ou teñtez al annuell value de xl s. au meins, denquerer de lez concelementt dauts enquestt, p'sez dev'nt eux & dev'nt autz, dez tiels mats & offences quels sont a enquerrerz & psenters dev'nt Justices du peas, de quell complaint tra fait p bill ou billes si bn deinz franchiš come dehors; Et si ascun tiel concelement soit t've p ascun enquest, come est av'nt reherce, eue ou fait deinz lan aps fi le concelement, chun psone de fi lenquest serra amciez p' fi la concelement p discrecion fiz lez justicez de peas; lez ditz amciamentz destre assessez en pleyn Sessions.

Ītm nre dit f' le Roy remembrant coment murdrez & tuerie de cez subgett (1) en cest tre, dount lez occasions sont divses, un q gentes es villes lou tiels murdrez aviendront eschier & estre faitez ne voillent my attachier le murderour, lou la ley de cest tre est q si ascun ho' soit tuez en le jour & le felon ne soit my pris, la ville ou la mort ou murder est fait tra amcie; Et si ascun home soit naufre en pel del mort, la ptie q ensy naufra troit arrestuz & mise en suertie tanq, pfit conusaunce soit ewe quelq, il issint naufrez viveroit ou moreroit, Et [la [2]] Corono' sur la vieu del corps mort enquerreroit de luy ou ceux q ou quex ad ou ount fait ou faitz la mort ou murdur, de lour abbetto'z & consento'z, & q furent psentz q'unt la mort ou murdre fuist fait ou ppetrez, quelq, q home ou fme, & lez nouns de ceux q furent psentez & issint trove de enroller & certifier; quell ley p negligence est disusee & pent graunde audacite est donez as tuours & murderours; Et oustre ceo il e use q dedeinz lan & jour aps ascun mort ou murdre ewe & fait, le felonie ne troit pas dtminez al suist le Roy, pur salver la suite la ptie, en quell la ptie est sovent foitz tepiz & auxi agreez, & p fyne del an tout est oubliee quell est un auter occasion de murdre; Et auxi celuy q voiet suer ascun appell covict suer en ppre psone, quel suite est long & costeouz q il face la ptie appellant lassez a p'suer: Pur reformacion de lez pmissez, Nre dit Sovaign f' le Roy del assent dez f'z espuels & temporels & lez cōens en le dit pliament assemblez & p auctorite dicell, voiet q chun Coroner excise & face son office accordant a la ley come est av'nt reherce: Et q si ascun home soit tue ou occiz ou murdrez, & de ceo tuo'z murderours abetto'z mainteno'z

ij.

[1] An Omission in both MSS.
[2] le *MS. Hatt.*

* In all Printed Editions this forms part of Chapter I. In *Lib. Scacc.* it is numbered ij, and intituled 'Ayenst Coronors.'

& comforto'z dicell soient enditez, q̃ ñiz lez tuo'z & murderours & toutz aut̄z accessoriez dicell soient [arrettę [1]] & det̄minez de ñi le felonie & murdre, au ascun temps all suite du Roy dedeinz lan apres mesme la felonie & murdre faitz, & ne targent my lan & jour pur appell dę prise pur ñi la felonie ou murdre: Et sil aveigne ascun psone nosme come p'ncipall ou accessorie destre acquitez pur ascun tiell murdre, all suite le Roy deinz lan & jour, q̃ adonq̃s ñiz lez Justicez dev'nt quex il est acquite ne luy soefferent daler a large, mez autri de luy remetter arere a p'son ou aut̄ment de lesser luy au baille, solonq̃ lour discrecion, tanq̃ lan & jour soient passez; Et sil aveigne q̃ ñiz lez felouns ou m'derours & accessories soient arrettez ou ascun de eux destre acquitez, ou le p'ncipall du dit felonie ou ascun de eux destre atteintez, la feme ou pchyn heir a celuy issint tue, come requirera, poiet p̄nder & avoir lour appell de ñi la mort & m'dre, deinz lan & jour ap̄s la dit felonie & murdre fait, encontre lez psonz issint arrettez & acquittez & toutz aut̄z lour accessoriez, ou encountre lez accessoriez du dit principall ou ascun diceux atteintez, ou encountre lez dęez p'ncipals issint atteintz silz soient en vie & la benefite de son clergie ent dev'nt nient ewe. Et q̃ lez appellantz aient tiels & semblablez av'ntagę si come la dit acquitaill ou atteinder ne soit james estre eue, la dit acquitell nient contristeant. Et oustre ceo q̃ la feme ou heir de psone issint tue ou m'drez, come la caše requirera, poiet comencer lour appell en ppre psone, all ascun temps deinz lan ap̄s la felonie fait, dev'nt le Viscount ou Coroners en le Countie lou la dit felonie & murdre furent faitz, ou dev'nt le Roy en son bank ou Justicez de Gaole deliv̄ez; Et q̃ lappellauntz en ascun appellez de m'dre ou mort de home, lou batail p la cours del cōen ley ne gist pas, facent lour atto'neis & appiergent ([2]) lez ñiz en lez dęez appellez, puis ap̄s q̃ lez soiet comencez all fyn del suite & execucion dicels: Et si ascun psone so' tue ou m'drez en le jour, & le murderour eschape nient prise, q̃ le ville lou le dit fait est issint fait soit amęciez pur le dit eschape; Et q̃ le dit Coroner aiet aucto'' denquerrer ent sur le vieu de corps mort; Et auxi Justicez de peas aient poiar denquerrer de tiels eschapes & lez ęstifier dev'nt le Roy en son Bank; Et q̃ ap̄s la felonie trove lez Coroners deliv̄ent lour inquisięons, dev'nt lez Justicez de la pschyn gaole deliv̄er en le Countie lou lenquisięon est p'se, ñiz lez Justicez de pceder encontre tiels murderours silz soient en le gaole, Et autri ñiz lez Justicez de metter lez ditez Inquisięons devant le Roy en son Bank. Et pur ceo q̃ Coroners ne neussent ne dusent ascun chose avoir p la ley p' lour office affaire, quel sovent foitz ad este loccasion q̃ Corono'z ount este remise en faisant lour office, il est ordeigne q̃ le Coroner aiet p' son fee sur chun enquisięon prise sur la vieu del corps tue xiij s. iiij d. dez bnz & chateux de luy q̃ est tuour & murderour, sil y ad ascunz bnz, & sil nad nulls biens lors le Coroner av̄a pur son dit fee de tiels amęciamentz quells aviendront ascun ville destre

[1] arettez *MS. Hatt.* [2] per *omitted in both MSS.*

of the same be endited, that the same sleers and murderers and all other accessariez of the same bee arayned and det̄myned of the same felonye and murdre, at eny tyme, at the Kyngę sute, within the yere after the same felonye and murder doon, and not tarie the yere and day for eny appelle to be taken for the same felonye or murder: And yf yt happen eny psone, named as pryncipall or accessarie, to be acquited of eny such murdre at the Kyngę sute within the yere and day, that [than [1]] the same Justices afore whome he is acquited shall not suffre hym to goo at large, but eyther to remytte hym ayen to prison or els to lette hym to baille after ther discrecion till the yere and day be passed; and yf yt fortune that the same felons or murdrers and accessaries so arrayned, or eny of theym, to be acquitte, or the principall of the seid felonye or eny of them to be attaynt, the Wyf or next heire to hym soo slayne, as shall require, may take and have theire appelle of the same dethe [or [2]] murdre, within the yere and day after the same felonye and murdre don, ayenst the seid psones so arrayned and acquite, and all other their accessaries, or ayenst thaccessaries of the seid principall or any of theym so attaynt, or ayenst the seid principalles so attaynted yf they be then on life, and the benyfice of his clargie therof before not hadd. And that thappellauntes have such and like avauntage as yf the seid acquitall or attayndre had nev̄ be hadde, the seid acquittall or attayndre not withstandyng. And ov̄ that the Wyf or [their [3]] of the psone so slayne or murdred, as case shall require, may cōmence their appelle in ppre psone, at eny tyme within the yere after the seid felonye don, before the Shirif and Crowners of the Countie where the seid felony and murdre was don, or before the Kyng in his benche, or Justices of gaole delyv̄er; and thappellantes in eny appeles of murdre or deth of man, where batell by the cours of the comen lawe lieth not, make their attourneis & appere by the same in the seid appelles after they be cōmenced to the ende of the sute and execucōn of the same: And yf eny psone be slayne or murdred in the day, and the murderer escape untaken, that the Townshipp where the seid dede ys so don be amęced for the seid escape; And that the Crowner have auctorite to enquire theroff upon the vewe of the body dede; and also Justices of the Peas have power to enquire of suche eschapis and that to ęstifie afore the Kyng in his benche; and that after the felonye founde, the Crowners deliv̄ their inquisicions afore the Justices of the next gaole deliv̄er, in the Shire where the inquisicōn ys taken, the same Justicez to pceede ayenst such murderers yf they be in the gaole, and els the same Justices to put the seid inquisięons afore the Kyng in his bench. And for asmoch as Crowners had not nor ought any thyng to have by the lawe, for their office doyng, which oftymes have been the occasions that Crowners have been remysse in doyng their office, [Be yt [4]] ordyned that a Crowner have for his fee upon ev̄y inquisicōn taken upon the vewe of the body slayne xiij s. iiij d. of the goodes and catalles of hym that ys sleer and murderer, yf he have eny goodes, and yf he have no goodez, than the Crowner to have for his seid fee, off such amęciaments as shall fortune eny Townshipp to be

[1] thenne
[2] and
[3] heyre
[4] It is
} *Lib. Scacc.*

Murderers, &c. may be arraigned and tried within the Year after the Felony done, without waiting for Appeal; if acquitted they shall be secured, to answer any Appeal;

which may be sued, against Principals or Accessaries, notwithstanding any such Acquittal, &c.

Proceedings upon such Appeals:

Appellants may appear by Attorney, except where Battle lieth.

Townships shall be amerced for the Escape of Murderers by Day;

Coroners shall enquire thereof; and Justices of the Peace of Escapes.

Certifying of such Inquisitions.

Coroner's Fee, on View of the Body.

anced for eschape of such murderer as ys afore seid; and yf eny Crowner be remysse and make not his inquisicons upon the vewe of the body dede, and certifiet not accordyng as ys afore ordeyned, that the Crowner for evy defawte forfette to the Kyng C s. And also [be yt [1]] ordyned by the same auctorite, that evy Justice of Peas within this Realme that shall take eny reconisaunce for the kepyng of peas, that the same Justices do certifie send or bryng the same reconisaunce at the next Sessions of peace where he ys or hath been Justice, that the partie soo bounde may be called; and yf the partie make defaute the same defaute than ther to be recorded, and the same reconysaunce withe the recorde of the defaute be sent and certified into the Chauncye, or afore the Kyng in his bench or into the Kyngis Eschequer.

Penalty on Coroner for Neglect;

Justices of the Peace shall certify Recognizances to the Sessions.

anicie p' eschape dautiell murderour come est av'ndit; Et si ascun Coroner soit remise & ne face my cez Inquisicons sur le vieu del corps mort, & ceo ne certifie accordant come av'nt est ordeigne, q lors lez Corons forferount pur chun deffaut au Roi C s. Et auxi est ordeigne p ñi lauct'e, q chun Justice de peas deinz cest realme, q pndera ascun reconisance pur confvacion de peas, face certifier [amender [1]] ou amesner ñi la reconisance a lez pschyn Cessions du peas, lou il est ou ad este Justice du peas, q la ptie lie poet estre appelle; Et si la ptie face defaute ñi le deffaute illonqs destre recordez, & ñi le recognisance ovesq la record de ñi la defaute soit mise & certifie en la Chauncellarie ou dev'nt le Roy en son banke, ou en leschequer du Roy.

II. [III.] *Rot. Parl. nu.* 18.

AN ACTE agaynst taking awaye of Women agaynst theire Wille.

Taking away Women against their Wills, declared Felony.

([2]) WHERE Wymmen aswell [Mayndens [3]] as Wydowes and Wyfes havyng substaunce somme in goode moveable, and some in landes and tents, and sume beyng heires apparaunte unto their auncesters, for the lucre of suche substaunce been oft tymes taken by mysdoers cont'rie to their Will, and after maried to such mysdoers or to other by their assent, or defoulled, to the greate displesire of God and cont'rie to the Kynge lawes and dispargement of the seid Women and utter hevynesse and discomforte of their frendes and to the evyll example of all other: [Be yt [1]] therfor ordeyned establisshed and enacted by oure Soveygn lord the Kyng, by thassent of his Lordes spuell and tempell and the Comens in this psent parliament assemblid and by auctorite of the same, that what psone or psones from hensforth that taketh eny Woman soo ayenst her Will unlawfully, that ys to seye Mayde Wydowe or Wyf, that such takyng pcuryng and abettyng to the same, and also receyvyng wetyngly the same Woman so taken ayenst her Will and knowyng the same, be felonye; And that such mysdoers takers and pcuratours to the same, and receytours knowyng the seid offence, in forme aforseid be hensforth reputed and juged as principall felons. Provided alwey that this Acte extend not to eny psone takyng eny Woman onely claymyng her as his Warde or bond Woman.

The Misdoers, Procurers, and Receivers, principal Felons.

Proviso in respect of Wards and Bond-women.

Itm co[e] femez, si bn pusels come veus & femez mariez, aiantz substancez ascunz en biens moeblez & ascunz en trez & tenitz & ascuns esteantz heirs apparantz a lour auncestrez, pur la lucre dautiels substances sont sovent foitz prisez p mesfaisours, contrarie a lour voluntie & apres maries a tiels mesfaisours ou as aut's p lour assent, ou deflorez, au graunde displeasir Dieu & encontre lez leyz du Roy & dispgement de lez dcez femez, & surquidious dolour & descomfort de lour amys, & a malvais example de toutz aut's: Il est pur ceo ordeigne establie & enacte p nre dce Soveraigne s' le Roy de lassent dez s'z espuels & tempels & lez cōens en le dit pliament assemblez & p auct'e del ñi, q qconq psone ou psonez de cy en av'nt q ou quels pigne ou pignent ascune feme ensi encontre sa volunte illealment, cest assavoir pusell veu ou feme marie, q tiels pruise pcurement & abettement all ñi, & auxi receitement scientment ñi la feme issint prise encontre s vo[re], & sacheant le mesme, soit felonie; Et q tiels mesfaisours pignours & pcuro'z a icell, & recettours sacheantz ñi loffence en fo'me av'ndce, soit de cy en av'nt reputez & jugez come p'ncipals felons. P'veu toutz foitz q cest acte nextende pas au ascun psone pignant ascune feme tantsoulement en claymant come sa garde ou feme villein.

iij.

III. [IV.] *Rot. Parl. nu.* 24.

An Act that Justice of Peace may take Bayle.

Recital of St. 1 R.III. c. 3. respecting bailing of Offenders.

([2]) WHERE in the parliament late holden at Westñi the first yere of Rychard, late in dede and not in ryght Kyng of Englond the third, yt was ordyned and enacted among other dys actes that evy Justice of the peas, in evy Shire Cite or Towne, shuld have auctorite and power by his or their discrecion to lett prisoners and psones arrested for light suspecc'on of felony in baill or maynprice; by colour wherof afterwarde, dyse psones such as wer not maynp'nable ware oftymes leten to baille and maynprise by Justicez of the peas, ayenst the due forme of the Lawe, Wherby many murdrers and felons eschaped to the greate displeasure

Itm come en [la [2]] pliament, nadgairs tenuz a Westñi lan p'mer de Richard nadgars en feet & nient du droit Roy Dengliste le iij[me], il estoiet ordeigne & enacte enter aut's divsez actez, q chun Justice de peas en chun Countie Cite ou Ville arroit auctorite & poiar, p sa ou lour discrecion, de lesser p'soners & psones arrestez pur legier suspeccion de felonie en baile ou mainp'se; p colour de quell, aps divsez psones tiels quels ne furent mainpnablez estoient sovent foitz lessez en baille & mainp'se p [Justice [2]] du pees, encontre la due fo'me du ley, p quel plusours felons & m'dro'z eschape fierent au g[d]unde displeasure

iiij.

[1] It is
[2] Maydens
[3] Item, } *Lib. Scacc.*

[1] *omitted.*
[2] Justic̄ } *MS. Hatt.*
[2] le

le Roy & anusaunce de son poeple: Si nr̃e dit Sovaigne f[r] le Roy ceo considerant, de ladvise assent & auctorite suisdẽez ad ordeigne & establie & enacte, q̃ lez Justic̃ de peas en c̃un Countie Cite ou Ville, ou deux de ceux au meyns dont un soit del quoz̃, aient aucto[te] & poiar de lesser ascunz tiels p'soners ou psonez mainpnablez p la ley, quex sont emp'sonez deinz lour sevalx Countiez Citee ou Ville, a baille ou mainp'se a lour pschyn gñals Cessions ou all pschyn gaole deliver (') en c̃un Countie Citee ou Ville, sibien dedeinz franchise come dehors, lou ascunz tiels Gaols sont ou enap̃s serront; Et q̃ lez dc̃ez Justic̃ de pees ou un de eux, ensi pignantz ascun tiell baille ou mainp'se, face c̃tifier le ñ̃ a lour pschyn gñall Cessions de peas, ou all pschyn gaole deliverer dascun tiell Gaoll deinz c̃un Countie Citee ou Ville, pschynment ensuant ap̃s tiell baille ou mainp'se issint prise; sur peyn de forfeer au Roy pur c̃un deffaute sur ceo recordez x li. Et oustre ceo il est enacte p ñ̃ laucto[te] q̃ c̃un vic̃ bailliff de franchise, & c̃un auter psone aiant auctorite ou poiar de garde de gaols ou dez p'soners de felonie, en semblablez maner & fo'me facent certifier lez nouns de c̃un tiels p'soner en lour garde, & de c̃un prisoner as eux comys p[r] ascun tiell cause, all pschyn gaole deliv̄er en c̃un Countie ou franchise lou ascun tiell gaole ou gaols est ou sont ou en ap̃s serra ou frount, illeosquez destre kalendres dev'nt lez Justicez del deliverance ñ̃ le gaole; p quell ils puissent si bn pur le Roy come pur la ptie pceder a feer deliv̄ance dez tiels p'soners accordant a la ley; sur peyn de forfeer au Roy p[r] c̃un default ent recordez C s. Et q̃ lav'ntdit acte, don'nt auctorite & poiar en lez p̃missez au ascun un Justice de peas p luy ñ̃, soit en cell pte to[r] oustremẽt voied & de null effecte, p aucto[te] de ce p̃sẽt pliamẽt.

of the Kyng and anoys'unce of his lege people: Wherfor the Kyng our Sov̄eyn Lorde consideryng yt, by thadvice and assent of his lordes sp̃uall and tempall and the Comens in this p̃sent pleament assemblid and by auctorite of the same [ordyneth establisseth and enacteth [1]] that the Justices of the peas in ev̄y Shire Cite and Towne, or too of them at the lest wherof on to be of the Quoz̃, have auctorite and power to lete eny such prisoners or psones maynp'nable by the Lawe, that been imprisoned within their sev̄all Counties Cite or Towne, to baille or maynprise, unto ther next gen̄all Sessions or unto the next gen̄all gaille delyv̄ere of the same gailles in ev̄y Shire Cite or Towne aswell within Fraunches as without, where eny such gailles been or herafter shall bee; and that the seid Justices of the peas or oon of theym so takyng eny such baill or maynprise do c̃tifie the same at [the [2]] next gen̄all Sessions of the peas, or at the next gen̄all gaolez deliv̄aunce of eny suche gaole within ev̄y such Countie Cite or Towne, next folowyng aftir eny such baill or maynprise so taken; uppon payne to forfete unto the Kyng for ev̄y defaute theruppon recorded x li. And ov̄ that [to be [3]] enacted by the same auctorite, that ev̄y Shiref Baillyf of fraunchese, and ev̄y other psone havyng auctorite or power of kepyng of gaoles or of prisoners for felonye, in like man̄ and forme do c̃tifie the names of ev̄y such prison̄ in their kepyng, and of ev̄y prisoner unto theym cōmytted for any such cause, at the next gñall gaole delyv̄er, in eny Countie or Fraunches where eny suche gaole or gaillez been or herafter shall be, ther to be kalendred by fore the Justices of the delyv̄aunce of the same gaole; wherby they may aswell for the Kyng as for the partie pcede to make delyv̄aunce of suche prisoners accordyng to the Lawe; uppon payn to forfette unto the Kyng for ev̄y defaute therof recorded C s. And that the foreseid Acte yevyng auctorite and power in the p̃misses to eny oon Justice of the peas by hym selfe, be in that behalfe utterly voide and of non effecte, by [the seid [4]] auctorite of this p̃sent pleament.

Two Justices of the Peace may bail Prisoners bailable, and shall certify the same to the next Sessions, or Gaol-Delivery.

Sheriffs, &c. shall certify at the Gaol Delivery the Names of Prisoners.

Power given by Statute 1 Ric. III. c. 3. to one Justice to bail, repealed.

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v. Itm q̃ come sovent foitz (') de done dez biens & chatiaux soient faitz, a lentent pur defrauder lour credito'z de lour dueties, & cell psone ou psonz q̃ ou quels fet ou fount le dit feet de done fue ou fuent a seintuarie ou au's lieus privileges, & occupiont ou vivont ovesq̄ lez ditz bnz & chateux, lour creditours esteantz nient paies: Il est ordeigne enacte & establie de lassent & aucto[te] suisdẽez, q̃ toutz feetz de done dez bnz & chatieux faitz ou affairs de confiance, all oeps de cell psone ou psones q̃ ou quels feet ou fount ñ̃ le feet del done, soiet voidez & de null effecte.

[1] mesme le Gaoll
[2] feetes
} *MS. Hatt.*

An Acte agaynst fraudulent dedc̃ of gyft.

IV. [V.] *Rot. Parl. nu.* 20.

Deeds of Gift of Goods, in Trust for the Donors, declared to be void.

[PRAYEN the Comens in this p̃sent parliament assembled [1]] that where [oftymes [5]] dedc̃ of gifte of goodc̃ and catall be made, to thentent to defraude ther creditours of their duties, and that psone or psones that maketh the seid dede of gyfte [goth [7]] to seyntwarie or other places p'vyleged, and occupieth and levith with the seid goodis and catallc̃, theire creditours beyng unpayed, [That yt be [2]] ordyned enacted and establisshed by thassent of the lordc̃ sp̃uall and tempall [in this p̃sent [8]] plement assemblid and by auctorite of the same, that all dedc̃ of gyfte of goodc̃ and catallc̃, made or to be made of trust to thuse of that psone or psones that made the same dede of gyfte, be voide and of non effecte.

[1] hath ordeyned establisshed and enacted
[2] their
[3] It is
[4] *omitted.*
[5] Item
[6] often tymes
[7] goeth
[8] and at the requeste of the Comens in the said
} *Lib. Scacc.*

V. [VI.] *Rot. Parl. nu. 29.*

AN ACTE agaynst Usury and unlawfull Bargaynes.

(1) FOR SOMOCH as ymportable damages losses and enpoverysshyng of this realme ys had, by dampnable bargayns groundyt in usurye, colorde by the name of newe Chevesaunce, contrarie to the lawe of naturell justis, to the comen hurt of this land and to the greate displesur of God: (2) the Kyng for the reformacon therof and of all corrupt and unlefull bargaynes, by the assent of the Lordes Spuell and Tempell and the Comens in this psent parlyament assembled, and by the auctorite of the same, [ordyneth and enacteth [3]] that yff herafter eny bargayne [covenaunt [4]] by bying of eny obligacon or bill or by eny pleg put for suertie or by bill or otherwise, by the name of drye exchaunge or otherwyse, wherby eny cteyn some shall be lost by eny covnd or pmys betwyx eny psone or psones, by theym selfe or eny other to their knowleg within this realme, or of eny bargayne or lone wherby eny of the ptes shall lose or paye for eny some cten, that ys to sey for havyng C li. in money or in mchandys or otherwyse, and therfor to pay or to fynd suertie to pay vjxx li. or more or lesse, in and for eny more or lesse some after eny man rate, that all such bargeyns covndes pmys and suertes therfor made, and all thyng therof dependyng, be utterly voide and of none effecte. And ov this [that yt be [5]] ordyned by the same auctorite, that yff eny mchaundyses oblygacons billes or plate be pmysed to be delyved uppon such corrupt bargayns, and nev delyved, or delyved and had ageyn to hym that ought such mchaundises obligacons billes or plate, or knoweth by eny other man by assent agrement (6) knowleg in eny man forme of hym or his factour or broker that such mchaundises ought [and ar preve [7]] to suche bargayns, that all such bargayns covndes pmysses and all suerties therfor made be utterly voide; and seller and owner bargayner or pmyser of such corrupte bargayns or goodf lease for evy such bargayne made by hym or hys factour C li. and who so ev will sue therfor to have an accion of dette, in which the party shall not wage hys lawe, the Kyng to have the one halfe and he that will sue the oder halfe. And for somoche as theies corrupt bargaynes be most usually hadde within Citees and Burghes, havyng auctorite to trye all maters and causes growen and had within the same Citees and Burghes, and yff eny suche defautes shuld ther be tryed, pjurie by lykelynesse therby shuld growe and lytell of the pmesses to be founde, Therfor [yt be [8]] ordeigned by the seid auctorite, that aswell the Chaunceller of Inglond for the tyme beyng, have auctorite and power to examyn all man corrupt bargayns pmyses lones or sales growen and hadde of eny of the pmysses, and theruppon by hys examinacion to here and determyne the same, and to geve lyke jugement and make lyke execucon thereoff, as the mater ware tried and founde at the pties sute in any such accion of dette by course of the comen lawe; as the Justices of the peas of any Shire next adjoynyng to eny Cite or Burgh where such deffautes be, of eny of the pmysses, and they to make lyke pcesse ayenst eny man therof indyted afore theym

Certain Bargains by the Name of dry Exchange declared void.

Penalty 100l.

Chancellor of England shall have Jurisdiction to enquire of these Bargains in Cities and Boroughs;

and the Justices of the Peace of adjoining Counties.

[1] Item [2] Our sayd sovereyne Lord } *Lib. Scacc.*
[3] hath ordeyned and enacted
[4] covenaunt [5] It is [6] or

[7] { and er privee *Lib. Scacc.* } *On Rot. Parl.* and *is interlined,*
{ or privy *Printed Copies.* } ar *is written on an Erasure.*

Itm pur taunt q enportablez damagez pdes & enpovisshement de c Realme sount euez, p dampnablez bargains founduz en usurie colourez p noun de novell chevesaunce, contrarie a la ley de nat'ell justice, a coen damage du cest re & a graunde displeasure de Dieu: Nre dit Sovaigne f' le Roy, pr la reformacion ent & de toutz corruptez & illicitez bargeins, dell assent & auctorite suisdcez ad ordeigne & enacte, q si en aps ascun bargeine covenant p achate dascun obligacon ou bill, ou [pur [1]] ascunz pleggez misez pur suertie ou p bille ou autrement, p (2) sekke eschaunge ou autment, p quell ascun certein some serra pduz p ascun covenant ou pmise enter ascun psone ou psones, p ceux iz ou ascun auter a lour conisaunce, dedeinz cest realme, ou del ascun bargaine ou prest p quel ascunz dez pties pdera ou paiera pur ascun some certeine, cestassavoir pur avoir C li. en money ou en mchandise ou auterment & pr ceo a paier ou a trover suertie a paier vjxx li. ou pluis ou meins, en & pur ascun greinder ou meinder some solonq ascun maner rate, autielx bargains covenantz pmis & suerties ent faitz & toutz chosez ent dependantz soient tout oustrement voides & de null effecte. Et ouster ceo il est ordeigne p i laucte, q si ascunz marchandisez obligacons billes ou plate soiet ou soient pmisez destre deliverez sur tiels corruptez bargains, & james deliverez, ou deliverez & euez derere a celuy q dusent tiels marchaundisez obligacons billes ou plate, ou sache p ascun auter home p assent agrement coignoisance en ascun maner forme de luy ou son factour ou brocour q tiel marchandise doiet & ou prive a tiels bargeins, (2) covenantz pmisez, & toutz suertes pur ceo trovez, soient tout oustment voides, & vendour possessour bargenour ou pmiser dautiels corruptz bargains ou tnz pde pur chun tiel bargeine fait p luy ou son factour C li. & qconq q pur ceo psuera ava accon de dett en quel la ptie ne gaga sa ley, le Roy davoir lun moite & celuy q suer voiet lauter moite. Et pr tant q cestez corruptez bargeins sont pluis usuelmt euez dedeinz Citeez & Burghs, aiantes auctte de trier toutz matiers & causez accruez & euez deinz iz lez Citees & Burghs, Et si ascuns tiels defautez serroient illeosqs triez pjurie p semblance pent accresteroit, Et petit de lez pmissez destre trovez, Pur ceo il est ordeigne p la dit auctte, q si bien le Chaunceller Denglit'e pr le temps esteant aiet auctte & poiar dexaminer toutz mans corruptez bargeins pmises creaunces ou vendez, accrues & euez dascun de lez pmissez, & sur ceo p sa examinacion a oier & tminer le i, & a doner semblable jugemt & feere semblable execucion ent, si come la matier fuist trie & trove all suite dez ptiez en ascun tiell accon de dett p le course del coen ley; Et q Justicez de peez, dascun Countie pschyn adjoignt au ascun Citee ou Burgh lou tiels defautz sont, [eient poiar denquerer [3]] dascun de lez pmissez, et ilz de feere semblable pcesse encontre ascun home en endite devnt

vj.

[1] per *MS. Hatt.*
[2] Omissions here in both MSS.
[3] Interlined in *MS. Pet.*; *MS. Hatt.* omits.

eux dascun de lez p̄misses, come ilz ferroient ou durroiet afaire encontre ascun home q̄ estoiet endite dev'nt eux dascun riott ou trespas & le a det̄miner; Et si ascun home soit trove coulpable dev'nt eux dascun de lez p̄missez, a forfaire lav'ndit peyn de C li: ref̄v'nt all Esglice, cest punissement nient contristeant, la correccion de lour almes a les leies dicell accordant.

vij. Ītm pur ceo q̄il ad accrue & de jour en autre accrest g'unde desplesure Dieu & g'unde damage du Roy nr̄e So͞vaigne f̄r & cest son realme, (1) & p' lenordinates chaunges & rechaunges quex de long temps ount este usez & unq°r continuez en cest Realme, s'unz aucto'e donez p le Roy a tiel eschaunge & rechaunge; p' remedie de quel plusour͞ noblez statuitz sount faitz, dont un especiall estatuit en lan vynt cynke le Roy Edward le iij^e, et un auter espea' estatuit fait en lan quynt du Roy Richard le ij^de, ovesq, au͞tz di͞vsez statuitz faitz pur n̄i le remedie, es jours du Roi Henrie le quart Henry le quint & Henry le sisme: Si nr̄e dit So͞vaigne f̄r le Roy voiet q̄ toutz tiels statuitz soient mys en due execucion de cy en av'nt; Et q̄ null home face ascun exchaunge (2) ne rechaunge de monoie destre paiez deinz cest t̄re, forsq, tiels quelq, le Roy depu͞a a ceo, agarder faire & responder tielx exchaungez & rechaungez, sur le peyn en n̄i lestatuit du Roy Richard contenuz. Et oustre ceo il est ordeigne p nr̄e dit So͞vaigne le Roy del assent & auctoe suisdc̄ez, q̄ toutz illicites chevesances & usurie soient dampnez, & nulles destre usez, sur peyn del forfaiture del monoie ou biens issint chevisez ou creauncez, n̄i la forfaiture de currer sur le vendour ou creanceour ent. Et auxi pur ceo q̄ di͞vsez Englois broco'z (2) q̄ sont nosmez & assignez doccupier leall brocage, sont encrementours & Bargains faisours de illicitez chevisancez & usurie, & en ascun parte dillicitez exchaunges, au damage nr̄e dit So͞vaigne f̄r le Roy & cest son Realme; Pur ceo il est enacte & establie p la dc̄e aucto'e, q̄ toutz tiels broco's deinz cest son Realme, faisant illealment dascun de lez p̄missez, soient mys a part & jām̄es doccupier come brocours, silz puissent estre espiez & trovez es Citees Burghs Villes, p Maiers bailiffz ou ascun de eux ou p lour ministrez lou ascun tiel bargaine est usee; Et q̄ c̄hun brocour q̄ est trove defectif en feisure dilleall brocage forfacera pur c̄hun defaute xx li. & a͞va emp'sonem̄et de di an, & en oustre destre puniz p le pilorie ou au͞ment a lour overt reproef & hunt; le Roy davoir lun moite de c̄hun de lez ditz forfaiturez, & la ptie q̄ suer voiet lauter moite p acc̄on de dett p le cōen ley; Et le def en n̄i lacc̄on ne soit admys a sa ley ne essoin ne ptecc̄on soit pur n̄i le defend allowe.

[1] per *omitted in both MSS.*

[2] Omissions in both MSS. *See Rot. Parl.*

of eny of the p̄mysses, as they shuld or owe to doo ayenst eny man that were indyted afore theym of eny ryote or trespas, and to det̄myne yt; and yff eny man be founde gyltie afore theym of eny of the p̄myses to forfeite the forseid payne of C li: reservyng to the Church, this punysshement notwithstondyng, the Correccion of their Soulles accordyng to the lawes of the same.

VI. [VII.] *Rot. Parl. nu.* 28.

An Acte agaynst Exchaunge and Rechaunge w^th^out the Kyng^s Lycence.

The Growth of inordinate Exchauges and Re-exchanges, notwithstanding former Statutes.

(1) FOR ASMOCH as ther hath growen and daily groweth grete displesur of God, and greate hurte of the Kyng our So͞veyn lorde and to this his realm, by and for thenordynat chaunges and rechaunges that have ben of long tyme used and yet contynued in this seid Realme, without auctorite gevon of [the Kyng^s gode g'ce [3]] to such chaungyng and rechanging; For remedy wherof many noble Statut^s [a yene [3]] made, Wherof one s̄pall Statute was made in the xxv. yere of Kyng Edwarde the thirde cap° xij°; and a oder es̄pall Statute made in the v^t yere of Richard the ij^de; with oder dy͞vse Statutes made for the same reamedy in Henr̄ the iiij^th Henry the v^t and Henry the vj^t ys daies: Wherfor [that yt may please the Kyng^s gode g'ce [4]] that all such Statutes be putte in due execuc̄on fromhensforth; and that no man make any Exchaunge without the Kyng^s licence, ne make eny exchaunge nor rechaunge of Money to be paide within this land, but only such as the Kyng shall depute therunto to kepe make and answere such Exchaung^s and rechaunges, upon the paynes in the same [Statutes [5]] of Kyng Rychard conteyned. And o͞v that [yt be [6]] ordyned by the Kyng oure So͞veygn Lorde, by thassent of the lordes s̄puell and tempell in this p̄sent parliament assembled and by auctorite of the same, that all unlefull Chevysaunc^s and Usurye be dampned, and none to be used, upon payne of forfeyture of the Value of the Money or goodez so chevysched or lent; the same forfeiture to renne upon the Seller or lener therof. Also for asmoch as dy͞vse englisch brokers and estraungers brokers which be named and assygnet to occupie lefull brocage, ben ynducers and bargeyne makers of unlefull chevys'unc^s and usurie, and in som parte of unlefull Exchaungez, to the hurt of our seid So͞veygn Lorde and this his seid realme; therfor [be yt [6]] enacted and establisshed by the seid auctorite, that all such brokers delyng unlawfully of eny of the p̄mysses be putt apte, and ne͞v to occupie as brokers within this his realme, as they may be aspied and founde in Cites Burghes and Townes, by Maires Baillefs or eny of theym or of their minystres where eny such bargenyng ys used; and that e͞vy broker that ys founde defectyf in makyng of unlefull brocage shall forfeit for e͞vy defaute xx li. and have enprisonement of halfe a yere, and ferther to be punyshed by the pyllory or otherwyse to ther opeyn rebuke and shame; the Kyng to have the one halfe of e͞vy of the seid forfeytours, and the ptye that will sue the other halfe of the same, by accion of Dette by the Comen Lawe; and the Defend'unt in the same Acc̄on be not admytted to his lawe, ne essoyne ne ptecc̄yon be for the same Defendaunt allowed.

Unlawful Chevisances and Usury shall be extirpate.

Punishment of Brokers dealing unlawfully.

[1] Item [2] the Kyng
[3] ayenst the same
[4] the Kyng our said Soverayne Lord wylle } *Lib. Scacc.*
[5] Statute [6] It is

None shall make Exchanges without the King's Licence, &c. under the Penalty in Statute 5 Ric. II.

See Statutes 25 Edw. III. stat. 5. c. 12: 5 Ric. II. stat. 1. c. 2.

VII. [VIII.] *Rot. Parl nu.* 33.

AN ACTE agaynst Marchantꝭ carrying of goodꝭ from one Port to an other without a certificat from the Customer where the goodꝭ were fyrst entred.

If Goods be brought into one Port, and customed, and then removed into another, a Certificate thereof shall be produced at the latter Port;

(1) THE Kyng oure Soveygn Lorde, by thadvyse and assent of the Lordes spuall and Tempall and the Comens assemblid in this p̄sent parliament and by auctorite of the same ordyneth and enacteth, That evy mchaunt, aswell denyzen as Straunger, which shall bryng fromhensforth eny man of goodez into any porte within this realme by wey of mchaundise, and ther do entre the seid goodes or mchaundyse, in the bokes of the custumers of the seid porte where the same goodes or mchaundise shall first come to, and the Kynges duetes therof to the seid Custums contentid or therfor with theym agreed, and afterwarde that don wolle conveye or carie the same goodes or mchaundyses from thens into eny other porte within this seid realme, that then the owner of the seid goodes and mchandises, his factor or attorney, shall bryng frome the Custums of the porte where the seid goodes or mchaundises be so entred, a ctificate undre the same Custums sealx, directe to the Custums of the porte wherunto the seid goodis or mchandises shalbe conveyed or caried, makyng mencion within the same ctificate aswell of the nature colour lenght and value of all man of mchandises so entred, used to be mette with elne or yerde, as of the nature weight content or valure of all man other mchandises used to be weyed or [valurered[2]]; and that the same ctificate so made be delyved to the seid Custums before the seid goodis or mchandises be discharged, so that they may see whether the nature colour lenght valure content or weyght of the same do agree with the seid ctificate, so that the Kyng be not disceyved of his Custumes and Subsidies therof due: and yf any ctificate from hensforth be made by eny Custum of eny porte, wherunto eny such mchandises or goodes shalbe first brought unto, and ther in their bokes entred, not makyng mencion accordyng as ys aforeseid, that than the seid Custumer or Customs for their mysbehavyng lese their office and to make fyne with the Kyng for the same at his plesire. And ferthermore yf eny such goodes or mchandises or eny pcell therof be discharged unpakked, or put to sale, within eny other porte then within the same where they shall be first entred, byfore the seid ctificate be delyved and the same goodes or mchandises seen, accordyng as above ys exp̄sed, that then all the seid goodis or mchandises be forfeit to the Kyng oure Soveygn Lorde, the one halfe therof to remayne to his [seid g[3]ce[3]] and the other halfe to hym or them which shall prove eny such goodis or mchandises soo forfayted; and that the Custum or Customs, nor no Deputie to any such comen officer to whome such ctyficat shall cōme, take nothyng for the sight of the same goodis so ctified. Also yt ys ordyned and stablisshed by auctorite aforseid, that no man of marchant denyzen ne straunger do take uppon hym to do entre or cause to be entred, in the bokes of eny Customer of any porte within this realme, eny man of mchandises, cōmyng into this seid realme or goyng out of the same, in any other marchantis name, savyng oonly in the name of the true mchant owner of the same; uppon payne of forfeitor of all such goodis and mchandises so entred; and evy of the seid mchauntes which so shall take

Penalty on Customer giving improper Certificate;

Forfeiture of Goods if discharged or put to Sale, before the Certificate delivered.

Merchandises shall be entered in the Custumer's Books in the Name of the true Owner.

Itm nre dit f[1] le Roy de ladvys assent & auctoe suisdcez ad ordeigne & enacte, q̄ chun marchaunt sibien deinzen come estunge q̄ amesnera de cy enavnt ascunz maners biens en ascun port deinz cest son realme, p voie ou fet de marchandises, & illec face entrer lez dcez biens ou mchandisez, es lez livers dez Custumers de le dit port lou ñz lez bnz ou mchandises p'mermēt viendront, & lez dueteez du Roy ent a lez Custumers contentez, ou pur ceo ovesq, eux agreez, Et apres ceo fait voiet conveher ou carier ñz lez bnz ou mchandisez dilleosq̄s en ascun auter port deinz le dit realme, q̄ lors le possessour de lez ditz bnz & mchandisez, son factour ou atto'ney, amesnera de lez Custumers del port lou lez dcez biens ou mchandisez sount issint entrez un ctificate, desoubz lez seals ñz lez Custumers, directez a lez Custumers del port a quell lez dcez bnz ou mchandisez serront conveihez ou cariez, faisaunt mencion dedeinz ñ le ctificate de tout la nature colour longeour & value de toutz maners de mchandisez issint entrez, usez destre mesurez ovesq, eln ou vge, come del nature pois content ou value de q̄conq, autz mchandisez usez destre poisez ou valurez; Et q̄ ñ le ctificat issint fait soit delivere a lez dcez Custumers, avnt lez dcez bnz ou mchandisez soient dischargez, pensi qilz puissent veer quelq, la nature colour longeur value content ou pois dez ñz accordent ovesq, le dit ctificat, issint q̄ le Roy ne soit deceyve de cez custumez & subsidiez ent duez: Et si ascun ctificat de cy enavnt soit fait p ascun Custumer dascun port, auquell ascuns tiels mchandises ou bienz serra p'ñment amesnez, & illeoq, en lour livers entrez, nient faisaunt mencion accordant come est avntdit, q̄ lors le dit Custumer ou Custūmers p' lour mesfait pde ou pdent lour office & face ou facent fyne ovesq, le Roy pur icell a son pleasur. Et en ouster si ascunz tiels biens ou mchandises ou ascun pcell ent soient ou soit descharges ou depakkez ou mise au vende, deinz ascun auter port q̄ dedeinz le ñ lou ils frount p'merment entrez, devnt le dit ctificat soit delivē & ñz lez biens ou mchandisez vieuez accordant come desuis est exp̄sse, q̄ adonq̄s toutz lez dcez biens ou mchandisez soient forfaitz a nre dit Sovaigne f[1] le Roy, lune moite de remeindre a luy, & lauter moite ent de remeinder a luy ou a celuy ou ceux q̄ ou quex pvera ou pveront ascunz tiels bnz ou mchandisez issint forfeitz; Et q̄ le Custumer ou Custumers, ne null depute au ascun cōen officer a q̄ ou quex au tiel ctificat viendra, p̄igne ou p̄ignent nul chos pur le vieu de ñz lez biens ensi ctifiez. Ensement il est ordeigne & establie p laucto avndce q̄ nul maner mchaunt deinzein ne estunge p̄igne sur luy a fair entrer ou cause destre entre, es lez livers dascun Custūmer dascun port deinz cest realme, ascun maner de marchandisez, venntz en cest dit realme ou issantz hors del ñ, en le noun dascun auter mchaunt, sauf soulemēt en le noun de verraie mchant possessour del ñ; sur peyn de forfeture de toutz tiels bnz & mchandisez issint entrez; Et chun de lez dcez mchantz q̄ issint p̄ndera

viij.

[1] Item
[2] valured
[3] highnes
} *Lib. Scacc.*

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B' '.'" .7-

.1 ".++!" 1< BD1

, >ʻ ʻ B&>1ʻ1-ʻ @1ʻ C@'<>1-ʻ ʻ@1ʻ & ʻ AK< A1ʻ @1ʻ''' Wʻ 1-?\ʻ <ʻ F 10 >ʻ <-ʻ A1ʻ 0&-ʻ <.-1ʻ L+ʻ 9 *# 10 &@ʻ& 8ʻ A1@.-1ʻ1- 1ʻ<?,\ʻHʻBD?-ʻ='BD<-ʻ ʻ`<@1- 9ʻ I '?-ʻ<? 1ʻ @ <@@@1ʻ 4ʻ <?,ʻ10 >.1ʻ -@1-ʻ 10 1<-ʻ A1'-\@-9Hʻ 10& 1ʻ <?ʻ<0B?-ʻ@'1?ʻ &?ʻ C& ʻ A1@-\ʻ B10ʻ 1<@>1ʻ&?ʻ E<@10ʻ?C0ʻ @<ʻ=10 1ʻ A1ʻC<0BD1ʻ <@& 0ʻ C0B@ @-ʻ 1-0?<-ʻ 9ʻ A?1 -1-ʻ 1>8ʻ C@&'1 &'ʻ &0ʻ @<ʻ >&-1@1ʻ9 Cʻ @?ʻ ʻ A10 1ʻ 10B1?\ʻA1@-\ʻ <0B?-ʻ C& ʻ A1A1@-\ʻ B10ʻ 1<@>1ʻ &?ʻ E<@10ʻ ?ʻ @1\ʻ ʻ BD<-A@<1\ʻ &?ʻ <?R\ʻ B&>&A@ 11\ʻ A?ʻB10ʻ 1<@>1ʻ &?ʻ <?R>1-ʻ'0/?-\ʻ = <?A1ʻ >1 1ʻ @ @<ʻ >&-&'1ʻ1-ʻA?1ʻC<@18ʻ >1-ʻ A1A1@-\ʻ B ʻ 1<@>1ʻ >ʻ @1>C@&@1>1-ʻ &?ʻ C<@1> ʻ A?1>1ʻ<CC &+1 0ʻ Cʻ @1ʻ ='BD<-ʻ +@ <@@@1ʻ &?ʻ <? 1ʻ 108ʻ ?-.1ʻ 0)ʻ <Aʻ 1>C@&@1\ʻ&?ʻ C<@1\ʻ0<ʻ >&-<ʻ Cʻ @?ʻ ʻ 10j B1?\ʻ CO @1\ʻ >< BD<-A'01\ʻ<>10-1\ʻ 1-ʻ B10ʻ R 1ʻ9 10 @@ >&@-/-ʻ Hʻ ʻ<Aʻ 00@-ʻ=1@ 9ʻ ?ʻ <?= -1-ʻ Cʻ @1@0ʻ C+10ʻ B&ʻ 01>#@1 <ʻ 10&-<#@1ʻ<ʻ @1ʻ ?0 ?>1ʻ &?ʻ &?- &@@&? ʻ >ʻ @<ʻ & 9ʻ &?ʻ <@ < ʻ #<'@'=ʻ &?ʻ <?,\ʻ BD@1=ʻ E&+ -& \ʻ A<0B?-ʻ ʻ 11ʻ ? .Dʻ &?ʻ @@@1ʻ @&?ʻ @1@ C& ʻ 01 <9ʻ 0?ʻ C1 -ʻ A1ʻ =& =<@ ? 1ʻ A1ʻ &? \ʻ B1\ʻ #-\ʻ 10 1<- \ʻ A1A1@-\ʻ B10ʻ 1<@>1ʻ9 Iʻ A<+&ʻ ʻ 1>CO0&-1>1-ʻ A?-ʻ <-Gʻ <+<-ʻ <ʻ BD?-ʻ @1@ BD<-ʻ ʻ+@ <@@@1ʻ Iʻ <? 1ʻ10 ?-.1ʻB1\ʻ 10&-8ʻ <#@1\ʻ1LC1- 1\G &+10H2ʻB1 1@-\ʻ C+@0'&-0ʻ1-ʻ'B1@@9 B&>1ʻ Cʻ @<Q 1ʻ C@?@0ʻ @< .1>1-ʻ <CC@1 ;ʻ ^?1@ <Q@1ʻ 10 &@ʻ =<'ʻ <ʻ 1-A? 1ʻ >1\ʻ 0&?@1>1-ʻA1ʻ@1ʻA'ʻ =10ʻ A1ʻ C< BD1ʻ < ʻ= -1ʻA1ʻ 01C ʻ <-\ʻ<A&-H0ʻ C0BD -ʻ 1-0?<- \G '00@-ʻHʻ <?ʻ dR01-ʻ & ʻ Iʻ < .1-ʻ 10BA'Cm9ʻ Cʻ '5B@'<- \ʻ <@'1-0ʻ Iʻ <?C\ʻ +ʻ <'@@1 0ʻ Iʻ 10 ?-.10ʻ -@1-ʻ 10 1<- \ʻ A1'-\1'-0ʻ Cʻ 9 - BD<-A'01\'<>10-1\ʻ1-ʻB10ʻR 1ʻ9-10ʻ> ʻ 1>C@&@1\ʻ 0?ʻ @1\ʻ B&>&A'1\ʻ A?ʻ B10ʻ)ʻ >1\ʻ B&-+1@D1\ʻ Iʻ B< '1\ʻ D& 0ʻ A?ʻ B10ʻ 1<@>1ʻ9 <?ʻ . <?-A1ʻ CA1ʻ <?ʻ & ʻ A1ʻ B1\ʻ B?0 ?>1\ʻ Iʻ ?#0'A'1ʻ Iʻ1>C& '001>1-ʻA?ʻB10ʻ 1<@>1;ʻ ʻ 10ʻ 1-<= 1ʻ& A1'.-1ʻ 4ʻ 10 <#@'1ʻ Cʻ -=1ʻ A'ʻ &,<'.-1ʻ 1 -.-'&ʻ @1ʻ & ʻ H'& 1ʻ 10ʻ A1ʻ@<A+'01ʻ A1\ʻ Iʻ 10C?1@0ʻ Iʻ 1>C1@0ʻ Iʻ <ʻ @<ʻ C 1ʻ A1ʻ @1\ʻ BA1-0ʻ 1-ʻ e1ʻ A'ʻ C@'<>1-ʻ <001>#@1\ʻ Iʻ Cʻ <?=@& ʻ 1ʻ A'B1@@9 Hʻ @1ʻ A'ʻ <(1ʻ =<'ʻ @1ʻ A'ʻ <-ʻ L+ʻ W A1@ 1'.-1ʻA1@ & ʻ AK< Aʻ @1ʻ''' W9 &+10Hʻ &? \ʻ BD&01\ʻ B&>C 01\ʻ 1-ʻ 'B1@@ &?BD<-ʻ \ʻ @1\ʻ C>'001\ʻ Iʻ BD?-ʻ C+'0'&-ʻ =<'ʻ 1-ʻ 'B1@@9 0&'1-ʻ #&-10ʻ Iʻ 1==1= ?1@0ʻ Iʻ A1-A? 1ʻC? ʻ &? \ʻ &? =ʻ ?L'-ʻ ʻ 10ʻ1-<= 1ʻCʻ @<ʻA'ʻ <?B &0ʻ Hʻ BD?-ʻ '5BD<-ʻ ʻ "ʻ @<-Aʻ 1 -101ʻ &?ʻ E<>101ʻ Hʻ<>10-1-ʻ <0B?-ʻ='BD<-A'01ʻ 1-ʻ B10ʻ 1<@>1ʻ1>C@&@1 <

C ʻC ʻ=& ʻB&-=ʻ><= -ʻ &=ʻ <ʻ < ?ʻ ><A1ʻ'-ʻ 0ʻL+ʻ0W 1 1ʻ'&=ʻ AK" D1ʻ %0Ö <.< -0ʻ B< '-.ʻ &?ʻ &=ʻ D'0 1<@>1ʻ>&-1ʻ=& ʻ F< 10ʻ# &?.Dʻ'- &ʻ D1ʻ0<>1

` ʻ D1ʻ &>1-0ʻ'-ʻ D'0ʻ C01-ʻ C< @'<>1-ʻ <001>#@1A'Pʻ D<ʻ KD1 1ʻ'-ʻ D1ʻ C< @'<>1-ʻ &=ʻ , -.ʻ AK< Aʻ D1ʻ''' Wʻ D&@A1Dʻ <ʻ F 10 >ʻ D1ʻ L+ʻ0Ö 1 1ʻ &=ʻ D'0ʻ <'.-1@ ʻ K<0ʻ & A -1A@ <>&-.ʻ & D1 @ D<ʻ 1, ʻ ʻ BD<?-ʻ @1 -ʻ <-Aʻ 1, ʻ & D1ʻ +ʻ 1@1ʻ <-Aʻ & D1ʻ 10 <?-.1ʻ -&ʻ#1 -.ʻA1- \1-ʻ D<ʻ 10& 1ʻ &ʻ<- ʻC@<B1ʻ &ʻ C& 1ʻ K'ʻ D'-ʻ D'0ʻ 1<@>1ʻ& ʻ F <@10@ <= 1ʻ D1ʻ =10ʻ&=ʻ 0 1ʻ D1-ʻ-1L ʻ=&@&K -.9 0D?@Aʻ A?1@ ʻ1>C@& 1ʻ<@@ D1ʻ >&-1 9 # ʻ D >ʻ &ʻ #1ʻ 10B1'+1Aʻ K'ʻ D'-ʻ1- ʻC& 1ʻ K'ʻ D'-ʻ D'0ʻ 1<@>1ʻ& ʻ F <@10@ ?CC&-ʻ D1ʻ I D<?- 1A'010ʻ& ʻ& D1 ʻ B&>&A'A10ʻ &=ʻ D'0ʻ 1<@>1@ & ʻ 1@0ʻ K'ʻ D&?ʻ = <?A1ʻ C? ʻ D1ʻ 0<>1ʻ >&-1 ʻ'-ʻ A?1ʻC< >1-ʻ K'ʻ D'-ʻ D'0ʻ 1<@>1@ D1ʻ 0<>1ʻ1>C@& >1-ʻ& ʻC< >1-ʻA?1@ ʻ &ʻ #1ʻC+1Aʻ# ʻ D1ʻ ʻ BD<?-ʻ'+ʻ 1@1ʻ& ʻ& D1ʻ10 <?-.1 9 # =& 1ʻ D'0ʻA1C< 1ʻ &?ʻ&=ʻ D1ʻ0<>1ʻC& 1@ # ʻK -.ʻ= &ʻ D<ʻ BD<?-ʻ& ʻ BD<?-10ʻ &ʻ KD&>1ʻ D1ʻ 01'Aʻ BD<?-1ʻ <@'1-ʻ +ʻ 1@1ʻ & ʻ& D1ʻ10 <?-.1ʻD<+1ʻ1>C@& 1Aʻ& ʻ C<'1Aʻ D'0ʻ >&-1ʻ # ʻ D >ʻ 1B1+1Aʻ=& ʻ D'0ʻ'^BD<?-A'010ʻ# &?.Dʻ'- &ʻ D'0ʻ @<-A9 K'ʻ -100 -.ʻ D<ʻ D1ʻ D< Dʻ 0&ʻ A&-1@ & ʻ1@0ʻ# ʻ 0?BDʻ C &+10ʻ<0ʻ 0D<@@ #1ʻ D&?.Dʻ 10&-<#@1ʻ &ʻ D1ʻ &0 ?>1ʻ & ʻ &>C &@@1ʻ &=ʻ D1ʻ0<>1ʻC& 1@ & ʻ &ʻ D1ʻ <'1ʻ <'@'1=ʻ& ʻ& D1ʻ BD1=1ʻE&+ -&?ʻ &=ʻ1- ʻ ʻ1ʻ ? .Dʻ C ʻ &K-1ʻ KD1ʻ0?BDʻ C& ʻ 0D<@@ #1@ ?CC&-ʻ D1ʻ C< -1ʻ &=ʻ =& =<ʻ &?ʻ &=ʻ <@@ D'0ʻ .&&A'0ʻ #1 -.ʻ K'ʻ D'-ʻ D'0ʻ 1<@>1@ <-Aʻ &ʻ D<+Aʻ1-C '0&-1>1-ʻ &=ʻ <ʻ 1 1G <+ -.ʻ &ʻ 1, ʻ 0?BDʻ BD<?-ʻ+ʻ 1@1ʻ<-Aʻ& D1ʻ10 <?-.1ʻD'0ʻ 10&-<#@1ʻ B&0 10G K'ʻD'R 1 -ʻC+ 0'&-0ʻ>ʻ D1ʻ0<>1@<0ʻ# ʻ D1ʻ0<>1ʻ 1ʻ>& 1ʻ<ʻ @< .1ʻA& Dʻ<CC1 1G KD'BDʻ<A 1ʻK<0ʻ ><A1ʻ &ʻ1-A? 1ʻ#?ʻ&&-1@ ʻ= &ʻ D1ʻ01'Aʻ=10ʻ&=ʻ 0 1ʻ &ʻ D1-A1ʻ &=ʻ+ʻ ʻ 1 10ʻ D1-ʻ -1L ʻ 0? -.ʻG 0&ʻ D<ʻ -&K1ʻ .&@Aʻ <-Aʻ 0'@+1ʻ 1B1 +1A9 # ʻ ='BD<?- 10ʻ <@'1-0ʻ <-Aʻ& D1 ʻ +ʻ 1@1 0ʻ <-Aʻ10 <?-.1 0ʻ -& ʻ #1 -.ʻA1- \1-09 =& ʻ ='BD<?-A'010ʻ # &?.Dʻ '- &ʻ D'0ʻ @<-A1@ 0ʻ -& ʻ 1>C@& 1Aʻ C&-ʻ D1ʻ B&>&A' 10ʻ &dʻ D'0ʻ @&-Aʻ #?ʻ B&-+1 1Aʻ <-Aʻ B< '1Aʻ ?ʻ &=ʻ D'0ʻ 1<@>1@ &ʻ D1ʻ. 1< 1ʻ @&001ʻ &ʻ D1ʻ , -.ʻ &=ʻ D'0ʻ B&0j ?>1ʻ<-Aʻ 0?#0'A'1@ <-Aʻ1>C&C 00D -.ʻ&=ʻ D'0ʻ 1<@>1;ʻ k` D<ʻ ʻ><ʻ #1'0`ʻ 1-<= 1Aʻ& A -1Aʻ<-Aʻ10 <#@'00D1Aʻ# ʻ ` &?ʻ &? 1ʻ & 1 .-ʻ & A1ʻ# ʻ D<A+ /01ʻ&=ʻ D1ʻ & A'0ʻ C?<@@ <-Aʻ 1-'C<@@ 0)ʻ'-ʻ ` D'0ʻC001- Pʻ C< @'<>1-ʻ <001>#@1Aʻ <-Aʻ# ʻ<?= & ʻ 1ʻ &=ʻ D1ʻ0<>1@ D<ʻ D1ʻ01'Aʻ <Iʻ1ʻ ><A1ʻ D1ʻ01'Aʻ L+ʻ0W 1 1ʻ &=ʻ D1ʻ < .-1ʻ C=ʻ , .ʻ AK< Aʻ D1ʻ''' 0 9 K'ʻ Dʻ <@@ D -.0ʻB&C B1Aʻ'-ʻ D1ʻ 0<>1ʻ &KBD -.ʻ D1ʻ 0010 9ʻ <-Aʻ1 ʻ C+ 0 &-ʻ ><A1ʻ -ʻ D1ʻ 0<>1@ #1ʻ .&&A1ʻ <-Aʻ A=1^?1@@ <-Aʻ &ʻ 1-A? 1ʻ =&'0ʻ 1 ʻ @O& `ʻ#1ʻ 'ÖPʻ 1-<^1Aʻ# ʻ D1ʻ 01'Aʻ <?=@& '=1@ D<ʻ 1C ʻ - BD<?-ʻ &=ʻ '<-Aʻ E1 -101ʻ& ʻE<>101 9 D<ʻ # -.1 Dʻ1- ʻ I D<?-A'i 1ʻ'- &ʻ D'0ʻ 1<@>1@0D<@@ 1>C@& 1

6!#& ⁺. ʻ @ #& .O# &-*⁺ +&!-ʻ !"# -2ʻ ! 1 +.@&-*⁺ !&"ʻ .-!@ &-ʻ &2 6! +1

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!"# -2ʻ ".1ʻ "!+ -/ʻ b0!"-2!@ C#ʻ 2 +⁺ /.ʻ !ʻ +&E!

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0 01!"4 0"! @ .1' !"# -2 #.1 +@ !& l' 2 &/ 3". '&2&.-2

D1 >&-1 1B1 +1A =& D1 0<>1 I D<?-A'01@D ' 10&-@ <#@1 1LC1-01 A1A?^@ ?CC&- D1 B >&A 11 &= D'0 @&-A1@ & 1@0 K D&? = <?A1 C? D1 0<>1 >&-1 '-A?1 C< >1- K D-@ D'0 1<@==@1@ D1 01'A 1>C@& >1- & C< >1- &' #1 C+1A <0 0 <=& 101'A@ ?C&- C< -1 &= =& =1' ? 1 &= D1 +<@?1 &= D1 '5BD<?-A'01 0& # &?.D '- & D'0 @&-A1 -A` D< ' #1\ & A ?1A' # ' D1 <?= & ' 1 D< ' 1, ' ?0 &>1 ' <-A &>C &@@1 '0D<@@ <a1 0?==B'1- ' 0?1 '1@ =& ' 1+0 ' &= D1 01'A' '5BD<?- ' +' 1@1 ' & ' & D1 ' 10 <? .1 ' & 1>C@& 1 D1 + @?1 &= D1 01'A'=BD<?-A'01@ & ' &' C? ' D1 0<>1 ' >&-1 ' =& ' D1 1'A BD<?-A'010 1B1 +1A '-' A?1 C< >1- @ D'0 10&-<#@1 1LC1-010 <@K1 ' A1A?= 1@ ?C&-' C< -1' &=' = ?' &= D1 +<@?1 &= D1 01'A BD<?-A'010@ D1 &-1 D<@=1 &= D1 01'A =& =1' ? ' & D1 , -.@ D1 & D1 ' D<@=1 & D1 C< A1 D< ' K'@@ 0?1@ D'0 &' #1. -1 <-A <a1 1==1 1 < ' D1 =10 ' &= '0 1><0 -1L ' B&> -.@

@< >&-&'1 10B1?C ' C? ' K BD<-A'01@'B1\ 10&-< <#@1\ 1LC1-01\ A1A?B 1\@ 0? ' @1\ B&>&A'A10'A1 B10 ' R 1@ &?' <?.>1- ' 00?-\ = ?A1 >1 1 -" @1 ' >&-1 ' 1< ' A?1 C<'1> ' 1'-\ B10 ' 1<@>1@ @1! A '= 1>C&&@1>1 ' &?" C<'1> ' A10 1 C+1R B&>1 10 ' <+ &A ' 0? ' C1 -' A1@ =& =1' ? 1 A1@ +<@?1 '=! '< BD<-A'01 '00' -= <>10-1\ 1>' B10 ' R 1@ ' '@ 10 ' & A1'. -1 C =' A @<?= &W@ H B '?-' E?0 ' ''>1 ' I &?- &@@&? ' =2-A &- ' $ 0?==B'1- ' 0?1 '1 B@@?-' A1@ A' \ ' BD<- m +' 1@1 ' &?' 10 ?-.1 A1-C@&'1 ' @1 +<@?1 A1@ A' ' BD<-A'01@ &?' A1 <1 1 ' '=! @1 >&-1 ' C/ @1\ A' \ ='BD<-A'01\ 10B1?\ 1-' A?1 C<'1>1- @ B1\ 18 0& < @1\ 1LC1-01\ & \ =&= \ A1A? \@ 0? ' C1 -' A1@ =& =1= 1 AA@ +<@?1 A1 B1\ BD<-A'01\@ @?-1 >&' 1 A1@ Aa =& =<' 1 <?' & @ <? 1 ' >&' 1 <@@ CA1 H +>1 '0?1 ;' B10 ' <^1 <' B&>1-B1 ' I -A1 ' 1==1= 1 <@@ ' =10 1 A1 &KA@ C0D -+1-W-

(D@ ŸW I N$ ' ' '6: ' 6!#& ' . ' "/&- -#!' . ' & @' . ' . -/ . -' -.' B !! 1 !-' . ' . -/ . -' 2 +' . ' . ' -@] &"' . '" "É! ' 7& ' V "1Z . '" !"# -/&2!Z . ' 2!+' . '" ; " !'\

' ' D<' D1 '\1-0 &= &-A&-' >< 1 B< 0 <@@ >< --1 ' &= F< 10 &' =& < -1 < a1 =

` '0D1K1-' <-A C < 1-' ?- &' &? ' @.D-10 &? ' ?1 <-A' =1' D=?@@ &>1-0 &= D'0 &? ' 1<@>1 &= C.@&-A@ D< ' KD1 1 D1 ' 1\1--10 <-A' = 1>1-' &= D1 1a1 &= &-A&-' D<+1 ?01A' &? ' &= >1 &= > -A' &' .&&' B '1' <-A' @1A1' D1' ' BD<?-A'01' <-A' F < -' ?- &' < ' =1 10 <-A' >< H?1 10 <' D1' ' @ # 1 &? ' &= D1 01'A' ' 1@ -&K' &= @< 1 C1 D1 < 1 ' @A1 >1-' <-A' ' 1j \1--10 &= D1 01'A' ' 1 &= &-A&-/ P' D<+1 ><A1 `<-A' 1-< 1A'/' ' <-' A -<?-B1' F ' D'-' D1' 01'A' ' 1' ?C&-' < . 1< 1 C< 1 D< ' -&' -=1-@ D< ' 0 =' 1><-' ' a1\1'-' &= D1 0AA' ' 1@ 0D<@@ .&&' & ' B&>1 < ' 1- ' =1'1 ' & ' >< H?1 ' ?' &= D1 01'A' ' 1' &= &-AT h' K ' D' 1- ' > ' &= F < 1 ' & ' BD<?-A'01' &' 01@@ & ' &' `#< 1 'W C &' '-0 1- 1- ' D< ' <@@ # 1 0 <-A' ='BD<?-A10 0D?@A' 10& 1 & D1 01'A' ' 1' &= &-A&-@ &' # 1 D1 ' F < 1 <-A' BD<?-A'01' &= D1 01'A' ' 1\1'-0 <-A' = 1>1-' < ' &-AC-' <=& 1 01'A@ # ' B<?01' &= D1' ' 0 -.@1 ' @?B 1 <-A' < < @1;'

! &2# &! Z . ' !' 2 &/ "/&- .#!=

` / KD'BD' & A > -11@ = ' 0D?@A' D&@A' <0 0 #1=& 1 1L @001A@ 0D<@@ #1 &' D1' ?01 ' A10 <B1 -' &= ' <@@ & D1 ' =1 1 0 <-A' >< H?1 @= K' D'-' D'0 & ' 1<A>1 KD'BD' E&A' A1=1-A@ =& ' D1 ' #1 >1- ' =1 1 0 =& ' D1' B >1-' F1@@1 &= &? ' 0AA' @1.1 C1&C@1 <0 < ' <@?0#?= ' &F1 L -=& D <># '..1 & <.D<>' @ ' &+1- 1 <-A' < ' >< - ' & D1 ' C@<B10@ KD1 1 @& A10 0C?<@@ <-A 1>C<@@ ##& 10 '&? 10 ,- .D 10 H?1 0 E1- '@>1-@ <-A' &? ' 01'A' E& &1-0 &= ' 1 , ' &+> 1 ' D< D' D1' ' B&>1-' 10& 1 & # ' <-A' C? +1 ' >< - ' D -.= D< ' #1 .&A1' <-A' C= <#@1@ <0 & -<>1- 0 &= D&@ ' D BD' D<@1'0 #&a10 +10 1>1- 10 <-A' & D1 ' & -<>1- 1 ' =& ' D&@ ' D? BD' <=& 01'A@ <-A' <@0& ' =& ' D&K0&@A@ <0 + 1@@ =& ' D1' >1 &= 1- @ <-A' & D1 ' ?== <0 -1-' @& D' K&@1-' @& D' # <001' C1K 1 ' #1AA -.' &0>&-A1' 1-' !@<L' <-A' F <L@ <-A' >< - ' & D1 ' -1B100< ' D -.= D1' KD'BD' > .D ' -& ' #1' =& #& -1' < &-.1' &? ' 01'A' ='1.1' C1&C@1 6 #? ' # ' D1' 01'A' & A @0-B1' 1 ' >< -' K '@ -.' C' # ' 1- ' &= D1' C> 001 ' 0D<@@ #1' B&< 1A' &' B I -1' &' D1' 01'A' ' 1' &= &-A&-@ &' D1' ' ' >C& <#@1' &&0@1 <-A' D< .10@ KD'BD' =' D1' 01'A' <A1' 0D<@@ 1-A? 1' 0D< ' . &K1' . 1< 1' D? 1' <-A' ?A'B1' &' D1' &>1-' K1@1' &=

/' ' '0 @ V 1>' ' ' K<0 0D1K1A' ?- &' D1' , C . ' &? ' 0<'A' ' & 0'1 -' & A1@ # ' < 1 'B'&-' C? ' ?- & D' >' '-' D'0 ' 8' ' g <'A < @'<>1- @ D< ' D&K' &= @< 1' >1' D1' <' ' @A1 >1-' <-A' ' 1\1-0 &= D1' ' 11' &= &-A&-' /' #' /' #< 1' /' 6 $ ' ' <-A' S&# # 5'0 f &>'

>' '=?'0 ' >&-0 1' <' -=1' A' ' &+00?. - =' @1' & ' ?' @?-1' C1 '=' -' <' 68' #<==@1' 1-' @1' A' ' C@1>1- @ H' B& ' < < A1' @1\' <' ' @A1 ><-0 I ' 1\1'-0 A1@ ' 11' A1' &-A 1\' &?- ' =1@ ' ?-' & A'-0-B1' A1'-\ '=! @<' ' 11@ 0? ' . &-A1' C1 -@ H' -?@ D&>1' H' 10 ' D&W 1-= <-BD101' &?' ' 1\'-' A1' @< A' ' ' 11' C<001 <' &?' +'1-A <' <?' <0B?-' =1' 1' ?' >< a1 ' D& 0 A1' @<' ' 11' A1' &?-A 1\@ &+10H@ <0B?-' ><-1 ' K< 1' &?' I D<-A@01' <' +1-A1 ' & ' <' #< 1@' <' B1' 1- 1- ' H' &? \' <1D< & \' I ' ='BD<- \' 10& 1 1- ' <@@ A' ' ' 11@ A1' BD< 1' @&? ' K< 1' I ' -=1D<-A'01' A1' @1\' #P I' ' 1\'-0 I ' D&>1<" 1-=' <-BD'01\' A1' ?-A 1\' <+ &A 1@ C' B<?01' A1' =&? ' 0'-.?@1 ' @?B 1' I ' C=' ;

W ’ ŸW I’ N$”’ ’ “<

$ -’ =@1’ D<’ -&1’ >.1 ’ & ’ ”1- 0&-’0D<@@ B< ’<- F &@@1-’ @& D10 &?’ &=’ D’0 1<D-1’ #1=& 1’ D1 ’D1 #< #1A’ &K1A’ <-A’0D&>1

` ’=?@@ >1a1@ ’ &? 1’ . 1 1’ F 0A&>10 D1’ C& 1’ &>1-0 &=’ D’0 1<@>1’<0/P’ D1 >1-’ !?@@1=0 <-A’ & D1 ’ ’ ='B1 0 D<’0D’’@A’@ +1’<-A’ &# < -1’ D1’’ -1A ’0?0 1- <B&-’# ’ >1<-1’&=’ A <C =’><A1’<-A’A <C1A’ K’ D’-’ D’0 1<@>1 <0 K1@@ D ?.D&C 1’ <@@ D1’ 0<>1’ 1<@>1’ <0 K’ D’-’ D1’ ’1’ &=’ &-A&-0 `A’0B 1@’ & B&-0 A1 F ’ D<’KD1 1<0’ ’-’ <’ < ? 1’><A1’ ’-’ D1’+’ 33 1 1’ &=’ D1’ <’.-1’ &=’ , -.’ AK< A’ D1’ ’ 0 `KD&10 0&?@1’ E&A’ <00&’@1’ <>&-.’ &A1’ ’ ’0 B&- 1 -1A0 D<’ -& C0&-1’ A1- 01-’ C1’ <? .’1’ 0D?@A’ B< ’1’ & ’A& ’ #1’ B< ’1A’ &’ 1- ’ C< ’10 #1 &-A1’ D1’ 11’ <- ’ F &@@1-’ 1 -1’ -& ’ @& D’ ?-=&@@1A0 #?’ D<’ D1’ F &@@1-’ 1 -1’ &’#1’><A1’’-’ D’0 1<@>1’0D?@A’#1’ K 1-’ ’-’ D1’0<>10 <-A’<@0&’<@@ @& D1’ ’-’ D1’0<>1’><A1’ D?@A’#1’ =?@@1A’ <-A’=?@@ ’ K &?.D ’ K’ D’-’ D’0 1<@>10 #1=& 1’ D<’ 1- ’ &=’ D1’0<>1’0D?@A’#1’D<A’& ’ < ’1A’&? 1’&=’ D’0 1<@>10 ?C&-’C< -1’ &=’=& =1’ ? 1’ &=’ D1’ +< 1’ +<@?1’&=’0?BD0 1 -1’ -& ’K&+1-0 <-A’B@& D’-& ’=?@@1A0 D<A’& ’ B< ’1A’&? ’ &=’ D’0 1<@>1G D1’ &-1’ D<@=h’&=’ D1’0<>1’=& =1 ? 1’ &’ #1’@1+1 A’ &’ D?01’ &=’ D1’, -.0 <-A’ D< ’ & D1 ’ D<@=1’ &=’ ’ &’D >’ & ’ D1 >’ D<’ D?@A’ 1 ’1’ & ’ ><a1’C1=1’ &=’1- ’ 0?BD’ 1 -1’ -& ’ K&+1-’ & ’ & D’ -& ’ =?@@1A’ B< ’1A’ &’ 1- ’ C@<B1’ #1 &-A’ D1’ 11’ ’ ` ’ ’0’ 0&’ ’.D ’ D&-& <#@1’ & < -1’ D<’ =& ’ 0& >&BD1/ X’ <0 ’-’ D1’ 01’A’ <?1’&=’ , -.’ AK< A’ D1 ’ 0 -& 1LC0 >1-B’&-’ ><A1’ D<’ D1’01’A’ @& D10 0D?@A’#1’ &K1A’<-A’0D& -1 <=& 1’ D<’ D1 ’ #1’ B< ’1A’ <-A’ B&-+1 A’ &? ’ &=’ D’0 1<@>1 KD1 # ’ D1’ 01’A’ C& 1’ &>1-0 &=’ D1’ <= 10 <=& 01’A’ > .D ’ #1’ 01 1’ ’-’ @<#&? 1’ <-A’ &BB?C<B&-0 D1 =& ’ D1’01’A’ @& D10 1,’ 0 =D1-’ ’- &’ D’0 A< ’ D<+1’ #11-’<-A’A< @” < -1’ ’-’ . 1 1’-?># 1’ <-A’ C@1- ’B< ’1A’ <-A’B&-+1 1A’&? ’&=’ D’0 1<@>1 ?- &K11A’<-A’?-0D&>1 ’- &’ D1’ C< ’10 #1 &-A’ D1’ 11 <0K1@@ # ’ ”1- \1’- 0’$ <0 <?-.’1 0 KD1 # ’ &? @<-A’00D’ -<B’&-0’ K’ D’ D1’ 0<>1’ A <C ’ <>1’ 01 1’ &-’ @<#&? 1’ <-A’ &BB?C<B&-’ &’ D1’ ’ . 1< 1’ 1- BD’-.0 <-A’ D1’ C& 1’ &>1-0 &=’ D1’ <= 10 <#&+101’A’ D ?.D&? 1’ <@@ D’0 1<@>1 D<’ &=’ -< ? <@@ 1<0&-’<0 D1’, -.=’ ?1’@’1.1’>1-’0D?@A’D<+1’ <-A’ C < -1’ D1’ ’ -1A ’ 0?0 1- <A&-’ <-A’@ + -.’ # ’ >1<-1’&=’ D1’0<>1’A <C 0 =& ’@<a1’&=’0?BD1’&BB?C<B&-’ A<’@@ ’=<@@ ’-’ . 1< 1’ -?># 1’ & A @-10 <-A’C& ’1 &’ D1 ’? 1 >&0’A10 ?1A -’ =’ ’0D?@A’ 1- ’ @1-.1’B&-’ -?1’G `W @1<01’ ’ D1 =& ’ &? ’01’A’A’0B 1 1’F ’0A&>10 D1’C> 0010 1-A1@ ’ &-0’A 1A’ &’ C < ’ D1’, -.’ &? ’ & 1 .-’ & A1’ D<’ # ’ D1’<A+ B1’<-A’ <001- ’ &=’ D1’ & A’0 0C?<@@ <-A’ 1>C<@@ ’-’ D’0’ C#1- ’ C< @’<>1- ’ <001>#@1A’ <-A’ # ’<? I & ’ 1’ &=’ D1’ 0<>1 ’ ’ < ’ #13X’ & A -1A’ 10 <#D00D1A’ <-A’ 1-<=@1A0 D<’ -&’ <?-.’1 ’ -& ’ ”1- \1’-’ B< ’1’ & ’ ><a1’ &’ #1’ B< ’1A’ &? ’ &=’ D’0 1<@>1 1- ’ F &@@1-’ @& D10 #? ’ D<’ D1 ’ #1=& 1’ #1’ #< #1A’ &K1A’ <-A’ =B& -1’K’ D’-’ D1’ <>1’ 1<@>1 =& ’ D1’ 1@11=’<-A’ 01 -.’&-’ K1 a1’&=’ D1’ 01’A’ C&,1’ &0 >1-0 ?C&-’ D1’ C< -1’<-A’=& =1 ? 1’ @ > 1A’ ’-’ D1’ 01’A’0 < ? 1’&=’ , -.’ AK< A1’ ><A1’?C&-’ @& D10 B< ’1A’ &? ’&=’ D’0 1<@>1’ -& ’=?@@1A0 &’ #1’ A1+ A1A’ ’-’ >< ’ <-A’ =& D1<0’ ’-’ D1’0<>1’ < ? 1’ ’ 0 B&- 1 -1A ’ &+ A1A’ <@K1 ’ D<’ @& D10 B<@@1A’ 1001@0 < 10 <’@ -.’ @& D10 <-A’ <@@ & D1 ’ @& D10 B&>1,-’ 0 =D1-’ ’ ` -A’ D’0 &’ #1’ A&-1’<’ D1’ 1 1-B1’ &=’ E&A’ <-A’ ’-’K1 ’ &=’ BD< ’ 1 0P

0 !1’ 7 !”!’ 1’ !’ 2 &/!’ 3 ”+& 1!-’ &’ 7 ’ 2 !’?!/’ ;@’ <$ %’ ’ -/’ .” 21. # ! <’ !’M@-*’ .0” 2 &/!’ .’!”!@-!’ .”/’ !’ 3”!L’ 1@2 !2’ #.-2&/!”!/’ ;@’ /’@2!’ .’ !’ .”/!2’ = &”& 0!+’ -/’ !1 .”!++’ -/’ ’ !’3” @!”. ’ !’ .1!-2’ &-’ &2’ 2 &/!’3 ”+& 1!-’ 22!1;+!/’ -/’ ;@’ 0 +.”& !’. ’ !’2 &!’ ’ <

, >’@&?’ 1-’@1’ A11’C@’<>1-’ ’’@ =?’0’ ’>&-0 1’ C’ &-8’ A&? 0 !?@=&? 0 I ’<?R\9< ’=”B1 0 H?1L’+’+1 &-’ I’ .<’. ’ -1 &?-’@&?’ -1B100< ’1’ 0?0 1- <B’&-’ C’ >1<0-1’ A1’ A <8 C1 ’1’=<’ ’ I ’ A <C0 A1A1’-\’B ’ 1<@>1 0” #’1-’ C’ > ’ &?’ @1’ 1<@>1’B&>1’ A1A1’-\’@<’ D11’ A1’ #-A 1R H’ B&>1’ 1-’?-’10 < > ’=<’ ’ 1-’ <-’01C ’0>1’@1’ & ’ AK< A’@1’ ’’’ W’ 1- 1 ’<?R\’ ’@ 10 ’B&- 1’.-?\9 ’ -?@@ C0&-1’A1’-\1’-’ -1’ 10 0?-.1’ B< ’1 &’ ’ &?’ =1 &’ ’ 10 1’ B< ’1\’ <0 <0B?-\’ C@’1\’A&?0 1 ’ @<’ >1< ’ <0B&<1’ =’@1’@<-?0 &?’A <C0 -’1-’ =&@@1\9 >1\’H’@<’=’@1’@<-?\’ <=1’ 1’ 1-’ B1’ 1<@>1’ M &@1’ 1 1\’ 1-’@1’ =’’9 ’ <?L” &? \’A <C0 1-’ ’B1@@ =&’ \’ M &’1- ’=?@@1\’ I’C@1’<1>1- ’ &,1\’A1’-\’@1’ 1<@>19 A18 + ’’ ’H’<0B?-’A’B1@@ = &’1- ’ 1K1’ I’ B< ’1\’ A?’ B10 ’ 1<@>19 0’ C1 -’ A1’ =& =<’ ? ’ A1’ @<’ +1 <’1’ +<@?1’ A1’ &? ’ ’1@ =’@1’ -’1’ 1L1’ &?’ A <C’ -’1- ’ =?@@1’ 1?1\’ &?’ B< ’1\’ /)’ 1-’ <0B?-’@’1?’ A&?0 ’1 ’ @<’ >1< ’G ’ C ’ <- ’ H’ 1-’@1’ ’’ 0 < ?’ 1’ A?’ & ’ AK< A’ -?@@ 1LC2001’ >1-B’&-’ 10 ’ =<’ ’ H’ @1\’A11\’ A <C0 = &’1- ’ &?.D1\’ I’ &-A?\9 <+W- ’H’@\’ = &’1- ’ B&-+1’D1\’ I’B< ’1\’ D& 0’A1’B10 ’ 1<@>19 C’H?1@@ @1\’C&,&\’ &1-0’ A1’ @1\’ < 1\’ < WA’ \’C?’001- ’ 10 1’ >’01\’1-’@<’@<#&? ’ I’ &BB?C<B&-9 C? ’B1&’ >\’@1\’A <C0 &? \’ =&’ \’ A1’ C?’0’ 1-’ B10 ’ &? ’ &?- ’10 1\’ I’A1’ &? ’ 1-’<? 1’ 0& -’A?’ .=&-A1’ -&>#1’B< ’1\’ I’ B&-+1’D1\’ D& 0’A?’B10 ’ 1<@>19 -’10 &?.D11\’ I’ -’1- ’ &-A?\9 <’ @1\’ C ’1\’ A&?0 1 ’ @<’ >1< 9 0” #’1-’ C’ A1’-\1’-0’ B&>1’ 10 ?-.109 C&?- ’ -<B’&-0’A<?R\’ R 1\’ &+10B 9 >’@<’A <8 C1 ’1’ 01- ’ >’01\’ 1-’ @<#&? ’ I’ &BB?C<B’&-’ <’ @&? ’ . <?-A1’ 1- ’BD1 9 ’ @1\’ C& 1\’B&1-0’ A1’ @1\’ < \’ A10?’0A11\’C’ &?’ @<’ 1<@>19 H” A1’ -< ? <@@ 1<0&-’B&’C1’ =&’<@0’@’1.10 A?’ & ’A?0&@1- ’ <+&’ ’ I’ .<’. -1 ’ @&? ’ -18 B100< ’1’ 0?0 1- <A&-’ I’ +’+1 ’C’ >&’1-10 A1’=’@’@<’A <C’19 C? ’ A1=<?@’A<?’1@ &BB?C<B’&-’A1’ &? ’ 1-’<? 1 ’BD’1&-’ 1-’ ./?”A1’ -&>#1’1-’&A’0 1’ I’C&+0 19 <’ @&? ’=’-<@@ A18 0 ?BB&-’0’@ 1 &’ ’C@?’0’ @&-.1>1- ’ B&- ’-?\G =1’A11’ &,<’.-1’ ’@1’ & ’@1\’ C>’001\’B&-AA1 1\9 A1@<A+’B1’ <001- ’ I’ 0?=@&OJ A10?’0A11R’ <A’ & A1’.-1’ 10 <##@’1’ I;’ 1-<=@19 H’ -?@@ 10 ?-.1’ -1’ 1’-\1’-’ B< ’1’&?’ =”B1’ 10 1’ B< ’10 D& 0’A?’B10 ’ 1<@>1’ <0B?-\’A <C0 @<’@?1\9 >1\’ H’ B1?L’ A18 =&’ 0&’1 ’ #< #1\’ &?.D1\’ I’ &-A?\’ A1j A1’-\’ B10 ’ 1<@>19 C? @1’ 1@’1=>1-’ I’ >1 1’ 1-’ & <’.-1’A1’@1\’ A11m’ C&+1 0’B&1-09 0? ’ @<’ C1 -’ I’=& ’ =<’ ’ ? 1’@’-=’ 10’ 1-’@1’A’ ’ ! 4 4’ A?’ A’ ’ & ’ AK< A’ =<’ ’A1\’A <C0 0)’ -’1- ’ =?@@1\9 A10 1’A’+’A1\’<?’ ><-1 ’ I’ =< >1’ BB’>1’ ** 10 ’ 1-’ >’ @1’ 0 < ?@’ B&- 1’.-?\’ +1?’ &? \’=&’ \’ H’ A <C0 0)’ 10011 0’ <’10’ < @ -.’ B@& D10 9 I’ &? \’<?R\’A < ’B&1>1- ’ +1-A?\’<?’ L@’0’ I’ A10&?#\9 $ V 0&’1- ’ B&>C 01\’ A1’-\’ B10 ’ C01- ’ < 1

\’ -’ >’00’&-’D1 1’-’ #& ’)’ -’ 1&22&.-’ !”!’&-’ ;. ’ h<CC1@@1\’ Q ’ % $’-1’

L 8

;+ . 4))? -> ;?9

C0B= -' <C20 * ' <A' B&-'0<-B1' A1' B1&? I ' B&>1-' I' &+10H? H' B1@? ' 1' '00'- ' 1 1'. -?\? &?' <0B?-' A1' @1\' AB1\' &=='B1 0' B&-+&'1' <0B?-\' A1' @1\' AB1\' 1-<- \' 1-D<#'8 <- \' &?' =1 >&0' <?' & ' <?' <0B?-' BD<>C' & ' <001>#@1' &?' &? 1? <?@ >1 ' H' C' B&><?-A1>1 ' A?' & ' <==<' 1' @? ' '1? =+'B1' H?1? '? 01 < B&><-A?\? I ' B1&' &? \' =&' \' 1-' @<' @', A1' &?' 0'. -1' A?' & ? &+10H? ?-' B&-'0<-B1' A1' B1@? ' H' B1?L' 1-0 ' B&-+&'1' C' B#><?-A1>' ' A?' & ? &?' 0" A1@@ &=='B1 ' -1' +1'. -1' C<0' <?' & ' 1-' 1>C0' A1' &?#@1' &?' .?1 1' HO?-' '@ < B1&' = <' B&><-A?\? <'<- ' -?@@ 10&-<#@1' 1LB?01' < @1' B&- < '1? H' &? \' .0?- 1\' < B1@? ' A&-HO' =1' 1\' &?' 1?1\' A<0B?-\' A1' @1m' A' \' &=='B10? C' @1' & ' &?' C' <0B?-' A1' B1\' C.1-' & \' &?' CA1B10? 0&? =? 0&'1- ' A&-HO' &? ' &?0 1>1- ' +&'A10' I ' A1' -?@@ 1==1 ' ' '@ 1' & A1'. -1' C' '-' @<?= & ' H' 0" <0B?-' =1 >&' &?' 1-J- ? A1A1'-\' <0B?-\' A1' @1\' A 1\' D&-& \' = '10' >< 0' 1\' I ' 1- 1m? 0&'1 ' 1 1'. -?\' &+10H? <0B?-' C0&-1' &?' C0&-10? &- < '1' <' @1\' 0 < ?' \? C' @'+01' 0'. -1' &a1-' 1 1>1 ' 1-A1 ' ? 1' &?' C>'01? &?' A<@1 ' <?' <0B?-' BD<>C' B&-. 1.<B -' &?' <001>#@1' 1-' @<' @' 1' 0'. -1' &?' &a1-' A<0B?-' D&>1? =& H? 0&?@1>1 ' 1-' @<' @'+ 1' I ' 0 . -1' A?' & ' 9A1' '? ' M+1 ' @<-BH? 0&?@1>1-@ &?' @<' '@ 01 < &><-A?\' C' @1' & ? H' &? \' . <?- 10' I ' A'>'01\' <' @? ' ='<@\' C? ' >1' A1\' <-\' &?' <' +&@?- '1? A1\' 1\' 1- 10' =1- =' &?' <? 0' C&00100'&-0' 10 1<- 1\' CB1@@ A< B?-\' A1' @1\' A==1\' D&-& \' = '10' ><60' 10' I ' 1> 1\ '0&'1- ' A&-HO' &?' &?0 1>1- ' &'A1\' I ' A1' -? @ '1==1=

= C@@B'? ' ' o < ? < @'1' <--& ' C1- ' 1C ' >

A< 10' -1L ' <= 1 ' D1' D< D' a-&K@1BD' D1 &=' /)' D&K' <-A' K' D' KD&>1' D1' 0'0&' 1 1 -1A? & '1- '&=' D1'0<A' ==' B1 0' B&-+1 ' 1- ' &=' D1' 01'A 1-==' 10 -D' <?- 1\' & ' ! 1 >&? 0' &' D1' , -.? &' 1- ' =1@A' & ' <001>#@1' & ' &K 1? & D1 j K'01' D1-' # ' D1' -.=' B&><?-A>1- ' &' A&&' D >' 0?BD' M+' B1' <0' D1' 0D<@@ #1' B&><?-A1A? <-A' D<' <@K1 ' '-' D1' -.=' @ , ' & '0'. -1? K' D' <' B&- 0<?- B1' &=' D >' D<' 0&&' B&-+1 ' D1 >'# ' D1' , -.=' B&><?-A1>1- ? & ' ='0?BD' ==' B1 ' B&>1' -&' &' D1' , ' '.=' '.D-1 ' '-' >1' &=' 1#@1' & ' K1 1? KD1-' D1' D1 &' 0D<@@ #1' B&><?-A1A? D<+ -.' -&' 10&-<#@1' 1LB?01' &' D1' B&- '1? D<' <@@ . <?- 10' D1-' ><A1' & ' D<AA1' &' D >' #=' 1- ' D1' 01'A' &==' B1\? # ' D1' , -.' & ' # ' 1- ' &=' D1' , -.0' C.1- &? 0' & ' =2A1B100&0? #1' D1-' 1 @ ' +&'A1' <-A' &=' -&-' 1=='1= 1 -A' ` D<' '#10P' & A -1A' # ' D1' 0<>1' <? & ' 1? D<' =' 1- '=1 >&? ' & ' 1-<- ? K' D'-' 1- ' &=' D1' 01'A' &-&/0 & A0D'CC0' <-& 0' <-A0' <-A' =' #1' 1 1 -1A' K' D' &-A?1@ 'C0&-1' & ' C0&-10' B&- '1' &' D1' < ? =? # ' @ 1' 0'. -1 &a1-' & D1' '-A1- >' & ' C> 01? & ' .&&' &' 1- ' =1@A' .1A? D.' & ' <001>#@1? '-' 1- ' ><-- 0' @ C1 '80 .-1' & ' &a1-#?' &-@ ' '-' D1' , -.=' @ 1' <-A' 0'. -1? $<-A' &', +1' D > &&-@ ? & ' KD1 1' D1' 0D<@@ #1' B&><?-A1A' # ? D1' , -.9 D<' <@@ . <?- 10' <-A' @&00010? &' D >' ><A1' =& ' >1' &= 1 10' & ' <' F '@@? &=' C-A=' 1- =' 1- =' & ' & D1 ' C&0&' 0100'&-0? #1 -.' CB1@@ &=' 1- ' D1' 01'A' &-& 0' & A0D'CC0 < 0' &-A=' <-A' 1- =? #1' D1-' ? @ ' +&'A1' <-A' &= -&-' 1==1^1

ME' = ' '4' < '%HH

c ' c ' &' 1-<#@1' !1&==10' '-' ?0' &' 0?1' =& ' D1' #1-1= '&=' '!1==& 0' <@ D&?.D' D1 '#1' &? @<K1A

! ' ' <0' <=& 1' >1' A C01' C0&-10' =1&==110' &=' ?0' <-A' & D1 ? KD'BD' D<+1' 0?1A' <BB'&-0' & ' 0? 10' &' D1' ?01' &=' & D1 ' C0&-1' & ' C0&-10' <-A' -& ' &' D1' ' ?01' -1' #1D&+1? D<+1' #11-' A'0<#@1A' &' 0?1' 0?BD' <BB'&-' &=' 0? 1' <-A' 0?> >1' #< 1A' '-' D1' 0<>1? # ' D1' 1<0&-' D<' D1' C0&-10' 0&' 0? -.' #1-' &? @<K1A' &=' 10&-' =1@&- 1' & ' & D1 K'01' < - AA' B&-+ I1A' & ' & D1 K'01' A'0<#@1A? &' D1' . 1< 1' A1@<' <-A' D? ' #=' D&0' C0&-10' & KD&01' ?01' #1D&+1' & ' C &?=' ' D1' 0<>1' <BB'&-' & ' <BB'#-0' 0&' K1 1' 0?1A' & ' D<A' G '#1' & A=' . -1A' 10 <#@'00D1A' <-A' 1-<I1A' # ' D1' , -.' B? 1' 0&C1 .-' @& A1' # ' D<001-' &=' D1' @& A0' 0C?<@@ <-A' 1>C<@@ <-A' &=' D1' &>1-0' '-' D'0' 01- ' C< @'<>1- ' <001>#@'A' <-A' # ' <?A & ' 1' &=' D1' 0<>1? D<' -&' C0&-1' & ' C0&-10? KD'BD1' -&K1' D<' D' & ' D1 <= 1 ' 0D<@@ D<+1' <- ' <BB'&D' & ' 0? 1' D<-. -.' &' D1' ?01' <-A' #1D&=1' &=' & D1 ' C0&-10' D1-' &=' D1>01@=1? #1' -& ' = &>' D1-0=& D' A'0<#@1A' -1LB@?A1A' &' C? 0?1' D1' 0<>1' <BB'&-0' & ' 0? 10? <-A' 1L1B?=#-' &=' D1' 0<>1' & D1==1 ? # ' <- ' &? @< + '1'< 1 -A 1' & '&&-+'BB -G #? ' D<' D1' C0&-10' 0&' 0? -.' >< ' >< - 1-' <-A' C? 0?1' D1' 0<>1' <BB'&-0' & ' 0? 1? K' D' @<K= '@@ 1L1B?B I -0' &=' D1' 0<>1' :' <-A' D&0' C0&-10' & KD&01' ?01' <- ' 0?BD' D -.' 0D<@@ #1' 1B&C1A' & ' D<A' 0D<@@ >&K1' D<+1' <-A' 1- & 1' D1' 0<>1? D1' 01'A' -@<8K '10' < <-A1 0' & ' B&-+'B '&-0' D& K'=D0@<-A -.' D'0' = 1' & 1-A? 1' ?- &' D1' -1L ' < @'<>1-

ME' 6 ' '96(

L ' ? !& <0>&BD1' <0' <=& 1' >1' A +1 01' C1 0&-10? =1&==10' &=' ?0 ' <-A' & D1 ? KD'BD' D<+1' 0?1A' mBB'&-0' & ' 0? 10' &' D?01' &=' & D1 ' C1 0&-1' & ' C1 0&-10? <-A' -& ' &' D1' ' ?01' -1' #1D&+1? D<+1' #1' A'0<#@1A' &' 0?1' 0?BD1' <BB'&-' & ' 0? 1? <-A' `B&- - 1#< 1A' '-' D1' 0<>1? # ' D1' 1<0&-' D<' D&' C1 0&-10' 0& ' 0 -.' #1-' &? @<K1A' &=' 1<0&-' =1@&- ' ' & D1 K 01' < 1 - 1A' BC-+ = 1A' & ' & D1 K 01' A'0<#@1A? &' D1' 1' . 1 1' A1@<' <-A' D? 1' &=' D&0' C1 0&-10' &' KD&0' ?01' #1D&+1' <-A' C &=' ' D1' 0<>1' <BB'&-' & ' <BB'&-00&&' K1 1' 0?1A' & ' D<A' G ' '0' & A1 -1A' 10 <#@'0D1A' <-A' 1-< ;1A' # ' D1' , -.' &? ' &+1 1 -' & A' # ' D<001-' &=' D1' & A 0' C' ' ?1@@ <-A 1>C& 1@@ <-A' D1' &>1-0' '-' D'0' C 101-' < @'<>1-' <001>#@1A' <-A' # ' <?B & ' 1' &=' D1' 0<>1? D<' -&' C1 0&-1' & ' C1 j 0&-10? KD'BD1' -&K'D< D1' & ' D1 1<= 1 ' 0D<@@ D<+ ' &-' <BB'&-' & ' 0? 1' D<-. -.' &' D?01' <-A' #1D&+1' &=' & D1 ' C1 0&-10' D<-' &=' D1 >' 01@=1? #1' -& '= &>' D1-0=& D' A'0j <#@1A' -1' 1LB@?A1A' &' C? 0?1' D1' 0<>1' <BH&-0' & ' 0? 10? <-A' 1L1B?B'&-' &=' D1' 0<>1' & 1==1B 1? # ' &-' &K @<K ' < 1'-A 1' & 'B&-+'B '&-G #? ' D<' D&&' C1 0&-10' 0&' 0?'-.' >< ' >< - 1-1' <-A' C? 0?1' D1' 0<>1' <BB'&C0' & ' 0? 10' K D' @<K=?@@ 1L1B?B'&-0' &=' D1' 0<>1 -A ' D&0' C1 j 0&-10' &' KD&0' ?01' &- ' 0?BD1' D -.1' 0D<@@ #1' 1B&+1 1A' & ' D<A' 0D<@ >&K1' D<+1' <-A' 1- &' D1' 0<>1' D1' 0<'A' &? @<K '10' < 1'-A 10' & 'B&-+ BB &-0' -& K D0 &-A -.' D'0' B 1' &' 1-A? 1' ?- &' D1' -1L 1' < @'<>1-

Q 201 @&-!' N$ '

]' N$ ', +'

a'- '==0' '-' ?' 0' A1C1-A'-.' &' D1' 01' &=' & D1 0? ><' B&- '-?1' &' 0?1' D1' 0<>1? <-A' 0D<@@ D<+1' L1B? '&- ' -& K' D0 <-A0' '-.' D1' ' ? @<K ? <'-A1 ? & ' &-+'A '&-0

)' 2' .' &2' !"<' 2!!' !' # . - / 0 / &"<' 3 "'. ' !' . !' ' !' ; ! *&--&-*' . ' ' &' !-' ' -' M' ' ' !' ! / . ' &_' !" D' 7 "& !-' U %2 &" 0

)) ' /W ! #' 0 ' ' - / . .'<

ME' 6 ' ' ` ! '9&

<-#& &0-' / 0.'<! 1(!0&2 --.' S0 " .'+<!-"&/'<! &1&:

' D1' F & 0D'C' &=' E&A' <-A' &=' <@@ D&@ ' @''=BD1@ <-A' =& ' D1' B&>1-' K1@1' <>X C &=' ' &=' D'0 1<>1' &=' -.=&-A1@ ? ' &+1 1 -' & A' 1- @ # ' D1'E <B1'&='E&A' , -.' &=' -.'C-A1'<-A' &=' ! <?-B1'<-A' & A' &=' @&-A1' D1'+'\ <= 1 ' D1' &-H?10 1@ < ' D'0' < @'<>1-' D&@A1-' < ' F 10 > -0 1 ' D1' '' ' A< ' &=' <-?< 1' '-' D1' =&? D1' 1 1'&=' D'0' 1'.-1@ # ' D<A+ 0' <-A' <001-' ' D1' & A 0' C=' ?1@@ <-A' 1>C& 1@ <-A' D1' &>1-0' '-' D1' 0<'A1'C< @'<>1-' <001>#@1A@ <-A' # ' <? & ' 1' &=' D1' <>1@ D< D' A&&- &' #1' ><A1' & A1 -1A' <-A' 0 <#@'0D1A' A'+1 01' < ? 10' <-A' A1-<?-B10' '-' =&? >1' D<' =&@&K1 D6

ME' = ' +' < '%HH

' =& ' D1' . <&- '-.' =& D' &=' E&> 00'&-0' =& ' 1K1 0

' D1' , -.' &? 1' &,1'.-1' @& A1' 1 1-' D1' &>1-0' '-' D'0' &? 1' C01-' C@'<>1-' <001>#@1A@ D<' KD1=1' '-' D1'C@'<>1-' &=' D1' '.D' -&#@1' '-B1' 1=' ' D1' 'H D' @<@1' , -.' &=' -.@&-A' D&@A1-' < ' F 10 =D' D1' + D' 1 1'&=' D'0' <'.-1@ B&-0'A 1A' D1' . 1< 1' "<>.10' <-A' &0010' KD'BD' D1-' K1 1' # ' D1-B 1001' &=' F < 1 ' '-' A'R0' C< '10' &=' D'0' &? 1' 1<@>1@ <-A' >1- ' . 1 1 ' D? 10' @'a1@ ' 0D?@A' D<+1' B&>1' =' 1>1A ' '-' DH' #1D<@=1' 0D?@A' -& ' D<0 @ ' D<+1' #1' C? +1 1A@ ' K<0' 1-< 1A' &=A1'.-1A' <-A' . <?- 1A' # ' <?E& ' 1' &=' D1' 0<>1' C@'<>1-@ D<' =& ' L ' 1 10' D -' -1L ' =&@&K -.' 01 <@@ &> 0'&-0' &=' 1K1 0' 0D?@A' D1' ><A1' &' A ,0@ C0&-10@ # ' =&1' D<?-B1@@1 ' &=' -.@&-A' =& ' D1' >1' #1 -.' &' #1' -<>1A' '-' A C0' C< '10' &=' D'0' &? ' 1<@>1@ KD1 1' -1A1' K<1@ <= 1 ' D1'=&? >1' <-A' 1-&? ' &=' <' &-' 00'&-' '-' D1' 01'A' B 1' 0C1B'='1A6 -A' <= 1 K< A' '-' =&1' C@@<>1-' &=' =&1' 01'A'@< 1' , -.@ D&@A1-' < ' F 10 ='" D1'+'' 3' 1 1'&=' D'0' <'.-1@ # ' B<?01' D1' &> 00'&-1 0' '-' =&1' 01'A' &> 00'&-0' D<A' -&' C@< -1' C&K1 ' -1' <?B & ' 1' &' A&' C=&? >1' <-A' 1L1B? 1' D -.=' B&>C '10' A

ME' M ' ' ` ! '9H

6 ' &>>'00'&-0' . ' 1K1 0

= ' ' ' K<0' 0D1K1A' # ' =&1' &>1-0' '-' =&1' 0<'A' C< @ <>1-' <001>#@1A@ D<' D1 1' '-' D1' C< @'<>1-' &=' D1' '.D' -&#@1' '-B1' 1- ' D1' + ' @< 1' , -.' &=' -.@&-A@ D&@A1-' < ' F 10& -0 1 ' D1' + ' 1 1' &=' D'0' 1'.-1@ `=&1' B&-0'A1 1A0P . 1 1' D? 10' <-A' @&0B10' KD'BD1' D1-' K1 1' # ' D1 B 1<B1' &=' K< 1 ' '-' A'+1 0' C< '10' &=' D'0' 1<>1@ <-A' ><- ' . 1 1 ' DC 108@'a@ ' 0D&@A' D<+1' B&>1@ =' 1>1A'1' '-' D<' #1D<@=1' 0D&@A' -& ' D<0 @ ' D<+1' #1' C? +1 1A'6 ' K<0' 1-<B 1A' & A1 -1A' <-A' 0 <#@'0D1A' # ' <?B & ' 1' &=' =&1' 0<>1' C< @'<>1-@ D<' =& ' L ' 1 10' D<-' -1L ' =&@&K -.' 01+1 <@ &>>'00'&-0' &=' 1F1 0' 0DAF1' #1' ><A1' &' A +1 0' C1 0&-10@ # ' =&1' D<?-B1@@1 ' &=' -.@&-A' =& ' D1' '>1' #1 -.' &' #1' -<>1A' '-' A'+1 01' C< '10' &=' D'0' 1<>1@ KD1 1' -1A1' K1 1@ <= 1 ' =&1' =& >1' <-A' 1-&? ' &=' < &>'00'&-' '-' D1' 0<'A' B 1' 0C1B'='1A6 -A' <= 1 K< A0' '-' D1' C< @'<>1-' &=' D1' 0<'A' @< 1' , -.@ D&@A1-' < / F 10 > -0 1 ' D1' +' ' 1 1' &=' D'0' 1'.-1@ # ' B<?01' D1' &>'00'&-1 0' -<>1A' >' D1' 0<'A' &>'00'&-' D<A' -&' C@< -' C&K1 ' -1' <?B & ' 1' &' A&& C1 =&? >1' <-A' 1L1B? 1' D'-.10' B&>C '01A <J

0 D1' B&-0'A1 '-.' D1' .' #*

A+'-.=? D1 ' &K1 0'

V' D1' < @'<>1-' KD'BD' #1.<-' &-'*4' D' <-?< '% &- @ ' " '6%55 7@ K<0' &-' D1' .A' &='!1# ?< '=&@@&K'-.'C & &.?1A' &' *% D' A &#1' :' 1-' ' " '*%57 6' '-' KD'BD' 100'&-' K1 1' C<001A' D1' & / ' -?>#1 1A' D<C' ' &' ' &=' D1' < ? 1' -' D1' 0<'A' *% D' A@&#1' D1' < @'<>1-' >1' <-A' 0< 1' ?- '@ *% D' " 1B1>#1 ' =&@@&K'-.@ <-A' K<0' D1-' C & &.?1A' &' < D' <-?< ' 1-0?'-.@ :' 1-' ' 0' " '*%5787 '0' '-' KD'BD' 100'&-' K1 1' C<001A' D1' K&' Q 0' -?>#1 1A' D<C' @] ' &=' D1' < ? 1' -A' &-' D1' 0''A' 6: D' <-?< ' D1' < @'<>1-' >1' <-A' 0< 1' ?- '@ 6$ D' !1# ?< ' D1-' =&@@&K'-.@ 4' 1- ' " '*%5787 @ <-A' K<0' D1-' A'00&@+1A' 6 '-' KD'BD' 100'&-' K1 1' C<001A' D1' = 0' -?>#1 1A' D<C'] ' &']] ' &=' D1' < ? 1',' D1' KD&@1' &=' D1' < ? 1' '0' <@K< 0' B' 1A' <0' &=8%' 1-'

D'0' < ? 1' D<0' <@K< 0' #11-' C '-1A' '-' -.@'0D' ' <-A' - '10@ <. 11'-.' K' D' D1' '- 1A' &C'10@ < 1' =&?-A' '-' 6 $ ' ' <-A' >'<- ' & D1 ' ' C< 'B?@< @ ' '-' D1' ' # ' ' * ' '-' D1' &A@1'<-' '# < @ '-' KD'BD' D1' < ? 10' &=' D1' ! ' 0 ' <-A' D' A' 1< 0' &=' D'0' ,'-. 0' 1'.-' <'A' 1- 1 1A' '-' ! 1-BD' ' 11' D1' & 1' &' =&1' < ? 1' '' 1-' ' <- 1' C<'%77 ' D1' ' " ' 1=1 1A' &' '-' D<' & 1' 1-A0' K' D' D1' < ? 1' &=' D1' D' A' 1< ' D'0' !&? D' 1< ' <==& A0' D1' @< 10' -0 <-B1' &=' D1' < ? 1' &@@ #1'-.' ><A1' ?C' '-' D1' <-B'1-' !& > ' D1' 01+1 <@ Q@0' &-' KD'BD' D1' < ? 1' F<0' = <>1A' < 1' -&K' C '-1A ' = &>' ' D1' - & >1-' D1 1&=' &-' =&1' < @'<>1-' &@@ &=' '-0' 1< @ '-' &-=& >' 'K' D' =&1' @<-' <A&C 1A' '-' =&1' < ? 10' &=' =&1' ! ' 0 ' <-A' D' A' 1< 0' &=' D'0' 1'.-'

ME' 6 ' ' ` !

'-' D1' 0<'A' &>'00'&-9 ' K<0 & A<'-1A' <-A' 0 <#@'0D1A' # ' D<? & ' 1' &=' D1' 0<>1' < @'<>1- 9 D<' <@ 0?BD1' &>'00'&-1 0 0D&@A' D<+1' &K1 ' &' ><a1' <-A' 1L1B? 1' < ? 10 <-A' A1-<?- 10 <= 1 ' 1==1= ' <-A' C? C& '&=' D1' 0<'A' #>'00'&-';' -A' <= 1 ' D1' 0<'A' L ' 1 10 C<0 9 '-' D1' < @'<>1- ' &=' D1' 0<'A' @< 1' , -.' D&@A1-' <' F 10 > -0 1 ' D1' L+'' ' 1 1' &=' D'0 1'.-1 ' K<0 <@0& & A1 -1A' 1-<= 1A' <-A' 0 <#@'0D1A' # ' <?=@& ' 1' &=' D1' 0<>1' < @'<j >1- 9 D<' =& ' w ' 1 10 D<-' -1L ' =&@&K -.' 0 +1 <@@ &>'00'&-0 &=' 1K1 0 0D&@A1' #1' ><A1' &' A +1 01' C1 8 &-10 # ' D1' D<?-B1@@1 ' &=' -.@&-A' =& ' D1' >1' #1 -.' &' #1' -<'D1A' '-' <@@ C< '10 &=' D'0 1<>1' KD1 1' -1A1' 0D&@A' #1 <= 1 ' D1' 0<'A' =&? >1' <-A' 1==1= ' &=' D1' 0<'A' &>'00'&-' B&- 1 -BA' '-' D1' 0<'A' <= 1' ><A1' D1' 0<'A' + ' 1 1 -A' D<' 0?BD1' &>'00'&-1 0 0D&@A' D<+1' &K1 ' &' & A1 -1' <-A' 1L1B? 1' < ? 10 <-A' A1-<?-B10 <-A' & D1 ' D -.1 ' A&&9 <= 1 ' D1==1B ' <-A' C? C& ' &=' D1' 0<'A' &>'00'&-0';' -A' <= 1 K< A1' '-' D1' < @'<C'1- ' &=' D1' 0<'A' @< 1' , -.' D&@A1-' <' F 10 > -0 1 ' D1' LL'' ' 1 1' &=' D'0 1'.-1 ' K<0 <@0& & A1 -1A' 1-<B 1A' <-A' 0 <#@'0D1A' # '<?B & ' 1' &=' D1' 0<>1' < @'<>1- 9 D<' =& ' L+ ' 1 10 D<-' -1L ' =&@CK -.9 D1' D<?-B1@@1 ' &=' -.@&-A' =& ' D1' 'C1' #1 -.' 0D&@A' D<+1' &K1 ' &' ><a1' &?' &=' D1' D<? B1 '1' >'00'&-0 &=' 1K1 0 ?-A1 ' D1' . 1 1' 01<@@ '-' 0?BD1' =&? >1' <0 ' ' K<0 . <?- 1A' &' #1' ><A1' # ' D1' 0<'A' <B 1' ><A1' D1' /)' + ' 1 1 <0 '-' D1' 0<'A' <B 1' '0 >& 1' C@< -@ ' B&- 1 -1A;' -A' <= 1 ' D1' 0<'A' L+ ' 1 10 C<001A9 '-' D1' < @'<>1- ' &=' D1' -&##@1' '-B1' AK< A' D1' !&? D' @< 1' , -.' &=' -.@&-A9 D&@A1-' < F 10 > -8 0 1 ' D1' L' ' 1 1' &=' D'0 1'.-1 ' K<0 <@0& & A1 -1A' 1-<B 1A' <-A' 0 <#@'0D '# ' <?B & ' 1' &=' D1' 0<>1' < @'<j >1- 9 D<' =& ' w ' 1 10 D<-' -1L ' =&@ K -.' 01+1 <@@ E&>'00'&-0 &=' 1K1 0 0D&@A1' D1' ><A1' &' A +1 0 C0&-10 # ' D1' D<?-B1@@1 ' &=' -.@&-A' =& ' D1' >1' #1 -.1' &' #1' -<>1A9 '-' <@@ C< '10 &=' D'0 1<>1 <-A' <@0& &=' D1' < BD10 &=' <@1 0 E? -10 <-A' <>>10' KD1 1' -1A1' 0D&@A' #1 <= 1 ' D1' =&? >1' <-A' 1==1B ' &=' D1' 0<'A' &>'00'&-' B&- 1 -1A' '-' D1' 0<'A1' <B 1' ><A1' '-' D1' 0<'A' +' 1 1 -A' D<' <@@ 0?BD1' &>'00'&-1 0 0D&@A' D<+1' = ' C&K1 ' &' ><a1' & A1 -1' <-A' 1L1B? 1' < ? 10 <-A' A1-<?-B10 <-A' & D1 ' 'D'-.10 &' A&&9 <= 1 ' D1==1= ' <-A' C? C& ' &=' D1' 0<>1' #>'00'&-0 <0 '-' D1' 0<>1' <B 1' >& 1' C@1 ''@ ' 'D B&- 1 -1A;' # ' KD'BD' &>'00'&-0 <-A' <?=@& ' 1' 1+1-' &' D1' 0<'A' &>'00'&-1 0 '-' D1' <'A' =&? >1 ><- '. 1 1' D? 1 ' <-A' '-B&-+1-'1-B10 '-' A'+1 01' C< '10 &=' D'0 @1<>1' A&&-' <-A' D<A' # ' 1-B 1B1' &=' F < 1 ' K1 1 =@ B10 < '1@ ' 1A 1001A' 1=&? &1A' 0)G' ' 'D 0&' -&K9 D<' @< 1' <0K1@ '-' D1' &?- '10 &=' E@&?B1 1' <-A' &>1 01 ' <0 1@@10KD1 1' '-' A +1 01' < '10 &=' D 0 1<>1 9 -A' <@0&' K D'-' D1' #&?-A10' &=' D1' 0<'A1' < BD10 &=' <@1 0 E? 0-10 <-A' <' >10 # ' D1-B 1<01' &=' F < 1 0 A +1 0 @&-A10 <-A' 1-1>1- 10 '-' . 1 1' H?<-8 ' 1' #1-' 0? &?-A1A' <-A' A10 '1A9 <-A' >< - ' D&&' . 1 1' @'a1' D 1 ' <DA' A<><.10 #1' @'a1' K' D'-' 0D& ' >1' &' ='@@9 <0'' 1@@ &' D1' A1B 1<B1' <-A' A10 ?BB'&-' &=' D1' @'+18 @&&A' &=' D1' , -.' &? ' &+1 1 -' & A9 <0 &=' D1' @'+1@&&A' &=' D1' D' BD1' <-A' &=' & D1 ' ?1' @'1.1' C&1C@1' &=' D 0 1<>1' <-A' &=' D1' 0<'A' < BD10 <-A' >''1- '0>1- ' &=' D1' 0<>19 K D&?@ D<' 1>1A@1' '-' D<' #1D<@=' #1' C? j +1 1A'<-A' D<A;' D1' , -.' &? ' 0<'A' #+1 1 -' & A' D1 8 =& 1' &=' D'0 >&&0 ' D<#?-A<?-' . <B1 9 D1' C 1>'0010 1-j A1 @ ' B&-0'A1 1A9 # ' D<A+ 01' <-A' <001- ' &=' D1' & A10 C' ' ?1@@ <-A' 1>C& 1@@ <-A' <' D1' 1H?10 ' &=' D1' &>1-0 '-' D1' 0<'A' < @'<>1- ' <001>#@1A' <-A' # ' <?B8 & ' 1' &=' D1' 0<>1' < @'<>1- 9 D< D' & A1 -1A' 1-<B 1A

V<-A'<>1-A1A' / P# j ? ⁞⁞

ME' = '

'-' D1' 01'A' & ' 00'&-0 ' K<0 & A1'.-1A' <-A' 10 <8 #@'00D1A' # ' D1' <?I & ' 1' &=' D1' 0<>1' C@'<>1- 9 D<' <@@ ' 0?BD' &>00'&-1 0 0D?@A' D<+1' =?@@ C&K1 ' &' ><a1' & A1'.-1' <-A' 1L1B? 1' < ? 10 <-A' 'A <?-B1 9 <-A' & D1 ' D -.'0 A&&9 <= 1 ' D1' 1==1 1' <-A' C C& 1' &=' D1' 01'A8 & - 00'&-0';' -A' <= 1 ' D1' 01'A' L ' 1 10 C<001A9 '-' D1' C@'<>1- ' &=' D1' 01'A' , -.' D&@A1-' <' F 10 >' D1' L+'' 30 1 1' &=' D'0 1'.D1 'K<0 <@0& & A1'.-1A' 1-<E1A' <-A' 0 <#@'00D1A' # ' <?E& ' 1' &=' D1' 0<>1' C@'<>1- 9 D<' =& 'w ' 1 10 D1-' -1L ' =&@&K -.' 01, <@@ #> 00'&-0 &=' 1F1 0 0D?@A'#1' ><A1' &' A 0' C0&-10 # ' D1' D<?-j B1@@1 ' &=' -.@&-A' =& ' >1' #1 -.' &' #1' -<>1A' '-' <@@ C '10 &=' D'0 &? 1' 1<@>1' KD1 1' -1A1' 0D?@A' #11 <= 1 ' D1' 01'A' =&? >1' <-A' 1==1E1' &=' D1' 01'A' &> 00 &-' B&- 1 -1A' '-' D1' 01'A' <E1' ><A1' D1' 01'A' +30 1 1'G <-A' D<' 0?BD1' &> 00'&-1 0 0D?@A' D<+1' C&K1 ' &' & A1'.-1' <-A' 1L1B? 1' < ? 10 <-A' A -<?-B10 <-A' & D1 ' D -.0 A&&9 <= 1 ' D1' 1==1E1' <-A' C C& 1' &=' D1' 01'A' &> 0'&-0;' -A' <= 1 K< A' '-' D1' C@'<>1- ' &=' D1' 01'A' @< 18, -.' D&@A1-' <' F 10 >' D1' LL'' 3' 1 1' &=' D'0 <'.-19 ' K<0 <@0& & A1 -1A' 1-<E1A' <-A' 0 <#@'00D1A' # ' <?E& ' 1' &=' D1' 0<>1' C@'<>1- 9 D<' =& ' L+' 1 10 D1-' -1L '=&@&K -.9 D1' D<?-B1@@1 '&=' -.@&-A'=& ' D1' >1' #1 -.' 0D?@A' D<+1' C&K1 ' &' ><a1' &?' &=' D1' D<?-R ' &> 00'&-0 &=' 1K1 0 ?-A 1' D1'. 1< 1' 1<@1 9 >' 0?BD' =&? >1' <0 ' K<0 . <?- 1A' &' #1' ><A1' # ' D1' 01'A' E1' ><A1' D1' 01'A' +0 1 1G <0 '-' D1' 01'A' E1' 0 >& 1' C@< -@ ' B&- 1 -1A;' -A' <= 1 ' D1' 01'A' L+' 1 10 C<001A9 '-' D1' C@'<>1- ' &=' D1' -&#@1' -B1' AK< A' D1' '''30 @< 1' , -.' &=' -.@&-A9 D&@A1-' < F 10 >' D1' L' W 1 1' &=' D'0 <'.-19 ' K<0 <@0& & 8 A1 .-1A' 1-<E1A' <-A' 10 <#@'00D1A' # ' <?E& ' 1' &=' D1' 0<>1' C@'<>1- 9 D<' =& ' L+' 1 10 D1-' -1L ' =&@&K -.' 01, <@@ &> 00'&-0 &=' 1K1 0 0D?@A' #1' ><A1' &' A C0 C0&-10 # ' D1' D<?-B1@@1 ' &=' -.@&-A' =& ' D1' >1' #1 -.' &&' #1' -<> A9 '-' <@@ C '10 &=' D'0 &?' 1<@>1 -A' <@0& &=' &? 1' < BD10 &=' <@1'0 E? 0-10 <-A' <>>10 FD1 1'-11A' 0D?@A' #11 <= 1 ' D1' =&? -'1' <-A' 1==1E1' &=' D1' 01'A' &> 00'&-' B&- 1 -1A' '-' D1' 01'A' E1' ><A1' '-' D1' 01'A' +30 1 1G -A' D<' <@@ 0?BD' &> 00'&-1 0 0D?@A' D<+1' =?@@ C&K1 ' &' ><a1' & A1'.-1' <-A' 1L1B? 1' < ? 10 <-A' & A -<?-B10 <-A' & D1 ' D -.=' &' A&&9 <= 1 ' D1==1E1' <-A' C/C& 1' &=' D1' 0<'-1' &> 00'&-0 <0 '-' D1' 0<>1' E1' >& 1' C@< -@ ' 'D B&-j 1 -1A' G ' KD'BD' &> 00'&-0 9 <-A' <?E& ' '1' 1+1-' & D1' 01'A' &> 00'&-1 0 '-' D1' 01'A' =&? >1 9 >1- ' . 1< 1' D? 10 <-A' '-B&-+1- 1-B10 '-' A +0 C '10 &=' D'0 &' 1<@>1' A&&-' <-A' D<A' # ' 1-B 1001' &=' F < 1 ' K1 1' -1B10j 0< '@ ' 1A 1001A' 1=&? >1A' <-A' <>1-A1AG ' '0 0&' -HK1 9 & 1'.-B' & A1 9 D<' @< 1' <0K1@@ '-' &? 1' &?- 110 &=' E@&?#' <-A' &=@0' <0 1@0KD1 1' '-' A C0' C '10 &=' D'0 &? 1' 1<@>1 9 <-A' <@0&' K' D'-' D1' #&?-A10 &=' &? 1' 01'A' < BD'10 &=' <@1'0' E? 0-10 <-A' <>>10 # ' 1-j B 1001' &=' F < 1 0 A ,0 @&-A10 <-A' 1- =' '-' . 1< 1' H?<-' 1' #11-' 0? &?-A1A' <-A' A10 &'1A9 <-A' >1- ' >&& . 1< 1' @'a1' D? 10 <-A' A<><.10 #11-' @'a1' K' D'-' 0D& ' >1' &' =<@@ <0K1@@ &' A1B 1001' <-A' A10 ?BB'&-' &=' & ' @ +1@&A19 &C1'.-1' & A1 9 <0 &=' D1' @ +1@&A1' &=' D1' D? BD' <-A' &=' & D1 ' &? ' ?1' @'1.1' C1&C@1' &=' D'0 &? 1' 1<@>1' <-A' &=' D1' 01'A' < BD'10 <-A' <- 1- 10 >1-' &=' D1' 0<>19 K' D&?' D<' 1>1A ' '-' D<' #1D<@=1' #1' C? +1'1A' <-A' #<A G a1' ' D1 =& ' &? 1' '.D-1001' &=' &' >&&0 ' D<#&?-A<-' . B ' D1' CD- 0010 =1-A1 @ ' &' B&D0'A 1 I ' # ' D<A+ 01' <-A' <001-' &=' D1' & A10 C?<@@ <-A' 1=&C<@@ '-' D'0 &? ' 'C01-' C@'<>1-' <001>#@1A' <-A' # ' <?B & ' 1' &=' D1' 0<>1' C@'<>1- 9 &' & A1 -.' 1-<B 1

B&-'-?'-.' &>>'00'&-0 =&' * ' 1< 0

64 5G B&-'-?'-.' &>>'00'&-0 =&' *:' 1< 0G

5 L ' 0" !" #.-&-0&-*' .1 1@22@.-2 .'" J A! "2=

(

;?> 7(. ‘ ‘ ‘ Ø?I

M(‘ " ‘ ‘ ?

<-A‘ 0 <#@‘0D1A@ D< =& ‘ LL+ ‘ 1 10‘ -1L 8B& > -.‘ 01+1 <@@ & > ‘00‘& -Ø &=‘ 1K1 Ø #1‘ > <A1@ &‘ A +1 01‘ C1 0&-10‘ = ‘ D1‘ D<?-B1@@1 8&=‘ -.@&-A‘ =&=‘ D1‘ >1‘ #1 -.‘ &‘ #1‘ -<>1A‘ >‘ <=‘ < ‘10‘ &=‘ D‘0‘ D‘Ø 1<>1‘ <-A‘ &=‘ D1‘ 0<‘A‘ < BD108KD1 1‘ -1A1‘ ‘0‘ & ‘ 0D<@@ #1@ <= 1 ‘ D1‘ =&? > =1‘ <-A‘ 1==1= 1‘ &=‘ D1‘ 0<‘A‘ &> ‘00‘& -‘ B&- 1 -1A‘ ‘-‘ D1‘ 0<A‘ <B 1‘ ><A1‘ ‘-‘ D1‘ 0<‘A‘ `+‘ ‘P‘ 1 1 ‘ -A‘ ‘+1 ‘ D< ‘ D< D‘ & @ A1 -1A‘ <-A‘ 0 <#@‘0D1A‘ # ‘ D1‘ 0<‘A‘ <?B &\l f‘ D< ‘ <@@ 0?BD1‘ & > > ‘00‘& -1 Ø D<+1‘ @?@@ C&K1 ‘ &‘ ><a1‘ & A1 -1‘ 7 ‘ 1L1B? 1‘ < ? 10‘ <-A‘ A1-<?-B10@ <-A‘ & D1 ‘ D -.10‘ A&@ <= 1 ‘ D1 1B ‘<-A‘ C? C& ‘ &=‘ D1‘ 0<>1‘ & > ‘00‘& >

ME‘ = ‘

<-A‘ 10 <#@‘00D@ D< ‘ =& ‘ LL+W‘ 1 10‘ -1L ‘ B& > -.‘ 01, <@@ & > 00‘&-Ø C=‘ 1K1 Ø #11‘ > <A1@ &‘ A R0Ø CO&-10‘ # ‘ D1‘ D<--B1@@1 ‘ &=‘ -.@&-A‘ =& ‘ D1‘ >1‘ #1 -.‘ &‘ #1‘ -<>1A‘ ‘-‘ <@@ C ‘10‘ &=‘ D‘0‘ &‘ 1<@>1‘ <-A‘ &=‘ D1‘ 01‘A‘ < BD‘10‘ KD1 1‘ -1A1‘ 0‘ & ‘ 0D<@@ #11@ <= 1 ‘ D1‘ =&- >1‘ <-A‘ 1==1= 1‘ &=‘ D1‘ 01‘A‘ &> 00‘&-‘ B&- 1 -1A‘ ‘-‘ D1‘ 01‘A‘ B 1‘ ><A1‘ D1‘ 01‘A‘ ‘ 1 1 ‘ -A‘ &, ‘ D< ‘ &‘ & A1 <1‘ <-A‘ 0 <#@‘00D‘ # ‘ D1‘ 0<>1‘ <?B & ‘ 1@ D< ‘ <@@ 0?BD‘ & > 00 &-1 Ø D<+1‘ = ‘@@ C&K1 ‘ &‘ ><a1‘& A1 . -1‘ <-A‘ 1L1B? 1‘ < ? 10‘ <-A‘ A -J-B10@ <-A‘& D1 ‘ D -.10‘ A&@ <= 1 ‘ D1==1B 1‘ <-A‘ C C& 1‘ &=‘ D1‘ 0<>1‘ & > 00‘&-

&^ ‘&?00‘&-Ø &=‘ 1K1 Ø 0D<@@ #1‘ -‘ A1‘ =& ‘ ‘ : ‘ 1< 0@ <BB& A‘ - .‘ &‘ D1‘ ! & > ‘ (=‘ D1‘ < ? 1‘ (‘ :

C&K1 Ø &=‘ & > > ‘02

‘ =& ‘ = -1 Ø &=‘ E&@A1‘ %4‘ @+1

‘ *6 ! ‘ -1= ‘ <-Á < 1 Ø &=‘ E&@A‘ <-A‘ ‘@+1 @ D1 1 &=& 1‘ K1 1‘ 0?# 1B ‘ &‘ =D1‘ ‘A10‘ &=‘B1 <‘-‘ ‘- 0@

$ = ‘ @K<0‘ ‘=‘ B‘A‘ > 1‘ <-A‘B&- ‘- ‘1A‘ @@ -&K‘ &=‘ @< 1‘ 1 10@ D< ‘ D1 ‘ K<0‘ =& ‘ D1‘ K1<@1‘ &=‘ D1‘ , -.‘ <-A‘ D1‘ 1<#-1‘ -& 0‘ <-A‘ C< 1 0‘ &=‘ E&@A‘ <-A‘ ‘@+1 @ # ‘ = 1‘ <-A‘ K< 1 @ ?-A 1‘ <‘ 1?@1‘ <-A‘& A 1‘ #1@&-. -.‘ & D1‘ - 10‘ &=‘ &-A&-‘ A‘B1‘ <?- ? @ #? ‘ & a‘ <-A‘ "& 1DDD@ <-A‘ >‘ & D1 ‘ C@<B10‘ KD1 1‘ - 10‘ K1 1‘ D&@A1-@ <-A‘ < ‘ D1‘ &@A0> D0‘ <@@ ‘-‘ &-A&-@ &‘ = -1‘ <-A‘ C< 1‘ <@@ E&@A1‘ <-A‘ @ 1 ‘ #1@&-.j -.‘ & ‘ -1A1=?@@ =& ‘ D1‘ 01‘A‘ - 10‘ <-A‘ !1@ 0D‘C‘ &=‘ E&@A0> D0@ =& ‘ D<A1> <A>1- ‘ &=‘ &- 10‘ <-A‘ C@< 1‘ ‘-‘ D1‘ 1<@>1@ D< ‘ 1, ‘ D -.‘ > .D ‘ #1‘ 1=&? >1A‘ &‘ D1‘ ‘.D ‘ 0 &-A< A‘ <0K =‘ ‘-‘ &- 10‘ <Ø C@< 1‘ &‘ D1‘ @10 ‘ &0 1@ =& ‘ D1‘ K1@1‘ =‘ D1‘, -.‘ D‘Ø -&#@1‘ >1-‘ &=‘ DC‘ &-A‘ <-A‘ B&> -‘ C1&C@1C ? ‘ 0& ‘ ‘ ‘0‘ -&F1@ D< ‘ <@@ 0?BD‘ = - ? Ø <-A‘ C< @&? Ø &=‘ E&@A‘ <-A‘ @+1 ‘ # ‘ = 1‘ <-A‘ F< 1 ‘ AK1@@1-‘ <# &A1@ ‘-‘ 1, ‘ C@<B1‘ &=‘ D1‘ 1<@>Ø &? ‘ &=‘ D1‘ ?@10‘ <=& 01‘A@ <-A‘ # 1‘ . ‘ ‘@+1 ‘ = &>‘ D1‘ - 10‘ D<?-.10‘ <-A‘ E&@A0> D0‘ <-A‘ C< 1‘ <-A@ = -1‘ ‘ <Ø ‘0‘ <=& 1 1‘A@ <-A‘ =& ‘ D1‘ >&&0 ‘ C<= 1‘ D1‘ ‘@+1 ‘ 0&‘ = -1A‘ D1 ‘ A&&‘ <@<‘1‘ ‘ ‘-‘ A 01‘ ><-& Ø <-A‘ 01@@ ‘ < ‘ D1‘ ‘ C@1<0? 1Ø &‘ 1+0 ‘ ><-‘ D< ‘ K‘@@ # 1‘ ‘ ‘ &=‘ D1 >@ &‘ ><a1‘ ?BD1‘ F 1 a1‘ <Ø C@1<0‘ D‘ D1‘ # 1 Ø G D1 =& ‘ >1-‘ B<-‘ .1 1‘ -&‘ = -1‘ @+1 ‘ KD1-‘ D1 ‘ -&A1‘ ‘ ‘ =& ‘ D1‘ ‘ &-1 @ =& ‘ D<A1>1-A>1- ‘ &=‘ &-1 ‘ ‘ ‘A‘ C@< 1‘ <Ø D< D‘ #11-‘ ‘-‘ = >10‘ C<001A@ F D1 =& ‘ ‘ B<-0‘ D‘ &-1 ‘ <-A‘ @< 1‘ ‘-‘ A +01‘ C@<B10‘ &=‘ D1‘ 1<@>1‘ &‘ #1‘ ><A1‘ K1 0‘ ‘-‘ = -10‘ D1-‘ ‘0D?@A‘ #1@ <Ø <CC1 ‘ D‘ 1+ A1- @ ‘ ‘ -‘ T= ,Ø C@<B10@ &‘ D1‘ . 1< ‘ D? ‘ &=‘ $ ‘ , -.‘ D‘Ø -&##@1‘ >1-‘ C=‘ D1‘ @&-A‘ <-A‘ B&> C-‘ C1&C@1‘G F D1 =& ‘ D1‘ , .‘ B? 1‘ & 1‘. -‘ @& A1‘ # ‘ D<001- ‘ &=‘ D1‘ @&=A10‘ C?<@@ <-A‘ 1>C1@@ <-A‘ D1‘ &>1-Ø ‘-‘ D‘Ø C201- ‘ C< j @‘<>1- ‘<001>#@‘A‘ <-A‘ # ‘ <?B & ‘ 1‘ &=‘ D1‘ 0<>1@ D< D‘ A=A1 -1A‘ 10 <#@‘00D1A‘ <-A‘ 1-<B 1A‘ D< ‘ -&‘ = -1 ‘ &=‘ E&@A1‘ <-A‘ ‘@+1 @ -& ‘ C< 1 ‘ &=‘ D1‘ 0<>1‘ # ‘ = 1‘ & ‘ K< 1 @= &>D1-0=& D‘ <@< ‘ -&‘ = -1‘ ‘@+1 ‘ -& ‘ E&@A1@ -& ‘ -&-1‘ 01@@ ‘-‘ 1- ‘ & D1 ‘ F‘01‘ -1‘ &‘ 1- ‘ & D1 ‘ C< 0&-1‘ & ‘ C< 0&-10‘ #? ‘ &-@ ‘ &‘ D&== 11 Ø &=‘ > -10‘ BD<?-.10‘ <-A‘ E&@A0> D10‘ K‘ D‘-‘ D‘Ø 1<@>1@ =& ‘ <.>1- <B‘&-‘ <-A‘ >1-A -.‘ &=‘ & -‘ <-A‘ C@<B1‘ <Ø ‘0‘ <=& 10 ‘A;‘ -A‘ D< ‘ D1‘ <‘0 1 Ø &=‘ -10‘ D<?-.10‘ <-A‘ E&@A0> D0@ ‘ =&=‘ <@@ 0?BD‘ = -1‘ E&@A‘ & ‘ ‘@+1 ‘ B& > -.‘ &‘ D1 >@ &‘ <-0K1 1‘ D1‘ +<@? 1‘ <Ø ‘ ‘ ‘0‘ K& D@ <BB& A -.‘ <Ø ‘ ‘ ‘0‘ -&K1‘ <-A‘ <D‘ #1>‘‘ &=‘ <?-B‘1<‘ >1‘ <BB?0 ?>1A‘ <= 1 ‘ D1‘ < 1‘ &=‘ = -10G 1‘ D< ‘ -&‘ = -&? ‘ -& ‘ = -&? Ø C< 1 ‘ -& ‘ C<= &? Ø 01@@ &‘ -&‘ C0&-1@ -1‘ D1 ‘ &‘ &-‘ -1‘ & D1 @ 1- ‘ ><5‘ &=‘ @+1 ‘ ‘- &‘ <001‘ >&@ 1-‘ <-A‘ <‘A@ ?C&-‘ C< -1‘ &=‘ =& =1‘ ? 1‘ &=‘ D1‘ 0<>1@ D1‘ , -.‘ D1 &=‘ &‘ D<+1‘ D1‘ &-‘ D<@=1‘ <-A‘ D1‘ = -A1 ‘ D< ‘ B<-‘ C &+1‘ ‘ ‘ <-A‘ K‘@@ 0?1‘ ‘ ‘ ‘-‘ D1‘ , -.‘= 0BD1H?1 ‘ D1‘ & D1 ‘ D<@=1‘G -A‘ ‘=‘ 1- ‘ = -&? ‘ & ‘ = -& Ø C< 1 ‘ & ‘ C1 1 Ø &=

! &?‘

@ F D1 1‘ <Ø ‘ ‘ K ‘Ø &=‘ &@A1‘ >1? 1A‘ <-A‘ B&-@ -?1A‘ @@1‘ -&K‘ &=‘ @< 1‘ 1 10@ D< ‘ KD1 1‘ D1 ‘ 8K<Ø =& ‘ D1‘ <+< @1‘ &=‘ D1‘ , -.‘ 7 #‘ D1‘ 1<>1‘ = -&? Ø <-A‘ C< 1 Ø &=‘ .&@A1‘ <-A‘ 80‘@+1 @ # ‘ =‘ 1‘ <-A‘ K< 1 @ ?-A 1‘ <‘ ?@1‘ <-A‘ & A1 ‘ #1@1<@. -.‘ ?>&‘ D1‘ > -10‘ &=‘ &-A&-‘‘ <@1 Ø <?- 1 D1 ‘ & a1‘ <-A‘ "? D<>@ <-A‘ ‘-‘ & D1 ‘ C@<B10‘ KD1 1‘ > -10‘ K1 1‘ D&@A1-@ <-A‘ < ‘ D1‘ .&@A8@ 0> D‘Ø D<@@ ‘-‘ &-A&-@ &‘ = -1‘ <-A‘ C< ‘ <@@ .&@A1‘ <-A‘ 0‘@+1 ‘ #1@&-. .‘ & ‘ -1A1=?@@ =& ‘ D1‘ 0<‘A‘ > -10‘ <-A‘ =1@‘0D‘C‘ &=‘ .&@A0> D10@ =& ‘ D<A>1 A1>1- ‘ &=‘ >&-1 Ø <-A‘ C@< 1‘ ‘-‘ D1‘ 1<>1@ D< ‘ 1+1 ‘ D -.‘ > .D ‘ #1‘ 1j =&? >1A‘ &‘ D1‘ ‘.D 1‘ <-A< A1‘ <0K1@@ ‘-‘ >&-1 Ø <Ø C@< 1‘ &‘ D1‘@110 ‘B&0 @ =& ‘ D1‘ K1@1‘ &=‘ D1‘ , -.‘Ø &#@1j >1-‘&=‘ D1‘@&-A1‘ <-A‘ B&>1-‘C&1C‘1G ? ‘ &&‘ ‘ ‘‘0‘ -&K@ D< ‘ 0?BD1‘ ! -&? Ø <-A‘ C< 1 ‘&=‘9.&&@A‘ <-A‘ 0‘@+1 ‘ # ‘ = 1‘ <-A‘ 8K< 1 ‘ AK1@@1-‘ <# &A1@ ‘-‘ 1+1 ‘ C@<B1‘ &=‘ D1‘ 1<>1‘ C? 1‘ &=‘ D1‘ ?@10‘ <=& 0< A@ <-A‘ #‘ ‘ .‘@ 1‘ 0 @+1 ‘ = &>‘ D1‘ > -10‘ BD<?-.10‘ <-A‘ .&@A0> D10‘ <-A‘ C< 1‘ <-A‘ = -1‘ ‘ ‘<Ø ‘0‘ <=& 1‘ 0<‘A‘ -A‘ =& ‘ D1‘ >&&0 ‘ C< 1‘ D1‘ ‘@+1 ‘ 0&‘ = -1A‘ D1 ‘ A&‘ <@< ‘ ‘ ‘ ‘-‘ A +1 01‘ ><-1 Ø <-A‘ 01@@1‘ ‘ ‘ < ‘ D1‘ ‘ C@1‘0? @ &‘ 1+1 ‘ ><-‘ D< ‘ K @@1‘# 1‘ ‘ ‘&=‘ D1 >@ &‘ ><a1‘ 0?BD1‘ K1 a10‘ <Ø C@1 01 D‘ D ‘# 1 0G D ‘ =& 1‘ >1-‘ B<- -1‘ .1 1‘ -&&‘ = -1‘ 0 @+1 ‘ KD<-‘ D1 ‘ -1A1‘ ‘ ‘ =& ‘ D1‘ ‘ >&-1 @ =& ‘ D<A>1-A1>1- 1‘ &=‘ >&-1 ‘ <-A‘ C@< 1‘ <Ø =‘< D1‘ #1-‘ ‘-‘ >10‘ C<001A@ F D1 =& 1‘ ‘ B<-01 D‘ >&-1 ‘ <-A‘ C@< 1‘ ‘-‘ A‘+1 01‘C@<B10‘ &=‘ D1‘ 1<>1‘ &‘ #1‘ ><A1‘ K1 01‘ ‘-‘ = -1001‘ D<-‘ ‘ ‘ 0D&@A1‘ #1@ <Ø ‘ ‘ <C8 C1 1 D‘ 1 A1- @ ‘ ‘-‘ A‘+1 0‘ C@<B10@ &‘ D1‘ . 1 1‘ D? ‘ &=‘ D1‘ , -.‘Ø -&##@1‘ >1-‘ &=‘ D1‘@&-A1‘ <-A‘ B&>1-‘ C&1C‘1J F D1 =& 1‘ D1‘ , -.‘ &? ‘ 0< A &+1 < -‘ & A‘ D‘‘ D<001- ‘ &=‘ D1‘ & A Ø C‘ ‘ ?1@@ <-A‘ 1>C& 1@@ <-A‘ &>1-Ø ‘-‘ D‘Ø 0<‘A‘ < @‘<>1- ‘ <001>#@1A‘ <-A‘ # ‘ <?B & ‘ 1‘ &=‘ D1‘ 0<>1@ D< D‘ & A1 -1A‘ 10 <#@‘0D1A‘ <-A‘ 1-<B 1A‘ D< ‘ -&&‘ = -&? ‘ &=‘ .&@A1‘ <-A‘ 0‘@+1 @ -& ‘ C< 1 ‘ &=‘ D1‘ 0<>1‘ # ‘ = 1‘ & ‘ 8K< 1 @= &>‘ D1-0=& D‘ <@< ‘ 1‘ -1‘ = -1‘ 0‘@+1 ‘ -& ‘ .&@A@ -& ‘ -&-1‘01@@‘ -‘ &- ‘ & D1 ‘ 0)‘ -1‘ &‘ &- ‘ C1 0&-1‘ & ‘ C1 0 - Ø#? ‘ &&-@ ‘ &‘ D&=='B1 Ø &=‘ > - 10‘ BD<?-.10‘ <-A‘ .&@A0> D‘Ø K‘ D‘ -‘ D‘Ø 1<>1@ =& ‘ <?. >1- <B‘&-‘ <-A@ <>1-A -.‘ &=‘ B&‘. 1‘ <-A‘ C@< 1‘ <Ø <=& 1‘ 0<‘A1;‘ -A‘ D< ‘ D1‘ <‘0 1 Ø &=‘ > - 10‘ BD<?-.10‘ <-A‘ E&@A8@ D10@ =& ‘ <@@ 0?BD1‘ = -1‘ .&@A1‘ & ‘ 0‘@+1 ‘ B& > -.‘ &‘ D1 >@ &‘ <-0K1 1‘ D1‘ +<@&? ‘ <Ø ‘ ‘ ‘0‘ K& D@ <B& A -.‘ <Ø ‘ ‘ ‘0‘ -&K‘ <-A‘ D< D‘ #1-‘ &=‘ <?-B‘1- ‘ ==@1‘ <BB?0 & >1A‘ <= 1 ‘ D1‘ < 1‘ &=‘ = -10G 1‘ D< ‘ -&‘ = -&? ‘ -& ‘ = -&? Ø C< 1 ‘ -& ‘ C< 1 Ø 01@@1‘ &‘ -&‘ C1 0&-1@ -1 D1 ‘ &‘ &-1‘ -1‘ &‘ & D1 @ &- ‘ ><-1 ‘ &=‘ 0‘@+1 ‘ ‘-‘ ><001‘ >&@ 1-‘ <-A‘ <@< 1A@ ?C&-‘ C1 -1‘ &=‘ =& =1‘ ? 1‘ &=‘ D1‘ 0<>1 ‘ D1‘ , -.‘ D1 &=‘ &‘ D<+1‘ D&-1‘ D<@=1‘ <-A‘ D1‘ = -A1 ‘ D< ‘ B<-‘ C &+1‘ ‘ ‘ <-A‘ K @@ 0?1‘ ‘ ‘ ‘-‘ D1‘ , -.‘Ø 0BD1H?1 ‘ D& D1 ‘ D<@=G -A‘ ‘=‘&- ‘= -&? ‘ & ‘= -&? Ø C< 1 ‘ & ‘ C< 1 Ø &=

?BD‘ ! ‘ -1 0@ I B ‘ 0D<@@ -& ‘ <@@< ‘ E&@A‘ & ‘ ‘@+1 @ & ‘ 01@@ ‘ ‘ #? ‘ &‘ D1‘ ==‘B1 Ø &=‘ ‘- 0@ (

<0 1 Ø &=‘ D=‘- Ø 0D<@@ <-0K1 ‘=&C D1‘ <@?1‘ D1 1&=‘ <BB& A‘ - .‘ &‘ D1‘ ! ‘ -1-100

! C1 Ø <-A‘ < 1 Ø 0D<@@ -& ‘01@@ ‘@+1 ‘ >&@ 1-‘ ‘- &‘ <001@ <-A‘ <@@< 1A

L, M1' ' O ' ' @N' H

QO' 6 ' 'H% !

.&@A18' <-A' 0 @ 1 ' 1 D1 ' # ' = 1' & ' K< 1 ' <@ 1' & ' 1@@1' &- ' = -1' 0'@+1 9' & ' .&@A19' & D1 ' K 01' D<-' ' ' 'Ø & 8' A1 -1A' '-' D'Ø @<0 ' <B 1' D1' & ' D1 ' &' @1<01' D1' +<@&? ' &=' D1' 0<>1' .&@A1' <-A' 0 @ 1 ' 0&&' <@< 1A' & ' 0&@A19' D1' , -.' D1 &=' &' D<+1' D1' &-1' D<@=1' <-A' D1' = -A1 ' D<' B<-' C &+1' ' ' <-A' K'@@1' 0?1' ' ' '-' D1' , -.10' 0BD1H-1 ' D18& D1 ' D<@=1' ' @0&' <@@80?BD1' = -1' 0'@+1 ' <Ø 0D<@@' #1' C< 1A' <-A' = -1A' <Ø 'Ø' <=& 1' 0<'A19' D<' ' ' #1' ><A1' 0&&' = -1' D<' ' ' >< ' D1 1' L' ' C1- ' K1 .D ' &=' <@< 1' '-' <' C&?-A' K'.D 9' -A' 1' ' ' #1' <Ø' .&&A' <Ø' 0 1 @ -.1' <-A' < D1 ' #1 1 ' D<-' K& 01G -A' D< ' 1+1 8= -&? ' C? ' D'Ø' 01+1 <@@' >< a1 ?CC&-' 0?BD1' = -1' 0 @+1 9' &' D1 1' K -1001' &' D1' 0<>1' &' #1' ?1' <Ø' 'Ø' <=& 10< A9' ?C&-' D1' C< '1' &=9' D1 +<'? 1' =&?-A1' B&- < 1' &' #1' =& =1' 19 D1' D.' D1 &=' &' D<+1' D&-1' D<@=' <-A' D1' = -A1 ' D<' B<-' C &+1' ' ' <-A' K'@@' 0?1' ' ' '-' D1' 0BD1H?1 ' D& D1 ' D<@=1 ' @0&' D< -&&' E&@A0> D' -& ' E&@A0> D'Ø' K' D'-' D'Ø' 1<>1' >1@ ' & ' <@@< 1' &- ' = -1' 0'@+1 9' &' -1' =& ' &- ' K1 a1 0' & ' & D1 ' 1- 1- ' #? ' &-1@ ' =& ' ><a -.' &=' <==@1@@10' =& ' A'+1 01' K& a10' &=' .&@A0>' D '19<-A' =& ' <>1-A -.' &=' C@< 1' &' ><a1' ' <Ø . &A' <Ø' 0 1 @' -.1& ' #1 1 ' =& ' D1' B&>1-' K1<@1' &=' D'Ø' 1<>1G & ' D< ' D1 ' 01@@' -&' = 1' A'+1 ' -& ' & D1 ' 0'@+1 ' <@< 1A' >&@ 1-' '-' &' ><001' &' &- ' C1 0&-1' & ' C1 0&-10' KD< 0&1+1 ' D1 ' #19' -& ' &-1' .&@Aj 0> D'8 & <-& D1 'E D'0' & A1-<?-B1' &' #1' a1C ' # ' D1' .&@A0> D'Ø' '-' 1+1 ' C& - 9' ?C&-' C< -' &=' =& =1' ? ' &=' D1' 0<>1' 0'@+1 ' & ' +<@? 1' D1 &=' D1' , -.' D1 &=' &' D<+1' D1' &-1' D<@=' <-A' D1' = -A1 ' D<' B<-' C &+1' ' ' <-A' K @@' ?1' ' ' '-' D1' , -.' ' 01D1H?1 ' D& D1 ' D<@=' @0&' ' ' 'Ø & A1 -1A' # ' D1' 0<>1' <?B & ' 1' D< <@@' @1 10' C< 1- 11' <-A' . <?- 10' &=' ='B10' #1@&- . -.' & ' C1 1 -8' -.1' &' D1' > - 1' &=' &? ' &+1 1 -' & A' D1' , -.' 1L11 B'01A' '-' D1' <>1' K D' =110' <-A' +<.10' D1 &' #18' @&- . -.' #1' = &>D1-0=& #' +B<A1' <-A' &=' -&-1' 1==1B

ME' = '

E&@A' <-A' '@+1 ' A D1 ' # ' @ 1'9& ' K< 1 ' <@< ' & ' 01@@' 1- ' = -1' @+1 ' & ' E&@A9' & D1 K'01' D<-' ' 'Ø & A1 -1A' '-' D'Ø Q@19' D1' & ' D1 ' &' @101' D1' +<@? 1' &=' D1' 0<>1' E&@A' & ' '@+1 ' 0&' <@<'1A' & ' 0&@A9' D1' , -.' D1 &=' &' D<+1' D ' &-' D<@=1' <AA' D1' = -A1 ' D<' B<-8' C+1' ' <-A ' K'@@' 0?1' ' '-' D1' , -.= LBD1H?1 ' D1' & D1 ' D<@=G ' @0&' <@@' 0?BD' = -1' '@+1 ' <Ø' 0D @' #1' C< 1A' <-A' = -1A' <Ø' 'Ø' <=& 101'A9' D<' ' ' #1' ><A1' ! ' = 1' D<' ' >< ' D1 1' L' ' C1- ' F 1.D ' &=' <@< ' '-' <' C&K-A' F 1.D 9' <-A' 1 ' #1' <Ø' .&&A1' <Ø' 1 @ .' <-A' < D1 ' #1 1 ' D1-' K& 01G -A' D<@@1, ' = -1 ' C? ' D'Ø' 01 <@@' >1 a1' ?C&-' 0?BD' = -1' '@+ Ø' &' D1 1' K' 10' D1' 0<' 1' &' #1' ?1' <Ø' 'Ø' <=& 01'A9' ?C&-' D1' C< -1' &=' D1' <@? 1' =&?-A' B&- = ' 1' &' #1' =& =1 9' DH' , -.' D1 &=' &' D<+1' D1' &-' D<@=' <-A' D1' = -A1 ' D<' B<-' C+1' ' ' <-A' K'@@' 0?1' ' ' '-' D1' , -.= LBD1H?1 ' D1' & D1 ' D<@=1 ' @0&' D<' ' &' E&@A0> D' -& ' E&@A0> D0' K' D'-' D'Ø' 1<@>1' >1@ ' <-A' <@<'1' 1- ' = -1' '@+1 9' &' -1' =& ' 1- ' F 1 a10' & ' & D1 ' 1- 1- ' #? ' &-@ ' =& ' ><a -.' &=' >1@@=' =& ' A C01' F 1 a=' &=' E&@A8' > D 9' <-A' =& ' D1' <A>1-A -.' &=' C@< 1' &' ><a1' ' <Ø' .&&A' <Ø' 1 @ -.' & ' #1 1 9' =& ' D1' B&-' -' F 1@1' &=' D'Ø' 1<@>1G -& ' D< ' D1 ' 01@@' -&' = -1' '@+1 ' -& ' & D1 ' @+1 ' <@<'A' >&@ 1-' '- &' <001' &' 1- ' C0&-1' & ' C< ' 0&-10' KD< ' 0&' 1+Ø D1 ' #19' -& ' &-1' E&@A0> D' &' <-&A1 ;' D'0' A -<?-B1' '#1' a1C ' # ' D1' E&@A0> D0' '-' 1C ' C& - 9' ?C&-' C< -1' &=' =& =<' ? 1' &=' D1' 0<>1' '@+1 ' & ' D1' <@&? ' D1 &=9' D1' , -.' D1 &=' &' D<+1' D1' &-' D<@=' <-A' D1' = -A1 ' D<' B<-' C &+1' ' ' <-A' F'@@' 0?1' ' '-' D1' , -.=' 01D1H?1 ' D1' & D1 ' D<@=' @0&' #1' ' ' & A1 -1A' # ' D1' 0<>1' <?=@& ' 1' D< ' <@@' 10' C< 1- 10' <-A' .D> 10' &=' ==' B10' #1@&- . -.' & ' C< 1 -8' -.' &' D1' - 1' &=' &? ' &+1'. -' @& A' D1' , -.' & ' 1L1 B'01A' '-' D1' 0<>1' K' D' =110' <-A' K<.'0' D1 &' #1@&- .j -.' #1' = &>' D1-0=& D' +&'A1' <-A' &=' -&-' 1==1= ' X

1-0 ' &BD1 0

' K<'Ø 0D1K1A' # ' <' C1A1'&-' C? ' &' D1' , -.' &? ' 0< A' +1 1 -' & A' '-' D'Ø' 0<'A' < @'<>1-' # ' D 'Ø ?#.1 10' <-A' < 0D1DØ&=' D1' C< 00D1' &=' 1 -@ 1 D10' <-A' < - ' E 1.& '10' '-' &-A&-9' .D' <A & -<?-' ?-' &' D1' < D1A <@@' D' BD1' &=' &K@ 'Ø'G D< ' ' ' K<'Ø 0&&' D< ' . 1 1' B&-B&? 01' &=' C1C@19' <0K1@@' &=' D'Ø' & <@ C1 0&-1' <'Ø &=' & D1 ' . 1 1' & A10' <-A' <0 < 10' K D' & D1 ' D 'Ø' ?1' 0?#.1 109' &= 1-' >10' K<'Ø D<A' ?- &' D1' 0<'A' E< D1A <@@' D' BD19' <-A' =& ' D1' >&&0 ' C< 1' D& ?.D' &? 1' D1' C< '00D1' <=& 10<'A19' D1' KD'BD1' &= 1-' >10' #1-' . 1A ' 1--& 1A' <-A' '-+1-1>1A' # ' B&= ?C ' 1' 109' 1-.1-A 1A' '-' D1' 0<'A' C< '00D10' # ' &BB<0'&-' &=' #@&A1' <-A' & D1 ' =&K@1 ' D -.1 ' # ' &BB<0'&-' &=' D1' 0@<?.D 1 ' &=' #10 10' <-A' 0B<@A -.' &=' 0K -1' D<A' <-A' A&&D' '-' D1' #&BD1 '1' &=' 1 - ' 'BD&@<Ø' !@100D<>109' KD&Ø' B ?CB'&-' # ' +'&@1-B1' &=' ?- '1-1' <-A' C? '='1A' K< 1 0' ' #& -1' A&K-

□ ' □ ' D<' -&1' ? BD1 ' 0@1' <- ' ><--1 ' &=' #1<0 ' K' D'-' D1' F <@@10' &=' &-A&-

' &? ' @'1.1' & A1' D1' , -.' <-A' D'Ø' & A'Ø' C?<@@' <-A' 1>C1@@' <-A' &' D'Ø' &>1-0' '-' D'Ø' k 01-' C@'<>1-' <001>#@1A' G &0 ' D?>#@ ' #101BD' D' 'D<#?-A<-' . B1' & ' C&, 1' ?#.'1 =' <-A' & < &? 0' C< '00D1-0' &=' D1' C<j '00D10' &=' 1 - ' !1 D0' <-A' B'-' E 1.& 0' '-' &-A&-9' D1L' <A & -<?-' ?-' &' D1' < D1A <@@' D? BD' &=' &K@10' G D< ' KD1 1' <0' ' ' 0'0&' D< ' D1' . 1< 1' &CB&? 0' &=' C1&C@1' <0K1@@' &=' & ' >&&0 ' &' <@@' C0&-1' <0' &=' & D1 ' . 1< 1' & A10' <= A' 10 < 'Ø' K' D' & D1 ' &=' & ' ?1' ?#.'1 '0' '0' &= 1-' >10' #<A' '- &' D1' 01'A' < D1A <@@' ' BD' &=' &K@109' <-A' =& ' D1' >&&0 ' C< '' D& &K1' &? ' D1' C< '00D10' <=& 01'A9' D1' KD'BD' &= ' >1' 'Ø' . 1 @ ' <-& A1' <-A' '-+18' -1>A' # ' B& ?C ' 1 09' '-.'1-A 'A' '-' D1' 01'A' C< '00D10' # '&BB<B'&-' &=' #@&A9' <-A' & D1 '=&?@1 ' D -.=' ?-' &' & ' >&0 ' -&#@1' .0B1' -& ' &' #1' -<>1A9' # ' 1<0&-' <-A' &BB<j 0'&-' &=' D1' 0@<?.D 1 ' &=' #10 10' <-A' 0a<@A -.' &=' K -1' D<A' <-A' A&&-' '-' D1' #&BD1 ' &=' 1 - ' BD&@'0' !@108' 0D<>@10' KD&Ø' B& ?C #C' # ' +'&@1-B1' &=' ?-B@1-1' <-A

' D1' =&@&K'-.' &+'0&' '0' 1- 1 1A' 8 -' D1' - &@@=-1-' ' '-' D<-B1 9' <= 1 ' D1' & <@ 001- ;' #? ' '0' -&' ' -01 1A8' '-' <- ' ' & ' '- 1A' &C'10' &=' D1' < ? 10' &=' D'0' 1< ;' $

W' &+'A1A' <@K1 ' D<' D'Ø Q 1' -& ' -& D -.' B&- 1 -1A' D1 1'-' 1L 1-A' -1' #1' -A'B'<@@ ?- &' E @10' " <K#1-1 ' , - .D ' <-A' < 1@>1K1' 1A1' &=' A-AA-'E&@A0> D9' '-' &=' & ' =& ' D&@ B1' &=' <'0 1 ' <-A' F ' D1 ' &=' &? 1' >&-1 0' <BB& A -.' &' &? 1' ' 10' C< 1- 10' &' D1>' D1 &=' ><A19' #? ' D< ' &? 1' 01'A' ' 10' C< 1- 10' <0' &' <-A' =& ' D1' 01'A' &=='B1' &=' <'0 1 ' <-A' F ' a1 ' &=' &? ' &-1'09' #1' <-A' 0 <-A' .&&A1' <-A' 1='1 ?1@@ ? &' 01'A' E'@10' <-A' < 1@>1K19' D1' 01'A' 1' & ' 1- ' & D1 ' ><A1' &' D1' B&- / 1' -& K' D &-A -. 3

=' KD< ' ! '-1-100' '@+1 '&?.D ' &' #1

B&-!"2' 2 +' 0' !&'' "E' 0 .-' &+'!"

&,' / 0#' ;1,:& ! ' +.2!,' ' #7' E!' ' !.'!6

+.2!,'#..#7!6' ' &.'!$'+$'&' 8# ' 0#.'$&' E!' &.6' E7' P&.6 ' +'0

;#'!$' ' &3' 33+(! ' E!.&$-+$-' '&' '0!' 8 +$'C' ,!:!#.!6

' *(

8+ (0+!3 ' &=' K' D'-' 1 0' %+'7' &3' &$6&$'!0

ME' = '

C? '='1A' F < 1 0' '0' #& > ' A&K-' D& &K1' D1' 01'A' C<8' '00D10ª <-A' B& > C<00' D' ' ' C< '10' &=' F' C<@<B1' KD1 1' &? 1' >&&0 ' &'<@@ 0 < 1' '0' K&?- ' &' <#'A1' KD1-' 1' B& >1' &' D1' 01'A' < D1A <@@ D? BD1' =& ' 1 - ' <=@1' &' #1' A&-ª &' D1' ?C< A&?0' <# A -.' &=' &' >&&0 ' -&#@1' C0&-1ª <-A' &' D1' &, . 1< 1' <-& <-0' &=' D1' 01'A' C< ' I OD&-0' D1 ª <-A' &=' & D1 ' &=' &? ' ?#. '1 =' <-A' <?-.1 0' D< ' C<00' D' # ' D1' 0< > 1' G B& > C@< - ' KD1 &=' < ' A ,0' <-A' >1- ' 1<0&-0' <@>&0 ' # ' D1' 0C<B1' &=' L+ ' 1 10' B&- -?<@@ ª <0K1@@ # ' D1' D<-&-0' <-A' 1 8' BD<-&-0' &=' D1' 01'A' < D1A <@@ D' BDª@<-A@& A'0' D1 1ª <0' <@0&' # ' >1- ' & D1 ' A', 0' &=' & ' ?#. '1 =' &=' '. D' D&-10 ' #1D<+&ª ?- &' A ,0' 1' 10' <-A' @A1 >1-' &=' & ' 1' &=' &-A&-' D< D' #1' >< A1ª <-A' -&' 1 >1A ' D<A' -1' =&?-A G ' > .D ' C@1<01' &? ' 01'A' >&&0 ' D<#&?-A?- ' . <B1' #& D' &' C &+ A' =& ' D1' B&-01 +<B'&-' &=' & ' 01'A' >&&0 ' & <@@ C0&-1ª <0' <@0&' &' 0?BB&? ' & ' C&, 1 ?#8' .1 =' '-' D'0' #1D<@+1G B&-0'A -.' D< ' '-' =1K1' -&#@1' 10' <-A' &K-10' & ' -&-' K' D'-' , 0 1-A&>1ª KD1 ' <0' <+1@ -.' >1-' D<+1' @<# 1Aª D< ' D1' B&>1-' @<?.D 1 ' D&K01' &=' #110 10' 0D?@A' #1' a1C ' '-' <- ' 0C1B'<@@ C< 1' K' D'-' D1' F <@@10' &=' D1' 0<>1ª @10 ' ' > .D ' '-.1-A 1' 0 a-10' &' D1' A10 ?BB'&-' &=' D1' C1&C@1ª &' & A1 -1' <-A' 10 <#@'00D' # ' D<A+ B1' <-A' <001- ' &=' D1' @& A10' 0C?<@@ <-A' 1>C<@@ <-A' D1' &>1-0' ' D'0' ?! ' C@'<>1- ' <001>#@1A' <-A' # ' <?=@& ' 1' &=' D1' 0<>1ª D< ' -&' #&BD1 ' -& ' D'0' M+<?- ' 0@11' -&' ><, ' #10 ' K' D'-' D1' 01'A' D&?01' B<@@1A' D1' a<@A -.' D&?01ª & ' K' D'-' D1' K<@@10' &=' &-A&-ª ?C&-' C< -1' &' =& =1' ' =& ' 1, 1' L1' L' ' A ' <-A' =& ' 1, ' &?. D' <-A' 1, ' & D1 ' #10 ' +'' ' A ' D1' &&-' Dd =1' D1 &=' &' &?' &, 1'. -' & Aª <-A' C1' & D1 ' D<@=1' D1 &=' &' Q ' &? 1' @'1. 10' D< ' K'@@ 0?1' =& ' D1' 0<>1' # ' <BB &-' &=' A1 1ª <-A' D< ' -&' C 1BB'&-' & ' 100&-' #1' <@&K1A' &' 1- ' &=' D1' " 1=1-A<?- =' < 1-0 ' KD&>1' 1- ' 0?BD' <BB'&-' 0D<@@ #1' B&-B1 +1A' G <-A' D< ' '-' D1' 0<>1' <BB'&-' &=' " 1 1' 0?BD' CB1001' #1' ><A1' <0' '-' & D1 ' <BB'&-0' &=' A1 1' 0?1A' < ' D1' B& > -' @<K1 ' -A' &+0' D'0' #1' ' ' & ª A1 -1A' <-A' 1-<= 1A' # ' D1' 01'A' <?=@& ' 1ª D< ' D1' 0<>1' & A -<?-B1' <= 1' <-A' @<K1' 1L 1-A' <-A' #1' &#=+1A' <-A' a1C ' '-' 1, ' ' 1' &? .D' <-A' &K-1' K<@@1A' K' D'-' D'0' 1<@>1' &=' -.@&-A ª <-A' '-' D1' &K-1' &=' <>#. '..1ª D1' &K-10' &=' 1 K a' <-A' , < @'@1' &-@ ' 1LB1C ' <-A' =& C '01A' &+'A1A' <@K1 ' D< ' D'0' C01- ' A@1' #1. -' &' <a1' 1=@!1<1' < ' D1' =10 ' &=' - -?-B'<B'&-' &=' &? 1' <A ' -1L ' B& > '-.' <-A' -& ' <=& 1

ME' 6 ' ' ` !

D ?. D' D1' 0<'A' C< '0D10ª <-A' B& > C<001 D' K&' '< 1&=' D1' <@< 0' KD1 1' D1' , -.10' >&&0 ' &'<@@ C1 0&-1' '0' K&- 1' &' <#'A1' KD<-' D1' B& >1 D' &' D1' < D1A <@@ D' BD1' =& ' &- <A@1' D1 1' &' #1' A&&-ª &' D1' ?#< A&?01' <# A -.' &=' D'0' >&&0 ' -&#@1' C1 0&-1' <-A' &' &+1 ' . 1 1' 1--& 0<?-B1' &=' D1' C< '00D1-0' D1 1ª <-A' &=' & D1 ' D1' , -.'0' 0?#.1 '0' <-A' 0 <?-.1 0' D< ' C<001' # ' D1' 0< > 1G &> C@1 - 1' KD1 &=' < ' A +1 01' <-A' >< - ' 1<0&-0' <@>&0 ' # ' D1' 0C<B1' &=' L+ ' 1 10' B&- -?1@@ ª <0K1@@ # ' D1' D<-&-0' <-A' C1 ' BD<-&-0' &=' D1' 0<'A' < D1A <@@ D' BD1ª@&-A@& A10' D1 1ª <0' <@0&' # ' >< - ' & D1 ' A +1 01' &=' D1', -.'0' 0?#.1 10' &=' '.D 1' D&-10 1' D<+&? ª ?- &' A'+1 01' <' 10' <-A' @A1 >1-' &=' D1' ' 11' &=' &-A&-' D< D' #1' >< A1 ' -A' -&&' 1>1A'1' D<A' -1' =&?-A1-;' D< ' ' C@1<01' &? ' 0<'A' &+1 < -' & A' &=' D'0' D<#?-A<?- ' . <B1' &' C &+ A1' =& ' D1' B&-01 +<B'&-' <0K1@@ &=' D'0' >&&0 ' &'<@@ C1 0&-1ª <0' &' 0&B&? ' D'0' C&? ' ?#.1 10' <-A' 0?CC@'<?- 10' '-' D'0' #1D<@=1G & -0'A1 -.' D< ' '-' =1K' -&#@1' 110' <-A' &K-10' & ' -&-1' K' D'-' '0 1-8' A&>1ª KD1 1' <0' <+1@ -.' >1-' D<+1' @<#& 1Aª D< ' D1' B&>1-' 0@<?.D 1 ' D&?0' &=' #10 0' 0D&@A1#1' a1C ' '-' &- ' 0C1B'<@@ C< 1' K' D'-' D1' K<@@10' &=' D1' 0<>1ª @110 ' ' ' > .D ' 1-.1-A1 ' 'a-1001' &' D1' A10 ?BB'&-' &=' D1' C1C@1G D1', -.' &? ' 0 ?A' &+1 1 -1' & A' '-' B&-0'A18' <B'&-' &=' D1' C 1> 0010ª D< D' # ' D<A+ 01' <-A' <001- ' &=' D1' & A 0' C' ' ?1@@ <-A' 1> C& 1@@ <-A' D1' &>1-0' '-' D1' 0<'A1' < @'<>1- ' <001>#@1A' <-A' # ' <?B & ' 1' &=' D1' 0<>1ª & A1 -1A' <-A' 0 <#@'0D1Aª D< ' -&' &BD1 ' -& ' D'0' 01 +<?- ' 0@11' -&&' ><-1 ' #110 ' K D'-' D1' 0<'A' &?01' 0B<@@1A' D1' B<@A -.D&?01ª :' K D'-' D1' K<@@10' &=' &-A&-ª ?C&-' C1 -1' &' =& =1' 1' =& ' 1+1 ' L1' L' ' C1-0ª <-A' 1+1 ' a&K1' <-A' =& ' 1+1 ' & D1 ' #110 ' +''' ' Aª D&-1' D<@=' D1 &=' &' D1', -.' &? ' 0<'A' &+1 < -1' & Aª <-A' D&A1 ' D<@=' &' 1+1 ' &=' D1', -.'0' @'1.10' D< ' K @@1' 0?1' =& ' D1' 0<>1' # ' <BB'&-' &=' A1 1' -A' -&&' C & 1BB'&-' & ' 100&'-' #1' <@&K1A' &' &- ' &=' D1' A1=1-A<?- \' < 1-0 ' KD&>' &- ' 0?BD1' BB'&-' 0D<@@ #1' B&-B1 +1A' G -A' D< ' '-' D1' 0<>1' <BB'&-' &=' A1 1' 0?BD1' C &B1001' #1' ><A1' <0' '-' & D1 ' <BB'&-0' &=' A1 1' 0?1A' < ' D1' &>1-' @<K1 ' -A' &+1 ' D'0' ' ' '0' & A1 -1A' <-A' 1-<B 1A' # ' D1' 0<'A' <?B & ' 1' D< ' D1' 0<>1' & A1-<?-B1' <B 1' <-A' @<K1' 1L 1-A1' <-A' #1' &#01 +1A' <-A' a1C 1' '-' 1+1 ' ' 11' ? .D1' <-A' &K-1' K<@@1A' K D'-' D'0' 1<>1' &=' -.@&-A1ª <-A' '-' D1' &K-1' &=' <># 'A.1ª D1' &K-10' &=' 1 K a' <-A' < @'@1' &&-@ ' 1LB1C ' <-A' =& C '01A' &+ A1A' <@K< ' D< ' D'0' C 101- ' <B 1' #1. -' <-A' <a1' 1==1B ' < ' D1' =10 1' &=' - -?-B'<B'&-' &=' &? ' <A ' -1L 1' B& > -.1' <-A' -& ' <=& 1

1□(0!, ' 0#.' $&□' .#1-0□!,' !# □ ' / +□0÷$' □0!' A #.. ' &3' &$6&$

0÷ ' #' 0#.' !S□!$6' □&' !2!,7'%÷□7□' (' !S(!:□f' !, / ÷(H' #16' %#,÷ .!

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;!, &$ ' !,2÷$-' □0!' J÷$ -' ' ' .,÷□□#$7' 0#.' 0#2!' □0!÷,' ;,&□!#÷&$ □' □&' E!' #..& / !6' ÷$' □0!' J÷$ -÷5 ' %&1,□ □' ÷$' #..' ;.!# ' &3' + !

□ ' □ ' D< ' <@@ 0&-0' 01 +'-.' D1', -.1' #1 &?-A' D1' 1<' '-' < -1' >< ' D<+1' D1' ' C 1BB&-' &=' C=1^?' I ' >& < ?

' , -.' &? 1' &, 1'. -1' & A1ª =& ' A 01' B<?01' <-A' 10&-<#@1' B&-0'A1 <B'&-0' D >' >&+ '' .ª # ' D1' <001-' &=' D1' & A10' 0C?<@@ <-A' 1>C<@@ <-A' D1' &>1-0' '-' D'0' C01-' C< @'<>1-' <001>#@1A' <-A' # ' <?=@& ' 1' &=' D1' 0<>1ª D< D' 1-<=@1A' & A1 -1A' <-A' 0 <#@ 00D1Aª D< ' 1+ ' C0&-1' &=' KD< ' B&-A'B'&-' & ' A1. 11' D1' #1' &=ª #1 -.' & ' D1 <= 1 ' #1' '-' &? 1' 01'A' &, < -' @& A' D1', -.=' K<.'0' #1 &-A1' D1' 11' '-' < -ª < ' D'0' C@10' 1' D<+1' D1' C 1BB'&-' &=' C &=1A ? ' & ' >& < ? ' B?' B@<?0<' +&@?> hG <-A' '-' D1' 1LB1C '&-' &=' D1' 01'A' C 1L'&-' D1 ' #1' ><A1' &> 00'&-' &=' <00'010G <-A' D< ' D1' 01'A' C 1L'&-' #1' <@@&K<#@1' '-' <@@ D1', -.'0' &? 10ª <-A' & D1 ' B&? 10' KD1 1' D1' 01'A' C 1LB'&-0' 0D<@@ #1' C@1A1A' & ' @< A1ª =& '1- ' &=' D1

& 1BB'&-0' =& ' <001 0' '-' &' 1 < ''

ª D1', -.' &? '0<'A' &+1 1 -' & A1ª =& ' A'+1 01' ''' B<?010' <-A' 10&-<#@1' B&-0'A1 <B'&-0' D >' >&+ -.ª # ' D<001-' &=' D1' & A10' C' ' ?1@@ <-A' 1>C& 1@@ <-A' D1' &>1-0' '-' D'0' 0<'A' C 101- ' < @1<>1-' <001>#@1A' <-A' # ' <?B & ' 1' &=' D1' 0<>1ª D< D' 1-<B 1A' & A1 -1A' <-A' 0 <#@'0D1Aª D< ' 1+1 ' C1 0&-1' &=' KD< ' B&-A'B'&-' & ' A1. 11' D1' #1' &=ª #1 -.' & ' D1 1<= 1 ' #1' '-' &? ' 0<'A' &+1 < -' & A1' D1', -.'0' K<.10' #1 &-A1' D1' 11' '-' 1 < -ª < ' D'0' C@1'0? ' D<+1' D1' C & 1BB'&-' &=' C &=1B ? 1' & ' >& < ? ' B? >' B@<?0?@<' +&@? > ?0G -A' '-' D1LB1CB'&-' &=' D1' 0<'A1' C & 1BB'&-' D1 1' #1' ><A1' 1> 00'&-' &=' <00'010' -A' D< ' D1' 0<'A1' C & 1BB'&-' #1' <@&K<#@1' '-' <@@ D1', -.'0' &? 10ª <-A' & D1 ' &? 10' KD1 1' D1' 0<'A' C & 1BB'&-0' 0D<@@ #1' C@1A1A' & ' @< Aª =& ' &- ' &=' D1

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0<'A' C1 0&-10 '-' <@ C@1<0 <-A' <00'\10 <0K1@ &=' &+1@ A'001'0'-' <0 &=' ! 10D' =& B1' K D&?' &- ' A ='B? 1 @0&' ' ' '0 1-<A1A' D<' D1' ?A.1'-1- 0 &' #1' .1+1-' = &-'D1-0=& D' '-' 0?BD1' <00'\1' < <'-1A' & ' &' #1' < 9 < -1A' 0D<@ -&' #1' C H?A'B<9 &' &- ' &=' D1' 0<'A1' C1 0&-10 0&&' #1 -.' '-' D1' 01 + 01' &=' &? ' &+1 1 -' & A' D1' , -.' '-' 1 < -' <0 '0 <=& 10<'A' KD'BD1' D<+1' - ' D -.1' '-8 1+1 0'&-' & ' 1> < -A 1' '-' @&-A10 $<-A' 1-1>1- \' + D1 &=' 0?BD1' <00'\1' #1' < < -1A9 '=' D1' -<>1' &=' D&0 C1 0&-10 KD'BD1' #1-' '-' D1' 1+1 0'&-' ' D1' 1-'< -A1 ' &=' 0?BD' @&-A10 <-A' 1-1>1- 0 #1' -& ' '-' D1' 0<'A' <00'01 ' #? ' D<' D1' 0<'A' ?.1>1- ' #1' < 1- ' <@ D1 >' +&'A1\ D1' 0<'A' & A1-<-B1' &' 1-A? 1' <-A' #1' <+< @<#@1' &' 1+1 ' &=' D1' 0<'A' C0&-10 <0 @&-.' <0 D1' <# A1 D' 0&&' '-' D1' , -.10 K<.10 -A' '=' D'0 A18 -<?-B1' &?BD -.' D1' 0<'A' C1 0&-10 0&' -&K' <#'A -.' & ' D<' <= 1 ' D'0 0D<@ <# A1' '-' D1' 01 +'B1' &=' D1' , -.'0 '.D-108 '-' 1 < -' #1' -& ' 0?==B'1- ' =& ' D1<01' <-A' 0?1 '1' &=' D1 >9 ' '0 <. 11A' <-A' <BB& A1A' # ' D1' 0<>1' <?A'& ' 19 D<' &? ' 0<'A' +1 1 -' & A1' D1' , -.' <-A' <@ D1' & A'0' &=' D'0 &?-0<'=@ =& ' D1' '>1' #1 -.' D<+1' =?@ C&K1 ' '-' <@ ><-& ' &=' <BB'&-0' 0? 10 <-A' C &j B10010' &' . <?- ' &' 1+1 ' &=' 0?BD1' C1 0&-10 C & 1BB'&-' <0 0D<@ #1' '-' D1' ' B<?01' <+<'@<#@1' <= 1 ' D1' ' A'0B 1B'&-' A? -.' D1' >1' D<' D1 ' & ' -' &=' D1 >' B&- -?1' '-' D1' 0<'A< >1' &=' K< 1 &+ A1A' D<' D'0 <=@1' #1' -& ' <+<'@<#@1' &' &- ' C1 0&-1' =& ' &- ' 1- 1' 0' D1-' D1' =& 0 1' A< 1' &=' D'0 C 101- ' < @'<>1- ' @0&' ' ' '0 1-<A@1A' D<' '=' &- ' A'0B1- ' &=' &- ' @&-A10 & ' 1-1>1- 10 & ' &- ' D1 ' .D ' & ' D1 1A' <>1- 10 #1' &' &- ' C1 0&-1' & ' C1 j 0&-10 #1 -.' K @@''-' D'0' <>1' & ' 1@@10 KD1 19 D<' D<' A'0B1 -' #1' &=' -&&' . 1< 1 ' 1==1A9 &' D1' A<><.10 & ' D? ' &=' D1' 0<'A' C1 0&-10 #1 -.' '-' D1' , -.'0' 1 B19 <0 '0 <=& 10<'A9 D1- -1' '=' D1' 0<'A' C 0&-10 '-' D1' , -.'0' 1 + B1' 0&' #1'-.' K1 1' K D'-' D1' <.1' &=' LL ' 1 10

'90&' ' ' '0 & A1 -1A' # ' D1' <'A' <?='& ' 19 D<' <@ 0?BD1' C1 0&-10 <0 0D<@ C<001' &+1 ' D1' 11' '-' D1' 0<'A' +'<.1' <-A' 1+1 ' &=' D1 >9 KD'BD1' D<+1' @&-A10 <-A' 1-1>1- \' D&@A1-' &=' D1' , -.' & ' =' <- ' & D1 9 0D<@ >&K' @<K=?@ ' ><a1' D1 &=' =1&==1- U- 10 <-A' <-0>?8 @<B'&-' &=' C&00100'&-' # ' A1A1' & ' A1A10 @ -1' & ' = -10 1B&+1 1' & ' 1B&+1'10 9 =& ' D1' C1 =&? ><<B1' &=' D1' ' F @'10 K D&?' &- ' = -1' =& ' D1' 0<'A' =1&=' -1- ' & ' <-0>? <B'&-' &=' C&00100'&-' D1 =& 1' &' #1' ><A1' '-' G -A' D<' D1 ' <-A' 1+1 ' &=' D< >9 D1' ' D1' 10 <-A' <00'.-'10 &=' 1+1 ' &=' D1 >' #1' A'0BD< .1A' &=' <@ 0?BD1' -10 # ' D1' 0<'A' <Q@1' F D&? 1' @1 1 0' C< 1- 10 &=' @'j B1-B1' & ' C< A&-' & ' & D1 ' A'0BD< .1' &' #1' D<A' '-' D<' #1D<@+1 ' -A' =1 D1 >& 1' ' ' '0 <@0&' & A1 -1A' <-A' 1-8 <Q@1A' # ' D1' 0<'A' <?=@& ' 1' D<' '=' &- ' &=' D1' 0<'A' 1 0&-10 0&&' C<00 -.1' '-' D1' 0<'A' + <.19 KD'BD1' D&@A1' @&-A10 & ' 1-1>1- 10 &=' D1' , -.' & ' &=' &- ' & D1=' # ' , - .D 10 01 + B1' & ' & D1 ' K 019 F D1 =& 1' D'0 D1 1' &K1 D' &' #1' '-' K< A19 <-A' =& ?-1' '-' D1' 0<'A' +'<.1' &' A1B1<01' #1 &-A1' D1' 119 & ' D<' <- ' =1&==>1- ' &=' D1' 0<>1' @&-A10' <-A' 1-1>1- \' #1' 0?CC&01A' &' #1' ><A1' # ' B&@@?0'&-9 D1' ' &=' D1' &K-1 ' &=' D1' 0<>1' @&-A10' <-A' 1-1>1- 10 #1 -.' K D'-' <.19 D<' D1-' D1' =1&==10 & ' 1L1B? &? 0' &=' 0?BD1' C1 0&-1' 0C' A1B1<01A' D<+1' D1' K< A1' <-A' >< '<.1' &=' D1' D1' 1' 0&' #1 -.' K D'-' <.19 <-A' &=' D1'9@&-A10' <-A' 1-1>1- 10 0&&' D&@A1-9 A? -.' D1- -<.1' &=' 1+1 ' 0?BD1' D1' 19 &' D1' C1 =&? ><- 1' &=' D1' '@@1' &=8 1'0<'A' C1 0&D1' 0&&' A1j B1<01A' K' &? ' &- ' <B1&- ' & ' & 1 ' D = .1' D1 =& 1

ME' = '

01'A' C0&-10 '-' <@ C@110' &=' <00'01' <0K1@ &=' &+1@ A'001<0 -' <0 &=' = 10D' =& B1' K' D&?' 1- ' A'==' B?@= 1; @0&' #1' ' ' 1-<B 1A' D<' D1' ?.1>1-A0' &' #1' 1+1-' = &>' D1-0=&? D' '-' 0?BD1' <00' 1' < <'-1A' & ' &' #1' < <'-1A' 0D<@ -& ' #1' ?A'B'<@ &' 1- ' &=' D1' 01'A' C0&-0' 0&' #1 -.' '-' D1' + B1' &=' &? '0&, 1'.-' @& A' D1' a -.' '-' ' < -' <0 '0 <=& 101'A9 KD'BD' D<+1' 1- ' D -.' '-' 1 B'&-' & ' 1>< -A1 ' '-' @&-A10' & ' 1- 10 KD1 &=' 0?BD' <0<01' #1' < <'-1A9 =' D1' -<>1' &=' D&01' C0&-0' KD'BD' D1' '-' D1' 1 B'& ' & ' D1' 1>< -A1 ' &=' 0?BD' @&-A10' & ' 1- =' #1' -& ' '-' D1' 01'A' <0<019 #?' D<' D1' 0 ''A' @?.1>1- ' #1' < 1-0 ' <'@ D1>' +&'A1 D1'01'A' & A -<?-B1' &' 1-A? 1' <-A' #1' <+<'@<#@1' &' 1+ ' &=' D1 '01'A' C0&-0' <0' @&-.1' <0' D1' <# A D' 0&' '-' D1' a -.=' K<.10 <-A' =' D'0' & A -D'B1' &?BD -.' D1' 01'A' C0&-10' 0&' -&K1' <# A -.' & ' D<' <= 1 ' D'0' 0D<@ <#'A1' '-' D1' +'B1' &=' D1' a -.=' '.D-10' '-' < -' D1' -& ' 0?==B'1- ' =& ' D1' 1<01' <-A' 0?1 '0' &=' D1 >9#1' ' '<.. 11A' <-A' <BB& A1A' # ' D1'0<>1' <? @& ' 19 D<' &? 1' & 1 .D1' & A' 1' a -.' <-A' D1' @& A'0' &=' D'0' &?-01@ =& ' D1' >1' #1 -.9 D<+1' =?@ C&K1 ' '-' <@ ><' &=' <BB'&-0' 0? =' <-A' CB1001' &' . <?-' &' 1, ' &=' 0?BD' C0 '10' C 1BB'&-' <0' <@ #1' >' D1' ' B<?010' <+<'@<#@19 <= 1 9 D1' ' A'0B 100'&-9 A? -.' D1' >1' D<' D1 ' & ' 1- ' &=' D1 >' B&- -?1' '-' D1' 01'A' < >1' & ' K< 1' C &+'A1A' < ' D'0' < @1' #1' -& ' <+<'@<#@1' &' 1- ' C0&-1' =& ' 1- ' 1- 1' 01-' D1' =' 0 ' A< ' &=' D'0' C@01- ' C@'<>1- ' @0&' #1' ' ' 1-< '1A' D<' =' 1- ' A'001-' &=' 1- ' @&-A10' & ' 1- =' & ' 1- ' & D1 ' '.D ' & ' 1-D1 ' <>1- =' #1' &' 1- ' C0&-1' & ' C0&-10' #1 -.' K' D'-' D'0' 1<>1' & ' 1@0' KD1 9 D<' < ' A'001-' #1' &=' -&' . 1 1 ' 1==1 @@ &' D1' A<><.10' & ' D? ' &=' D1' 01'A' C0&-10' #1 -.' '-' D1' a -.0' M+'B1' <0' '0 <=& 01'A9 D1-' =' D1' 01'A' C0&-10' '-' D1' a -.'0' ,+'B1' 0&' #1 -.' K1 1' K' D'-' D1' <.1' &=' LL ' 1 10

-' @1' =& ' D1' C<00'-.' <-A' /-0>? <B&-' &=' @<-A=' K' D&?' ! -1' \')'

' #1' ' ' & A1'.-1A' # ' D1' 01'A' <? @& ' 19 D<' <@ 0?BD' C0&-10' <0' 0D<@ C<001' &+1 ' D1' 11' '-' D1' 01'A' +'<.1' <-A' 1 BD1' =' D1 >9 KD'BD' D<+1' @&-A=' <-A' 1'' =' D&@A1-' &=' D1' a -.' & ' &=' 1- ' & D1 9 0D<@ >&K1' @<K=?@ ' ><a1' D1 &=' ='1&==>1- =' <-A' /-0>? <B&-&=' C&00100'&-' # ' A1A1' & ' A1A'0 = '1' & ' = -10' 1B&+1 ' & ' 1B&+1 0 =& ' D1' C=&? ><?-0' &=' D1' ' F'@ 10 K' D&?' 1- ' = -1' =& ' D1' 01'A' =1&==1>1- ' & ' -0>? <B'&-' &=' C&00100'&-' D1 =& ' &' #1' ><A1' '@@ A' <-A' D<' D1 ' <-A' 1, ' &=' D1>' D1' ' D1' 10' <-A' <00'\10' <-A' D1' D1' 10' <-A' <00'.-10' &=' 1, ' &=' D1 >' #1' A'0BD< .1A' &=' <@ 0?BD' = -10' # ' D1' 0<'A' < @1' K' D&?' 10' C< 1- 10' &=' @'B1-B1' & ' CA&-' & ' & D1 ' A'0BD< .1' &' #1' D<A' '-' D<' #1D<@+1 ' -A' =1 D1>& 1' #1' ' ' <@0&' & A1 -1A' <-A' 1''<= 1A' # ' 1' 01'A'<?B & ' 1' < ' =' 1- ' &=' D1' 01'A' C0&-10' 0&' C<00 -.' '-' D1' 01'A' +'<.19 KD'BD' D&@A' @&-A10' & ' 1- =9&=' D1' a -.' & ' &=' 1- ' & D1 ' # ' a- .D '0' M+'B1' & ' & D1 K'019 KD1 =& ' D'0' D1' 1' &K1 D' &' #1' '-' K< A19 <-A' =& ?-1' '-' D1' 01'A' +'<.1' &' A'0B10 1' # ' &-A1' D1' 11' & ' D<' 1- ' =1&==1>1C ' C=' D1' 0<>1' @&-A=' <-A' 1- =' #1 0?CC&01A' &' #1' >'<A1' # ' B&@@?0'&- 1' D1'1 ' &=' 1' &K-1 ' &=' D1' 0<>1' @&-A10' <-A' 1- =' #1 -.' K' D'-' <.19 D<' D1=' D1' =1&==110 ' 1L1B? 1 0' &=' 0?BD' C0&-1' 0&' A1B1001A' D<+1' 1' K< A1' <-A' >< '<.1' &=' 1' D1'1 ' 0&' #1 -.' K' D'-' <.19 <-A' &=' D1' @&-A10' <-A' 1- =' 0&' D&@A1=9 A? -.' D1' -&-1<.1' &=' 1 ' 0?BD' D1'1 9 &' 1' C=& ><?-B1' ' D1' K'@@ &=' D1' 0<A' C0&-1' 0&' A1B1001A' K' D&?' 1- ' <BB&>C ' & ' & D1 ' D -.' D1 =&

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' !@' /&!' &-' 20# ' !"''&#!' B!. !!2 .'" %!#0 ."2' 2 +' '!' !' V "/' -/' ""'& *!' . ' !&'" !&"2' 7& &-' *!' -/' 02 ./@' . ' !' -/2' .'" 3!" ."1 LL' -#!' . ' !&'" V &+2

W1?6 ` !

" E’ ’ @1 1 0’ C< 1- 11’ &=’ &- ’ ==’B1’
№ ’-’ #1’ !& 10 ’ &=’ -.@1K&A1G

2’ !& <0>&BD1’ <0’ D ?.D’ D1’ -1B@’.1-B1’ &=’ ?<=A10’ !& 10 1 0’ <-A’ & D1 ’ ,1C1 0’ D’-’ D1’ , -.’0’ !& 10 1’ &=’ -.@1K&A1’ ’-’ D1’ D’ 1’ &=’ &>#1 @&-A9’ <-A’ # ’ > ?0 -.’ &=’ D1’ ’ ==’B10@’ D1’ ’’1 1’ <-A’ E<>1’ ’0’ A’0 &’1A’ <A .&&- 8# ’&BB<0’&-’ KD1 1=’ D1’ 0<’A’ ^== B1<’ 1H? 1-’ -&-1’ <I?1@@ 1L1 B’01G ’ ’0’ D1 =& 1’ & A1 -1A’ <-A’ 1-<=@1A’ # ’ <? & ’ 1’ &=’ D’0’ 0<’A’ < @’<>1- 9’ D<’ <@@ @1 1 0’ C< 1- 11’ ><A1’ # ’ D1’ , -.1’ &< ’ 0<’A1’ &+1 1 -1’ & A1’ &=’ &- ’ &==’B1’ K D’-’ +6’ 0<’A1’ !& 10 ’ #1’9 = &>’ D1’ =’ 0 ’A< ’ &=’ D’0’ 0<’A1’ < @’<>1C 9’+&’A1’<= A’&=’-&-1’1==1A

’ ’ D<’ D1’ ==’B1’ &=’ K< A’ !& 10 1 ’ a11C’ &=’ D1’ !& 10 ’ &=’ -.@1K&&A’ 0D<@#1’ +&’A1

’ ’ <0’9 D& &?.D’ D1’ -1.@’.1-B1’ &=’ ’K< A0’ !& 10 1 0’ <-A’ & D1 9’ a1C1 0’ K’ D’-’ D1’ , -.=’ !& 10 ’ &=’ -.’@K&A1’ ’-’ D1’ D’ 1’ &=’ &>8’ #1 @&-A9’ <-A’ # ’ > 0?0 -.’ &=’ D1’ 1’ ==’B10@’ D1’ A1 1’ <-A’ .<>1’ ’-’ D1’ 0<>1’ ’0’ A10 &’1A’ <-A’ .&&-9’ # ’ &BB<0=& ” KD>2=’ D1’ 0<A’ ==’B10’ 1H?’ 1’ -&-’ <A@?1@@ 1LB1 B’001G ’ 1’ ’ ’ D1 =& ’ & A1 -1A’ <-A’ 1-<= 1A’ # ’ <?A& ’ 1’ &=’ D’0’ 01- ’ C@’<>&’ 9’ D<’ <@@ 10’ C< 1- 10’ ><A1’ # ’ D1’ , -.’ &? 1’ & 1’.-1’ & A1’ &=’ 1- ’ &==’B1’ K’ D’-’ D1’ 01’A’ !& 10 ’ #1’9 = &>’ D1’ =’ 0 ’ A< ’ &=’ D’0’ 1 - ’ CD<>1- 9’+&’A1’ <-A’ &=’ -&-1’ =& B1’ -1’1==1A 1

’ ’ # ’ ’ (’ J

+’ ! !”2’ 3 !- 2’ -’ &#!2’7& &-’ !’B.”!2’ . ’ -*+!7 . . /’ / !#+ ”!/’ ’ .&/

8B100& 0’&=’U- ’A’0BDD 1’1L1- B#’0’ 1@10’ 2’&A 1 ’ D -.G’ #? ’ D< ’<@@ . <?- 1\’ &=’ A’0BD< .10’ <-A’ 1@10010’ &=’ C< >1- ’ <-A’ B&@@1A@’&-’&=’ A’0>1)’ & ’ &=’ 1- ’ & D1 ’ D -.’ ><A1’ &’ D1 >’ & ’ &’ 1- ’&=’ D1’ ’ TiB100&?’ ’D1’ <0’ .&1A1’ <-A’ 1==1’ ?1@@ <0’ ’0D?@A’ D<+1’#11-’ =’ D1’ 01’A’ <A1 9’ -1’ 1- ’ & D1 ’ <A1’ ><A1’ 1)’ D1’D? 1’& ’ <A-?@@<B’&-’ D1 &=2’D<A’ -& ’ # -’ ><A1’ -1’D<A

”.’&2.’ .’” 3”%.”Z’ -/’ .-EZ’. ’ !’ ”/!”. ’ !’ D< 1’ .02!’@

&+ A1A’ <@K1 ’ D<’ D’0’ <A1’ &=’ <A-?@@<B’&-’ & ’ +&’A<’ B1’ &=’ 1L1>CB’&-0’ <-A’ &=’ 10’ C< 1- 10’ &=’ 1L1>CB’&-’ &=’ C< >1- ’ & ’ B&@@1BB &-’ &=’ A’0>10’ & ’ 0?#0’A’10 9’ -1’ 1- ’ D -.’ D1 ’-’ &&- 1 -1A’ -U & D1 ’ <A B’ ><A1’ & ’ #’ #1’ ><A1’ ’-’ D’<’ C01- ’ C< @’<>1- 9’ #1’ -& ’ ’-’ 1- ’ K’01’ D? =?@@ -1’ C ?A’B’<@@ &’ D1’ ’& ’&=’ D1’ D< D&?01’ &=’ &? 1’ & A1’ D?’ &=’ 1 D1@1>’ &=’ D1-19’ -1’@&’9 1’ 0<’ 1 ’&L’ <-A’ &-aB0’&=’ D1’ 0<D1’ C@<B1’ -1’ &’ D1’ ’ 0?BB100&? 09%O-1’W &’ 1- ’C ’& ’ &=’ 1- ’ D&?01’ &=’ D1’ D< ’ D&?01’& A’ 9’ -1’ &’ 1- ’ ’& ’<-A’ &-Ba’0’ &=’ D1’ 01’A’ ^’A1’ K’ D’-’ D’0’@&-A’ &=’Q-.a2-A’ -1’ &’ D’ 1’ 0?BB100&? 09’-1’ &’ D1’D? ’ -1’<+&’A<?-B1’&=’ 1- ’’ 10’ C< 1- 10’ ><A1’ &’ D1 >’ ’ &’ 1- ’ &=’ D1’ ’ A1B100&? 09’ &=’ 1- ’ A’0BD< .1’ & ’ 1@1<01’ &=’ C< >1- ’ &=’ A’0>10’ i?D0’A’1i ’ a 1’ & ’ 1 ’&A’1 ’ D -.9’ & ’ &=’ 1- ’& D1 ’ D -.=’ ’#? ’ D< ’<@@ ’ 10’ C< 1- 10’ ><A1’ &’ D1 >’ & ’ &’ 1- ’&=’ D1’ ’ 1B100&? 09’ # ’ ?0’ & ’ # ’1- ’ &=’ &? 1’ C &@ .1- &? 0’ & ’ A1B100&? 0’ , -. ’ &=’ -.a>A9’ #1’ .&A1’ <-A’ 1@!1 @?1 ’ <= 1 ’ D1’ 1-& ’<-A’ C? C& ’ &=’ D1’ 0<>1’ &’ D1’ 01’A’ ’& ’ &=’ D1’ D&?01’ &=’ &? 1’ & A’ D?’ &=’ 1 D1@1>’ &=’ D1-1’ <=& 1’ 0C1B’ 1A9’ <-A’ &’ D1’ >&-Ba R’ &=’ @’1’ 0<>1’ C@<B1’<-A’ #’ @’1’ ’ 0?BB10 &? 09’ -A’<@0&’ &’ 1R ’ ’& ’ <-A’ &-Ba10’&=’ D1’ V0<>1’& A1 ’ &=’ D< 1 D&?01’ <-A’ &’ D1 ’ 0?BB100&? 09’ K’ D’-’ D’0’ 1<@>1’&=’ -.@<-A9’<0’ ’0’ <=& 1 ’ 1D1 01A9’# ’ KD<’ ’-<>1’& ’ -<>10’ D1 ’# -’ B<@@1A’G D1’ 01’A’ <=@1’ -1’ <- ’& D1 ’<B 1’ ><A1’ &’ &’ #1’ ><A19’ ’-’ D’0’ 01- ’ C< @’<>1- ’ -& ’ K’ D0 &?A -.

3%.’&2.’ .’” D1’ ##100’ &=’ &-9’5 B

&+’A1A’ <@K1 ’ D<’ D’0’ B 1’&=’<A-?@@<B’&-’ &’ ’+&’A<?-B&’ &=’ 1L1>CB’&-0’ ’” &=’ ’ 10’ C< 1- 10’&=’ 1L1>CB’&-0’&=’C< >1- ’ & ’B&@@1BB’&-’&=’ ”’0>1 9’-1’<- ’ D’-.’ D1 ’-’B&- 1 -1A9’-1’1- ’ & D1 ’<B 1’ ><A1’& ’ &’ #1’ ><A1’ ’-’ D’0’ 01- ’ C@’<>1- 9’#1’ -& ’ ’-’1- ’K’01’D? =?@@ -1’ ?A’B’<@@ &’ D1’ ##1001’&=’ D1’ &-<0@ B ’1’ &=’ 1 ’@ ’ <+ &? ’ <-A’ &=’ 1 - ’ < ’1’ D1’ ’ .’-1’ <-A’ 1 - ’ ’.’ 1’ C=’ &-9’&=’ D1’ & A1 ’ &=’ 1 - ’ ?0 -’ 1 - ’ <+ &? 0’ B’ 1A9’ -1’ &’ D1 ’ ?BB100100&? 09’ -1’ &’ D1’ 0<>1’ ##1001’ <-A’ &’ D1’ &+1- ’&=’ D1’ 0<>1’ &C<0!’1’ -1’ &’ D1’ ’ BB100^ 09’ -1’ &’ D<##1001’&=’ D1’ &-<0 f 1’&=’ &-’ ’-’ D1’ &?- ’1’ &=’ ’AA1@01L9’ -1’ &’ D1 ’ <-A’ &’ D1’ &+1- ’&=’ D1’ 0<>1’ &-<0 ’1’ -1’ &’ D1’ ’ ?BB100&? 09’ # ’ KD<’ -<>1’& ’ -<>10’ D1 ’#1-’B<@@1A9’ ’’-’ 1- ’K’01’+&’A1’ -1’D? ’1- ’ 10’ C< 1- 10’ ><T ’ &’ D1’ 0<>1’ ##1001’ <-A’ &+1- ’ &=’ A#1’ 01’A’ &-<0 1 ’ &=’ 1 - ’ <+ &? ’ &’ &-<0 ’B’ &=’ &-9’ &’ &’ 1- ’ &=’ D1’ ’ CA1B100&? 09’ -1’1- ’%’0 BD< .1’ 1@1001’ &’ & D1 ’ D -.’ B&@-C ’01A’ -’ 1 ’&=’ 7 ’’0<>1’ ’ 10’ C< 1- 10’ ’ # ’ ’ D< ’ (’ ’ 10’ C< 1- 10’ ><A1’ &’ D1 >’ ’ >’ &’ 1- ’ &=’ D1’ ’ CA1B100&? 0’ #1’ .&&A1’ <-A’ 1==1 ?1@@ &’ D1’ 0<>1’ -&K1’ ##1001’ <-A’ &+1- ’ <-A’ &’ D1’ ’0?BB100&? 0’ <= 1 ’ D1’ 1-&0’ <-A’ C C&-’&=’ D1’0<>1’ ’ D1’ 01’A’ <B 1’ & ’ 1- ’ & D1 ’ <B 1’ ><A1’ & ’ &’ #1’ ><A1’ ’-’ D’0’ C01- ’C@’<>1- ’ -& ’ K’ D0 &-A -.

”.’&2.’ .’” ;-2!”@’. ’ ’ &# .+ Z’ !!/2’ &-’ ”!2 ! ’. ’ ! !”2’ 3 !-’ . ’ /7 ”/’ ’K

&+’A1A’ <@K1 ’ D<’ D’0’ C01- ’ <B 1’ <-A’ & -<?-B1@’ -& ’ -&&-’ & D1 ’ <B 1’0 < ? 1’ & ’ & A -<?-B1’ .1 <@@’ & ’ 0C<@@’ ><A1’ & ’ &’ #1’ ><A1’ ’-’ D’0’ 01- ’ C< @’<>1- 9’1L 1-A’ -& ’ -& ’ #1’ D? =?@@ & ’ ’-’ 1- ’K’01’ C ?A’B’<@@ &’ D1’ ’& ’ <-A’ &+1- ’&=’ D1’ &-<0 1’ &=’ &? 1’ #@1001A’ <A ’ <-A’ 1’>’ ’BD&@<0’ &=’ 1A10’ ’-’ D1’ &?- ’&=’ , 1- 9’ -& ’ &’ D1’ ’ 0?BB100&? 09’ <0’ &=’ &’ & ’ =& ’ D1’ ’ 10’ C< 1- 10’ &=’ , -.’ AK< A’ D1’ > ’ #1 -.’ A< 1’< ’ F 10 -” D1’ LL ’A< ’ &=’ !1# ?< ’1’ ’-’ D1’ LL’ ’ 1 1’ &=’ D’0’ <’. -19’ ><A1’ # ’ D1’ 0<>1’@< 1’ , -.’ AK< A’ &’ D1’ 01’A’ ’& ’ <-A’ &+1- ’ <-A’ D1’ ’ ?BB100& 09’& ’ &’ & ’ =& ’ <- ’. <?- ’ 1@1001’ & A’0BD< .1’ &=’ <@@’ A 0>10’ 0?#0’A’10’ <-A’ & D1 ’ <@@<.’1 ’ B&-B1 - -.’ D1’ C&00100’&-0’ .&&A10’ B< <@@10’ 1>C& <@ ’10’ ’ 0C?<@ ’10’ &=’ D1’ 01’A’ ’& ’ <-A’ &+1- ’ <-A’ D1’ ’ ?BB100&? 0 ’ & ’1- ’ >< 1 ’ 0C1B’=’1A’ & ’ B&>C ’01A’ ’-’ D1’ 01’A’ ’ 10’ C< 1- 10’ ’ #?’ D< ’ D1’ 0<>1’ ’ 10’ C< 1- 10’ <-A’ <@@ D -.=’ D1 ’-’ 0C1B’=’1A’ <-A’ B&>C ’01A’ #1 9’ &’ D1’ 01’A’ ’& ’ <-A’ &+1- ’ <-A’ D1 ’ 0?BB100&? 09’ &=’ <0’ . 1<’=& B1’ <+<?- <.’1’ <-A’ 0 1- . D’ ’-’ 1 ’ D -.’ <0’ D&?.D’ -&&-’ <B 1’ & ’ <B 10’ D<A’ #1’ D<A’ & A1 -1A’ & ’ ><A1’ &’ D1’ <A-?@@<B’&-’ 10?>C0’&-’ & ’ +&’A -.’ &=’ D1’ 0<>1’ ’ 10’ C< 1- 10’ <-A’ . ?- 10’ 0C1B’= 1A’ ’-’ D1’ 0<>1

3”. ’&2.’ .’” ;;.’ -/’ .-2!”@’. ’ !+2 ’&-’ . !”-!2’J

&+ A1A’ <@K1 0’ D<’ D’0’& ’ &=’ 10?>C1’&-9’ -& ’ 1- ’ & D1 ’<’ ’1’& ’<= 10’ ><A1’& ’ &’ #1’ ><A1’ ’-’ D’0’ C01- ’ C< @’<j >1- 9’1L 1-A’ -& ’ -& ’ ’-’ 1- ’ K 01’ #1’ D? =?@@ & ’ C ?A’B’<@@ ?- &’ D #& ’<-A’ &+1- ’&=’ ’’1’ &-<0 1’&=’ 1@0<’ ’-’ & 0’ A1>1001’ ’-’ D1’ &?- ’1’&=’ & a9’ &’& ’=& ’ 1- ’ . <?- 1’ ><A1’ ?- &’ D1 >’ & ’ &’ 1- ’ & =’ D1’ ’ CA1B100&? 09’ # ’ ?0’& ’1- ’ &=’ &? 1’ .1- &? 09’# ’1- ’&=’ &? 1’ & ’ &=’ &? 1’ 01’A’ C.1- &? <’ ’ 10’ C< 1- 109’ =& ’ A 0BD< . -.’ &=’ 0?#0’A’10’ <-A’ A’0>10’ ’ #?’ D< ’ D1’ 01’A’ ’ 10’ C< 1- 10’ <-A’ 1+ ’ &=’ D >’ #1@?- &’ D1’ 01’A’ ##& ’ <-A’ &+1- ’ <-A’ D1’ ’ 0?A1100&? 09’<0’ .&A1’ 1=’1 ?1’@’ <-A’ <+<’@<#1’<0’ ’=’ D1’ 01’A’ <Q’1’ & ’<I 10’ D<A’ -1 ’ #11-’ ><A1

3”. ’&2.’ .’” ! -’ -/’ -.-Z’. ’ !’ .+!*!’. ’ !’ !7 ”E!’ . ’ !&#!2 !”_

&+’A1A’ <@K1 ’ D<’ -1 D’ ’ D’0’ <Q#1’ &=’ <A-?@@<B’&-’ & ’+&’A 9’ <?-B1’ (’1L1- B’^-0’ & ’ &=’ ’ 10’ C< 1- 10’ &=’ 1L1A’CB’&-0’ &=’ B&@@1BB’&-’ & ’ C< >1- ’&=’ A 0>10@’-1’1- ’& D1 ’ <(;1’ ><A1’& ’ &’ #1’ ><A1’ ’-’ D’0’ C01- ’C< @’<>1- 9’#1’ -& ’ D? =?@@’ -1’ ’-’ 1- ’ K’01’ ?A’B’<@@ &’ D1’ ”1<-’ <-A’ D<-&-0’&=’ ’’1’ &@@’1.1’&=’ D1’ 1K< a1’&=’ 1 B10 1’-1’ &’ D1’ ’0?BB100&? 09’ ’-’ =& ’& ’ &’ <- ’ . <?- 1’ & ’ . < - 10’A’0BD< .1’ & ’A’0BD< .10’ B&-=’ >< -’ & ’B&-=’ <<B’&-0’ ’ A1’ &’ A’1’ ”1<-’ <-A’ D<-&-0’1=’ D1’ 01’A’ &@@’<.19’# ’ , -.’ 1- ’ D1’ 0’L 1’# ’?0’& ’# ’1- ’ ? 1’ C.18’ - &? 0’& ’ CA1B100&? 09’ # ’1- ’ D1’ ’’ 10’ C< 1- 11’?-A1 ’1- ’ &D 1’& ’ D1’ ’. 1<’ 1<@L9’# ’ FD<’ -<>1’ ’ -<>10’ D1’ 0<’

%;9?

M = &

J ' 'J M ' $ 'O

<n .=& 'K' LB1C ' <-A' C 'A1A' D< ' ' #1' & A 1A' # ' D1' 01'A' LB1C ' ' C &+ A1A' D< ' ' ⁋#1'& A1 -1A⁋ ⁋ D1' ' <'A'

. / #"!=' ` .' . ' C< 1- 11' @< 1' ><A1' # ' D1 <?=@& ' 1 ' D< ' D1' @1 1 0' C< 1- 10' @< 1' ><A1' # ' D1'

, -.' &' D&><0' & A1/ "<B 1' &=' <'0 1 ' !&0 1 ' &=' , -.' &' D&><0' & A' "<B 1' &=' D&== B1' &=' <'0 1 '

D1' 01'A' =& 10 ' <-A' <-A' #1' .&&A1' <-A' 1=!1B -1@@' & !& 0 1 ' A=' D1' 0<'A' !1K10 ⁋ 0 &-A1' <-A' #1' .&&A1' <-A'

D1' 0<>1' D&><0' <= 1 ' D1' 1-&' <-A' 1==1 I 1' &=' D1' 1==1 ?1@@' & D1' 0<>1' D&><0' <= 1 ' D1' 1-&? ' <-A'

0<>1' = 11' C< 1- 10⁋ D1' 01'A' Q 1' -& ' K' D0 &-A -. 1==1= 1' &=' D1' 0<>1' @1 1 0' C< 1- 10⁋ D1' 0<'A' <= ' -& K' D8

.'' - -2' ;!' # ++0!/' & ' !'2 1!' "!2' !- !2>;0 ' " & ' 20##!22.01 '-!' .' !' 0" ' -!' /-0++ #&.-' . ' !-@' &"!2' !- !2'

<<!'2 1!' "!2' !- !2' -/ !$@' . ' !@1' ;!' 2' * . . /!' ! !/ !++' .' !@1' ;@' O2' 1 /!' . ' /@2# "* i' . '+!' @!-*' . '" * "@-*' . '

-/' ' &+ ;+!' .' !' 2 1!' ! -!' -/' -.-2' -/' .' !&'' /&21!2' %!2' ++ *&!2' .'' !-@' . !'' 20;2&/&!2' .'' !-@' "' . ' !'

0##!22.0"2' .'' !, '&-'+@E!' 0"1!' 2' !@'2 0+/' '!' ;!!-'@ ' 2 1!' .' O2' .0'' !&"!2' .'' 20##!22.0"2' ;@' !' #+!"*&!' . ' O2'

<!'2!&/' /' -!<0 ; !.' /' -!' 1 /! ;0"!' 6 ; 1!' . ' -* .-/' *" 0- !/' .'' .' ;!' *" 0- !/' &-' ! @'

3".'&(.' .'' 3".'@/!/' +7!@' ' &2' ^E!' . ' /V0 #&.-' "!201 !&.-' /&.#&2!' 7& &-' !' 2!&/' "! 1!' -#' . ' !-@' 2O# ' #.++!##&.-' ;!'

!' 3"&.'' -/' 0"# ' "! .# #&.-' .'' '.&/ 0-#!' . ' "!2' !- !2' 1 /!' .'' /&$# "*!' . ' # "*! ;+!' ;0 ' .-+@' &-' !' /&.#&2!' . ' +@') ;0 ' ' !'2!&/'

. 'W<- .-@' #. +! &.-' . ' /@21!2' .'' !-@' . !'' / / !' 1 /!' .'' .' ;!' 1 /!' &-' 3"&.'' -/' . '!-' -/' !&'' 2O##!22.0"2' ;!' SO& !' -/' /&2# "*!/'

;!]&/! &2' 2!-'3 " 1!-'!% !-/'-.'-.'' &-'!-@7&2!';!' H-/&#& ++' ' . * "@-*' +!'@&-*' #!@'@-*' -/' "!#!@'@-*' . ' ++' 1 '

b+.0#!2 !"= 0" 0++' .' !'3"&.'' -' . ' !' .72!' -/' &"# !' . '.0"!';+!22!/' /&21!2' %!2' ++ **!2' -/' . !'' 20;2&/&!2' -/'!'<@ "!'. ' !'

+ /@' . ' - .-';!2@/!' b+.0#!2 '-!' .' &2' 20##!22.0"2' -!' 2 1!' .' O2' .0"!' !&"!2 .'' 20##!22.0"2' ;@' !' #+!"*&!' . ' .0"!'

.' !'3"&.'' -/' .'!-' ' !'2 1!' + #!'-!' .' !&'' 20!L' 2!&/'"! 1!' .'' . !"7&2!'*" 0- !/'!%#! '.-+@' &-' !' 2!&/' /&.#&2!' . ' +@' ##.'/@-*' .' !'! !#' -/' ." !'

#!2 .0"2'-!' .' !-@' . ' !@1' . ' .' .'' .'' -@' &"!2' !- !2' . ' 0"!';+!22!/' "&.'' -/'#.'!-' -/' !'''

1 /!'0-.' !@1' .'' !-@' . ' !@1' ;@' M@-*' /7 "/' !' &&H))' 20##!22.0"2' &-' ';! +'!'1 /!' !' 2!&/' "&.'' -/'#.'!-' -/' !''' /-0++ #&.-' .'' '.&/ 0-#!' .'' !-@' . !'' ^ !' .'' /&&2' &-' &2'

;!'%1&< / !' !' %'0H))' / @' . '"# ' !' %')(@ @!"!' . ' &2' 20##!22.0"2' &-' ';! +'!'1 /!' !' 2!&/' "&.'' -/'#.'!-' -/' !'''

" &*-' .'' !' /&2# "*!' . '#. !# -' . ' /@21!2' 20;2&/&!2' .'' <!'2 1!' .' O2' .0"!' !&"!2 .'' 20##!22.0"2' ;@' !' #+!"*&!' . ' .0"!'

%!' &-'!-@' . !'' /&.#&2!' .'' + #!';0 ' .-+@' &-' !' /&.#&2!' . ' 2 1!' .' O2' .0"!' !&"!2 .'' 20##!22.0"2' ;@' !' #+!"*&!' . ' .0"!'

V .&"#!2 ';@' 7 ' - 1!' .'' - 1!2' !' 2 1!' 3"&.'' -/' .'!-' .'' !-@' . ' !@1' ;!' - 1!' .'' 20##!22.0"2' &-' ';! +'!' 1 /!' !' 2!&/' "&.'' -/'#.'!-' -/' !'''

.'' !-@' . ' !@1' ;!' - 1!' .'' 20##!22.0"2' ;@' !' #+!"*&!' . ' .0"!' 2!H/' &!2' !- !2' ;!' .' !' 2!&/' 3"&.'' -/' .'!-' -/' .' !&'' /-0++ #&.-' .'' '.&/ 0-#!' .'' !-@' . !'' ^ !' .'' /&&2' &-' &2'

L20$#!22.0"2' -/' .' !3@' . ' !@1' *../!' -/' ! !/+0!++' !'' 0" 0++' -!'<H0/&#&"&+' .' ;;. '. ' !' 1.- 2$"&!' . '.0"!'+ /@' 6! /&-*>

!' !-.0'' -/' 0" ." $' #&' !'2 1!>' !'2!&/' ^E!' . '"!201 L' . '6!/@-*' &-' !' ;0-&!' . '4!"E2 &"!' -/' b . '!-' . ' !' <2$-' "+& 1!-' -. 7& 2 .-/@-* 2 1!' + #!';@' 7 ' - 1!2' 2.'!<' !@';!!-'# ++!/' -!' .'!-@' 2!.-' .'' /-0++ #. .-' .'' !-@' . !'' 1 /!' .'' .' ;!' 1 /!' &-' &2' . ' !@1' -!' .'!-@' &"!2' !- !2' 1 /!' .' !@1' .'' .'!-@' . ' !'' /!#!22.2' .'' . '!-@' . ' !&'' #.1.@-j' &-' !' 1 - '' .'' "&.'' . ' !.1@-2!'' &-' !' .0- !' . ' !"! ."/' !-' /7!+&@-*' .'' !'' !'' .'/7!++' . '#. !##.-' ##.1 ' .'' <2!-' !-@7&2!' 0" 0++' -!' H0/+#& ' .' !' V "/!-' -/' #.+!"2' . ' +!'@&-*' . '/&21!2' S0. &2' 20;2&Z<!2' # "*!2' .'' . '@1 .2&#&.&+2' !' .++&!*!' . '.0"!' /@' . 'V@-# !2!'' ;!'1 /!'&-' &2' <2!-' +& 1!-' ';!' -. '&-' 7 2.!3' !@';!'&-' !'/&.#!2!' . ' !"! ."/';@' !'#+!"*&!' . ' !' '@-#!' . ' -!"; 0"@' .'!-@' . ' !' M@-*&2' *!-@ .0"2' !' .++&!*!' . '.0"!' /@' . 'V@-# !2!'' ;!2&/!' V@-# !2!'' -!' .' !&'' 0##!22.0"2'-!' .' !' V "/!-' -/' #.+!"2' . ' !' .+&!**!' *" 0- !/' .'' .';!' *" 0- !/'Q ;0 ' !'2 1!'&"!2' !- !2' ;!' . ' 0"!' /@' . 'V@-# !2!'' ;!2&/!' V@-# !2!'' -!' .' !&'' &-' 20# ' ."#!' -/' !&i^;!' -/' .' !'2 1!' ;;. ' -/' #.'!-' 2' 20##!22.0"2'-!' .' !' 0" '-.'' '.&/ 0-#!' . '!-@' &"!2' !- !2' ' &+ ;+!' 2' !@'2 0+/' '!' ;!@-'@' &2' /&'-!'!-@' . !'' <!' 1 /!' .'' .' ;!' 1 /!' &-' &-2' 2!-' +& 1!-' .' !' 0" '.'' /-0++ #&. L' !". ' /' -. ';!-' 1 /!'-!' /=

20##!22.0"2' &-' ';! +'!' 1 /!' .'' /&2# "*!' .'' .' ;!' S @!' . '*!/"@-*' . ' /&21!2' .'' !-@' . !'' @-*'2 !#&&!/'&-' !' 2 1!'`^';!' -. ' &-'!-@' 7&2!' 3"'&2.' 3"&."!22' -/' 3"@';@' 3" @';@ ' +; &(2

3".'&2.' .'' 3".'@/!/' 2'!@' ' !' !' . ' /-0+ !&.-' .'' '.&/ 0-#!' 3"&."!22' -/' V "/!-' -/' (. '&"!2' ! !2' . '!%!1 2&.-' . ' @1!-' .'' #.++!##&.-' . ' .-'!-' '

.+ "2' . ' /@21!2' .'' 20;2&/&!2' -!' !-@' @-*' !"&-' #.-!@-!/'-!' !-@' ;!' ;++! 2' /@21!2' .'' 20;2&/&!2' -!' !-@' @-*' !"&-' #.-!@-!/'-!' !-@' . V&-# !2 !'' . !'' ^&!'1 /!' .'' .';!' 1 /!'&-' &2' <2!-' +& 1!-' ';!' -. '&-' &-' % ."/' !-@7&2!' 0" 0++' -!' H0/+#& ' .' !' V "/!-' -/' #.+!"2' . ' -/' ;!2&/!' !' .++&!*!' . '.0"!' /@' . 'V@-# !2!'' ;!2&/!' V@-# !2!'' -!' .' !&'' V&-# !2 !'' !' .+&!**!' . '.0"!' /@' . 'V@-# !2!'' ;!2&/!' V@-# !2!'' -!' .' !&'' !&'' 0##!22.0"2'-!' .' !' V "/!-' -/' #.+!"2' . ' !' .+&!**!' . '.&-"!' /@' . 'V&-# !2 !"!';!2&/!' V@-# !2!'' -/' !&'' 20##!22.0"2' 2' .' !'2!&/' V "/!-' -/' #; "2' . ' !' .++!**!' . '.&-"!' /@' . 'V&-# !2 !"!';!2&/!' V@-# !2!'' -/' !&'' 20##!22.0"2' ;@' 7 ' - 1!' .'' - 1!2' $@' .'' !-@' . ' !@1' ;!!-' # ++!/' !' 2!&/' /&!' -!' !-@' . !'' &<&!' 1 /!' .'' .' ;!' 1 /!'&-' &2' H<2!-# "+& 1!-'-.' 7& 2 .-/@-*

3".'&2.' .'' !' "&.'' -/' .-'!-' . ' +@> N8".'@/!/' +7!@' ' &2' ^!' . ''!201 2&.-' /-0++ #&.-' .'' '.&/ -#!' . ' !%!1 !&.-2' -/' . '&"!2' !- !2' . ' !%!1 !&.-' .'' @1!-' .'' # V!/&&.-' . '/@21!2' .'' 20;2&/&!2' .'' !'' @ @-*' &- !@1'#.- !@-!/'-!' !-@' . !'' /+!' &' /+!2' &-' &2' <2!-' "+& 1!-' 1 /!' .'' .' ;!' 1 /!' ;!' -. '&-' !-@' 7&2!' 0" 0++' !' .' !' 3"&.'' < /' . '!-' . ' +@' &!'' .' !'

20##!22.01 '-!' .' !' 0" ' -!' /-0++ #&.-' . ' !-@' &"!2' !- !2' .' !@1';@' O2' 1 /!' . ' /@2# "* i' . '+!' @!-*' . '" * "@-*' . ' /&21!2' %!2' ++ *&!2' .'' !-@' . !'' 20;2&/&!2' .'' !-@' "' . ' !' 2 1!' .' O2' .0'' !&"!2' .'' 20##!22.0"2' ;@' !' #+!"*&!' . ' O2' ;0"!' 6 ; 1!' . ' -* .-/' *" 0- !/' .'' .' ;!' *" 0- !/' &-' ! @' /&.#&2!' 7& &-' !' 2!&/' "! 1!' -#' . ' !-@' 2O# ' #.++!##&.-' ;!' # "*! ;+!' ;0 ' .-+@' &-' !' /&.#&2!' . ' +@') ;0 ' ' !' 2!&/' 3"&.'' -/' .'!-' -/' !&'' 2O##!22.0"2' ;!' SO& !' -/' /&2# "*!/' . ' * "@-*' +!'@&-*' #!@'@-*' -/' "!#!@'@-*' . ' ++' 1 ' /&21!2' %!2' ++ **!2' -/' . !'' 20;2&/&!2' -/'!'<@ "!'. ' !' 2 1!' .' O2' .0"!' !&"!2 .'' 20##!22.0"2' ;@' !' #+!"*&!' . ' .0"!' 2!&/'"! 1!' .'' . !"7&2!'*" 0- !/'!%#! '.-+@' &-' !' 2!&/' /&.#&2!' . ' +@' ##.'/@-*' .' !'! !#' -/' ." !' . ' .0"!' 2!&/' "!2' !- !2' .' !' 2!&/' "&.'' -/'#.'!-' -/' !'''

/-0++ #&.-' .'' '.&/ 0-#!' .'' !-@' . !'' ^ !' .'' /&&2' &-' &2' <2!-' "+& 1!-' .' !' #.-" "&!' 1 /!' .'' .' ;!' 1 /!' .' 7& 2 .-/@-*' Ł)

M ' 6 ' ' ` ! ME' = '

0 &-A - . ' &+ A1A' <@0&' D< ' D'0' <= ' 1L=1-A1' & ' -1' #1' C 1 ?A'B'<@' &' 1- ' '1' &=' & D?-A =@' &=' '=& ' & ' ' . <?-=' @1 1 0' C< 1- 10' & ' B&-='--<B'#-' ><A1' # ' D1' , - .' &? ' &+1 < -' & A' &' D1' 0<'A' '1

&+'A1A' <@0&' D< ' D'0' <= 1' 1L 1-A' -& @' D1' #1' ?A'B'<@' !& ' D1' < @' &' 1- ' '1' &=' U#-U#1 @ A9T '& ' =& ' 1 - ' . <?- ' #1QA' 10' C< 1- 10' & ' B&@'=' ><1'&-' ><A1' # ' D1' , - .' &? 1' - 1' ' & A1' &' D1' 01'A' '10

4 ' <@@' @1 1 ' C< 1 ' 10' =-<A1' &' &-@1-' &=' D1 & &''1' <-A' E &- 10' =' D1' , - .'0' I D<>#1' =& @<Ba1' &=' D< ' < 1-A<-B1'#1'+& A1G /

C ' C* ' D<' D1' 1&>1-' <-A' E=&'D10' &=' ℏ ' - . = D<>#1' .1 1' 1' 1' 1-A<+>B=' &-' D1' , ' - .1

' N$ ' @ ' $ ' Y

9' F D1 1' A'+1 01' &>1-' &=' D1' & &D1@' <-A' E &>10' &=' D1' , - .' ' ' &+1 1 -' & A ' D<>#1@' D<+1' A +1 0' &=='B10' <-A' =110' . <?- 1A' &' D1 >' ' D'0' @1 10' C< 1- 10@ =& ' D1' B&-0'A1 <B'&D' &=' D1' ' < 1-A8' < -B1' '-' D1' , - .'0' 01 +'B1@ KD'BD' A&&' -& ' 1-A1<+&? ' -& ' D1 >' 01@=1' '-' 1+ - .1' D1' ' < 1-A<?-B1' <BB& A - .' &' D1' ' A? 1' G ' '0' D1 =& 1' & A1 -1A' 10 <#@ 0D1A' <-A' 1-<= 1A' # ' D<?=@& ' 1' &=' D1' 0<'A1' < @'<>1- ' D<' '='&- ' &=' D1' 0<'A1' &>1-' & ' . &>10' A&&' -& ' 1+1' -& ' D1' ' < 1-A<?-B1' <#&? 1' D1' , - .'0' '.D-10@ <BB& A .' &' D& A'-<?-B1' &=' D'0' D<>#1@' D<' D1--1' <@@' @1 1 0' C< 1- 10' &' D1 >' & ' &- ' &=' D1 >' ><A1@' & ' D1 1<= 1 ' &' &- '0?BD1' C1 0&-1' & ' C1 0&-10' &' #1' ><A1@ #1' &=' '&' #1 1 ' =& B1' -1' 1==1^' #? ' < ' D1' , - .'0' C@1<0? 1

F &@@1-' @& D' <0' " <C1 0' <'@'&? 0' <-A' & D 1' '-' D1' ' 1' &=' &-A&-@' <-A' & D 1' C@<B10' K' D'-' D'0' 1<@>1@' D<' ?01' &' 01@@' F &@@1-' @& D' <' 1 <'@1' # ' D1' 1 A10@' 01@@1-' <' 1 A' &=' @& D' <' 1LB100'+1' C 'B1' D<+ - .' ?- 18' 0&-<#@1' @?B 1@' &' D1' . 1 1' D? 1' <-A' 1>C&+/ 00D@- .' &=' D1' , '- .10' @'1.1' C1&C@1' # 1 0' &=' D1' 0<>1@' < 1-0 ' 1H?' 1' <-A' .&A1' B&-0B'1-B1G F D1 =& ' #1' ' ' & A1 -1A' # ' D1' , '- .' &? ' &, 1' . -' & A' # ' D<A+ 01' &=' D1' & A10' 0C?<@@' <-A' 1>C& <@@' <-A' D1' &>&-0' '-' D'0' C01- ' C< 8' #<>1- ' <001>#@1A@' <-A' # ' <?=& ' 1' &=' D1' 0<>1@' D<' -&1' C &-1' 01@@' K' D'-' D'0' 1<@>1' <' 1 <'@1' <' # &A1' 1 A1' &=' F &@=1-' @& D' &=' D1' = -10 ' ><a' - .' 0B< @1 ' . < -1A@' & ' & D 1' B@& D' . < -1A' KD< ' B&@&? ' 0&1, ' ' '#1@' &' 1- ' &=' D1' , '- .'0'0?#.'1 10' <#&+1' D1' C 'B1' &='L+ ' 0' <' # &A1' 1 A1' G -A' <' # &A1' 1 A1' &=' F &@@1-' @& D' &=' <- ' & D 1' B&@&? ' &?' &='. < -1@' & '1- ' >< ' ?001' &=' D1' = -10 @' -& ' <#&+1' '@1' C 'B1' &='L ' 0' ?C&-' C1 -' &' =& =1' ' =& ' 1+0 ' 0?BD' 1 A' 0&@A' &' 1- ' D1' , '- .'0' ?#.'1 '0' <#&+1' D1' 01'A' C '010

'B1' &=' F #@@1' '' @& D

9' !& ' <0' >&BD1' <0' " <C1 0' <-A' < @&? ' <-A' & D1 ' '-' D1' 0 11' &=' &-A&-@' <-A' & D1 ' C@<B10' K D'-' D'0' 1<>1@' D<' ?01-' &' 01@@' K&@@1-' B@& D1' <' 1 <'@@' # ' D1' 1 A 0@' 01@@1-' <' 1 A1' &=' B@& D' <' 1LB100'+1' C 'B1' D<+ - .1' ?- 1 &-<#@12'@?B 1@' &' D1' . 1 1' D? 1' <-A' 1-8' C&+1 - .' &=' D1' , - .10' @'1.1' C&1C@1' # 1 0' &=' D1' 0<>1' < 1D0 '1H? 1' <-A@' .&&A' B&-0B'1-B1G F D1 =& 1' ' ' '0' & A1 -1A' # ' D1' , .' &? ' &+1 1 -' & A' # ' D<A+ 01' &=' D1' & A10' C' ' ?1@@' <-A' 1-@C& 1@@' <-A' D1' &>1-0' '-' D'0' 0<'A1' < @'<> ' <001>#@1A' -A' # ' <?^& ' 1' &=' D1' 0<>1@' D<' -&&' C1 0& 1' 01@@1' K' D'-' D'0' 1<>1' <' =1 <'@@1' <' # &A1' 1 A1' &=' K&@@1-' B@& D1' &=' D1' = -10 1' ><a -.1' B< @1 ' . < -1A@' ')' KD< ' B&@&? ' 0&' 1+1 ' ' ' #1@' &' &- ' &=' D1' , -.=1' ?#.1 10' <#&+1' D1' C 'B1' &=' L+ ' 0D1@' -.10' <' # 1A1' 1 A1G -A' <' # &A1' 1 A1' &=' F &@@1-' B@& D' &=' &- ' & D1 ' &@&? ' &?' &=' . < -1@' & ' &- ' ><-1 ' ?001 ' &=' D1' = -10 @' -& ' <#&+1' D1' C 'B1' &=' L ' D1@' -.10@ ?C&-' C1 -1' ' =& =1' 1' =& ' 1+1 ' 0?BD1' 1 A1' 0&@A1' &&' &- ' &=' D1' , -.10' ?#.1 10' <#&+1' D1' 0<'A' C 'B1

F &@@1-' @& D G

! ' ' <0' " <C1 0' <'@'&? 0' <-A' & D 1' '-' D1' ' 1' &=' &-A&-@' <-A' & D 1' C@<B10' K' D'-' D'0' 1<@>1@' D<' ?01' &' 01@@' F &@@1-' @& D' <' 1 <'@1' # ' D1' 1 A10@' 01@@1-' <' 1 A' &=' @& D' <' 1LB100'+1' C 'B1' D<+ - .' ?- 18' 0&-<#@1' @?B 1@' &' D1' . 1 1' D? 1' <-A' 1>C&+/ 00D@- .' &=' D1' , '- .10' @'1.1' C1&C@1' # 1 0' &=' D1' 0<>1@' < 1-0 ' 1H?' 1' <-A' .&A1' B&-0B'1-B1G F D1 =& ' #1' ' ' & A1 -1A' # ' D1' , '- .' &? ' &, 1' . -' & A' # ' D<A+ 01' &=' D1' & A10' 0C?<@@' <-A' 1>C& <@@' <-A' D1' &>&-0' '-' D'0' C01- ' C< 8' #<>1- ' <001>#@1A@' <-A' # ' <?=& ' 1' &=' D1' 0<>1@' D<' -&1' C &-1' 01@@' K' D'-' D'0' 1<@>1' <' 1 <'@1' <' # &A1' 1 A1' &=' F &@=1-' @& D' &=' D1' = -10 ' ><a' - .' 0B< @1 ' . < -1A@' & ' & D 1' B@& D' . < -1A' KD< ' B&@&? ' 0&1, ' ' '#1@' &' 1- ' &=' D1' , '- .'0'0?#.'1 10' <#&+1' D1' C 'B1' &='L+ ' 0' <' # &A1' 1 A1' G -A' <' # &A1' 1 A1' &=' F &@@1-' @& D' &=' <- ' & D 1' B&@&? ' &?' &='. < -1@' & '1- ' >< ' ?001' &=' D1' = -10 @' -& ' <#&+1' '@1' C 'B1' &='L ' 0' ?C&-' C1 -' &' =& =1' ' =& ' 1+0 ' 0?BD' 1 A' 0&@A' &' 1- ' D1' , '- .'0' ?#.'1 '0' <#&+1' D1' 01'A' C '010

'B1' &=' F #@@1' '' @& D

9' !& ' <0' >&BD1' <0' " <C1 0' <-A' < @&? ' <-A' & D1 ' '-' D1' 0 11' &=' &-A&-@' <-A' & D1 ' C@<B10' K D'-' D'0' 1<>1@' D<' ?01-' &' 01@@' K&@@1-' B@& D1' <' 1 <'@@' # ' D1' 1 A 0@' 01@@1-' <' 1 A1' &=' B@& D' <' 1LB100'+1' C 'B1' D<+ - .1' ?- 1 &-<#@12'@?B 1@' &' D1' . 1 1' D? 1' <-A' 1-8' C&+1 - .' &=' D1' , - .10' @'1.1' C&1C@1' # 1 0' &=' D1' 0<>1' < 1D0 '1H? 1' <-A@' .&&A' B&-0B'1-B1G F D1 =& 1' ' ' '0' & A1 -1A' # ' D1' , .' &? ' &+1 1 -' & A' # ' D<A+ 01' &=' D1' & A10' C' ' ?1@@' <-A' 1-@C& 1@@' <-A' D1' &>1-0' '-' D'0' 0<'A1' < @'<> ' <001>#@1A' -A' # ' <?^& ' 1' &=' D1' 0<>1@' D<' -&&' C1 0& 1' 01@@1' K' D'-' D'0' 1<>1' <' =1 <'@1' <' # &A1' 1 A1' &=' K&@@1-' B@& D1' &=' D1' = -10 1' ><a -.1' B< @1 ' . < -1A@' ')' KD< ' B&@&? ' 0&' 1+1 ' ' ' #1@' &' &- ' &=' D1' , -.=1' ?#.1 10' <#&+1' D1' C 'B1' &=' L+ ' 0D1@' -.10' <' # 1A1' 1 A1G -A' <' # &A1' 1 A1' &=' F &@@1-' B@& D' &=' &- ' & D1 ' &@&? ' &?' &=' . < -1@' & ' &- ' ><-1 ' ?001 ' &=' D1' = -10 @' -& ' <#&+1' D1' C 'B1' &=' L ' D1@' -.10@ ?C&-' C1 -1' ' =& =1' 1' =& ' 1+1 ' 0?BD1' 1 A1' 0&@A1' &&' &- ' &=' D1' , -.10' ?#.1 10' <#&+1' D1' 0<'A' C 'B1

N$ ' ' "+' 5J

3"&#!2' . ' V . .++!-' +. ' !& !'" *" &-!/ ' .'" .0' . 'b" &-' !' 4". / A "/

Ù . '" . !'" #+. ' *" @-!/' N$ '

) !' .++. 7&-*' 3". '&2. !2' &"!' ! -0"!/' . -' !' -". ++1 ! - ' . / ' 3"&- !/' . &!2' .

&2' / ' !'" !' 6 . @ +' 22!- 'J ; 0 ' "!' - . '&-2!" !/' &-' -@' ' !' 0 !' . ' &2' A! "<'

3". '&2.' ." V + &!'" ."@' [

3". '&/!/' ++' 7!@' & ' &2' !' . ' /-0++ # . -'$ '"!201@-*' . ' &"!2' & ! - !2' -/' * 0- !/' . ' &#!2' 7 & &-' !' B. "!2 ' . ' -*+!7. !' &-' !' .0- !' . ' 01 ; !"+ -/ ' !% !-/' -!' &-' !-@' 7&2!' ; !' 0" 0++' .'" H0/&## ++' .' V + &!'" ."@' - !' .' .0"!' *" - ' -/' &"!2' ! - !2' .' @1' 1 /!' . ' 0 &#!' . ' . -' . ' !' B. "!2 !"2' . '/&!' ." 7 "/!' . '.0"!' 2!&/' B. "!2 ' - !' .' !' V *&2' -/' B!!2' /0!' 0- .' !' 2!&/' &#!=' ; 0 ' .0"!' 2!&/' *" 0- !' -/' &"!2' ! - '2 -/' -/' ;!' *. ./' -/'! !<0!+' .' !' 2!&/' V + &!'" ##. "/@-*' .' !' !-.' -/' 0" ." !' . ' !' 2 1!=' !' 2!&/' &!' ." !-@' !'" /!' 1 /!' ." .' ; !' 1 /!' &-' /&&2' <2!-' +& 1!-' &-' !-@7&2!' -. 7<2 -/@-*

3". '&/!/' +7!@' ' &2' /!' . '"!201 !&. -' . '" !-@' . !'" /!' &-' &2' <2!-' +& 1!-' 1 /!' &' .' ; !' 1 /!' !% !-/' -. ' -!' &-' !-@' 7&2! ; !' 0" 0++' ." H0/+#& +' 0- .' 6&# "/' 4". 7 - ' . ' ." -@' *" 0- ' ." *" - !2' .' @1' 1 /!' ; @' !' M@-*' .0" .<!&*-' ."/!' ; @' &2' &"!2' !- !2' #. - -@-*' . &#!' . ' .-' . ' !' B. "!2 !"2' . ' -*+!7. /!' & '/&!' !'" 7 "/' !" &-' !' 2 1!' "!2' !- !2' ; !' -' 2* ./' ."#!' ' 2 "!-* ' 2' &' !' 2<'/' /L!' 7!"!' -&' 1 /!' ." < /

". '&2.' ." 6&# "/ 4". 7 -

3". '&2.' ." F ' > &-G

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(

ME‘= P‘

L@‘0‘<-A‘&=‘1, ‘&D 1‘ =& D‘KD<‘B&@&?‘ ‘1+0‘‘‘=11‘ D<‘‘0‘?-A1‘ D1‘01‘A‘C ‘010@‘<# &A1‘ 1 A1‘ &‘#1‘0&@A‘ &‘ D1‘ ,‘-.‘0‘0?#.‘1 10‘<= 1‘ D1‘ < 1‘&=‘ D1‘.&A1-1001‘ D1 &=G -A‘D1‘D<‘K&@@‘0?1‘=&‘1-‘0?BD1‘=& =1‘?1‘ D<+1‘<-‘<B‘&-‘&=‘A1 1‘ D1 &=‘< 1-0‘D‘>‘ D<‘0&‘A& D‘ =& =1‘@=-‘KD‘BD1‘<BB‘&-‘-&-‘100& ‘-1‘C 1BB‘&-‘=11‘ <@@&K<#@1@‘<-A‘ D1‘ "1=1-A<‘>‘-&‘ &‘ #1‘<A>‘ 1A‘ &‘ K<.1‘ D‘0‘@<K1G D1‘, -.‘ &‘D<+1‘ D1‘ L1B? ‘&-‘&=‘ D1‘&&-‘D<@=‘ D1 &=@‘<-A‘ D1‘C< ‘1‘ D<‘0D<@@‘ 0?1‘D<+1‘ D1‘& D 1‘D<@=;‘ D‘0‘& A1-<?-B1‘ &‘ #1. --1‘<-A‘ <a1‘ 1=@ 1Q@1‘= &>‘ D1‘ =10‘&=‘ 1‘-‘ D&><0‘ D<CC 0 1@@‘-‘ D1‘ 1 1‘&=‘ &? 1‘ & A1‘E&A‘ 0 ‘ LLL‘L‘ -A‘ D1‘ 0<>1‘ A1-<?-B1‘ #1=& 1‘ D1‘ 0<>1‘ =10‘K‘ D‘-‘ D1‘ 01‘A‘ ‘‘1‘&=‘ &-A&-‘ &‘ #1‘ B@< >1A

ME‘G& ‘ ‘ ` !

0A‘0D1@‘-.10‘‘ >A‘&=‘1+1 ‘& D1‘ @& D1‘KD<‘B&@&?‘0&‘ 1+1‘‘‘#1‘ D<‘‘0‘?-A1‘ D1‘0<‘A‘C ‘B1@‘< # ?A1‘ 1 A1‘ &‘ #1‘0&@A1‘=&‘ D1‘, -. 0‘0?#.1 10‘<= 1‘ D1‘ < 1‘&=‘ D1‘ .&&A-10‘‘ D1 &=G -A‘#1‘ D<‘K @@‘0?1‘=& ‘<- ‘0?BD1‘ =& =1‘?1‘D<+1‘<-‘<BB‘&-‘ &=‘A1 1‘ D1 &=‘< 1-0‘D >‘ D<‘0&h‘A&& ‘“=& =1‘1‘ -‘KD‘BD1‘<BB#-‘-&-1‘100& -1‘ -1‘C & 1BA&-‘#1‘<@@&K<#@1‘ -A‘ D1‘ "1=1-A<-‘‘-&‘ &‘ #1‘<A> 1A‘ &‘K<.1‘D‘0‘@<K1G D1‘, -.‘ &‘D<+1‘ D1L1B A&-‘&=‘ D1‘&-1‘=<@=1‘ D1 &=‘ -A‘D1‘C< ‘1‘ D<‘0D<@@‘0?1‘D<+1‘ D1‘& D1‘D<@=1;‘ D‘0‘& A1-<?-B1‘ &‘ #1. --1‘<-A‘ <a‘1==1 1‘=&>‘ D1‘ =1<0 1‘&=‘ 1 - 1‘ D&><0‘ D1‘ CC&0 1@@‘-‘ D1‘ 1 1‘&=‘ &? ‘ & A1‘E&A‘ ‘ LLL‘L‘ -A‘ D1‘0<>1‘& A1-<?-B1‘ #1‘=& 1‘ D1‘0<>1‘=110‘K D‘-‘ D1‘0<‘A‘ ‘ 11‘ &‘ #1‘C &A< >1A

?‘ +

"‘:‘&)

@< 10‘I‘ <CC10

‘ D1‘ &>1-0‘‘-‘ D‘0‘ C01-‘C< @‘<>1-‘ <0i1>#@1A@‘ D<‘KD1 1‘<=& 1‘ D‘0‘ >1‘‘‘D<D‘#11‘A<‘@@‘ ?01A‘<-A‘ 1‘‘0@‘ D<‘R 1 -B <= >1-‘-<>1A‘ < ><=B1 0‘ <-A‘ ,<C><a1 0‘A& D‘ 01@@‘ D1‘‘ D< 10‘<-A‘B<CC10‘<‘ 0?BD1‘<-‘&? <.1&?0‘C ‘B1@‘ D<‘KD1 1‘<-‘D< 1‘0 &-A1 D‘ -& ‘ D1 >‘‘-‘L ‘A‘ D1‘‘K&,‘ 01@@‘‘‘=& ‘<0‘& ‘L@A‘ <-A‘<@0&<‘ <CC1‘ D<‘0 <-A‘ D‘ -& ‘ D1>‘‘-‘]+‘A‘ D1‘ K&@@‘ 01@@‘‘‘=& ‘‘“‘‘0‘& ‘+‘0‘‘ -A‘ #‘B<?01‘ D1‘a-&K1‘ K1‘ D<‘1+ ‘><-‘ >?0‘ BB?C‘1‘ D1 - @ D1‘K&@@‘01@@‘ D1 >‘<‘ -&-1‘10‘1‘ C ‘B1@‘ &‘ D1‘. 1 1‘BD< .1‘<-A‘ A<><.10‘&=‘ D1‘, ‘-.‘0‘0?#1 10‘<-A‘<1-0‘<@@‘ .&A1‘ 1<0&-‘<-A‘B&-0B‘1-=1;‘ F D1 =& ‘#1‘‘‘& A1 -1A‘1-<= 1A‘ <-A‘10<#@‘00D1A‘# ‘ D<A+ B1‘&=‘ D1‘@& A‘0‘ 0C?<@@‘ <-A‘ 1>C1@@‘ ‘-‘ D‘0‘?! ‘C< =‘<>1-‘<001>#@1A@‘<-A‘# ‘ <? # ‘1‘&=‘ D1‘0<>1@‘ D<‘ -&‘ D< 1‘ -& ‘ B<CC1‘ -& ‘ & D 1‘C0&-1‘01@@‘ -& ‘C? ‘ &‘01@@‘<- ‘D< 1‘&‘<- ‘&=‘ D1 ‘,‘-.‘0‘ ?# 1 10‘<#&+1‘ D1‘C ‘B1‘&=‘LLA‘ D1‘#10@‘ - ‘ <- ‘ <CC1‘<#&+1‘ D1‘C ‘B1‘&=‘‘‘0‘+‘‘‘A‘ D1‘#10‘<‘ D1‘ <&0 1G -A‘=& ‘<@@‘ D1‘ < 10‘<-A‘ <CC10‘?-A1‘ D<‘ +<@?1‘ &‘#1‘0&@A‘<‘ 0?BD‘<‘C ‘B1‘<0‘ D1‘# 1‘<-A‘01@@1‘ ><‘ 10&-<#@‘<.. 1‘G ?CC&-‘C1 -‘&=‘=& =1‘?1‘=& ‘1C ‘ D< 1‘& ‘ B<CC1‘& D‘ K‘01‘ 0&@A‘ <#&+1‘ D&‘ C ‘B1‘ <#&+1‘ 01‘A‘L@‘0G D1‘ &-1‘ >&‘1‘ D1 &=‘ &‘#1‘ &‘ &?‘ &+01‘.-‘$ & A‘ <-A‘ D1‘& D 1‘ >&‘1‘ &‘ D1‘C< ‘ D<‘K&@@‘ 0?1‘ <-A‘ +1 D1‘ 01‘A‘=& =< ? 1@‘# ‘ <BB‘&-‘& ‘# ‘<BB‘&-0‘&=‘ "1 1@‘# ‘F ‘ 1‘ < ‘ D1‘B&1-‘ <K1@‘# ‘#‘@@‘ & ‘C@< - 1‘ <= 1‘ D1‘B?0 &>1‘ &=‘ ‘ 1‘ & ‘ &K-1‘KD1 1‘‘‘0D<@@‘ =& ?-1‘0?BD‘=& =1‘?1@‘ &‘#1G ‘-‘ D1‘KD‘BD1‘@‘a1‘CB1001‘ ?..1>1-‘<-A‘1L1B?B‘&-‘#1‘D<AA1‘<0‘‘0‘?01A‘‘-‘<BB‘&-0‘ #‘@@1‘ & ‘C@1 - =‘ &=‘A1 1‘0?1A‘<= 1‘ D1‘B&? 01‘&=‘ D1‘ B&1-‘ @<K1@‘& ‘ B?0 &>1‘ &=‘ &K-1‘ & ‘ ‘ 11‘ <=& 101‘A‘ -A‘ D<‘ D1‘ "1=1-A?-‘‘-‘<- ‘0?BD1‘<BB‘&-0‘#‘@@10‘& ‘ C@1 - 10‘#1‘-&‘<A>‘ 1A‘ &‘A&&‘D‘0‘@<K1@‘<& ‘ D<‘1-‘ C 1BB‘&-‘& ‘100&-‘ D1 ‘-‘#1‘<@@&K1A;‘ D‘0‘ A1-<?-B1‘ &‘ #1. -‘<-A‘ <a1‘ 1==1= 1‘=&>‘ D1‘ =10‘&=‘ 1‘-‘ D&><0‘ D<CC&0=1@‘‘-‘ D1‘ 1 1‘&=‘&? ‘ & A‘ ‘ LLL‘L‘ <-A‘ D1‘0<>1‘ A‘-<?-B1‘#1=& 1‘ D1‘0 ‘A‘=10‘K‘ D‘-‘ D1‘ ‘ ‘1‘&=‘ &-A&-‘ &‘ #1‘CB@< >1A

?

= :‘ 5‘&‘ ‘47G

‘ - ;%.+‘7 %-%-‘ %+‘+6 .‘ ‘ & ‘‘$;%‘.‘ %‘ 7 ;%‘‘ 7 ++ & ‘.

‘ D1‘, -.‘ &? 1‘ &+01‘.-1‘ & A1G < 1-‘D1‘ & &1-0‘‘-‘ D‘0‘ C0B‘‘‘C< @‘< <1?‘<001 <#@‘A@‘ D<‘KD1 1‘ . 1< 1‘> - 00D -.‘ <-A‘A1a<‘1‘D< D‘#11-‘ -&K1‘ &=‘@< 1‘ >B‘&=‘D1‘ <+‘1‘ &=‘ D‘0‘ 1<@>1‘ &=‘ -.@&-A@‘ <-A‘ A1@-10‘&=‘D1‘>< 0‘K‘D‘-‘ D1‘0<>1@‘#‘D1‘K F BD‘ D‘0‘ -&#@1‘ 1<>1‘K‘D‘-‘ 0D& ‘CB1001‘&=‘ >‘K‘D&?‘ 1=&?=><B#-‘#1‘D<A‘ D1‘-‘0D<@@‘ -&‘#1‘&=‘D<#@@‘‘1‘-1‘ C&?F‘&‘A1=1-A‘‘‘0A=G F D1‘= 2‘C=1<0‘‘‘ &?‘ ‘.D-10‘ #‘D<A 01‘&=‘D1‘@& A10‘0 ?1@@L‘I‘ 1>C& 1@L‘-‘ D‘0

V ‘B1‘&=‘ < 10‘<-A‘ D1 10]9

@ D<‘KD1 1‘<=& 1‘D‘0‘ >1‘‘‘D<D‘#1‘A<@‘ ‘? 1A‘<-A‘ 1‘‘0‘ D<‘B1 1 -‘B <= 1>1-‘-<>1A‘ < 8‘ ><a1 0‘<-A‘ <C><a1 0‘A&<-‘01@@1‘ D1‘‘D< 10‘<-A‘B<CC10‘<‘0?BD1‘<-‘&? 1<.1&?0‘C ‘B1@‘ D<‘KD1‘‘<-‘D< 1‘0 &-A1 D‘-& ‘ D1 >‘‘-‘L+‘C1-0@‘ D1‘K‘@@‘01@@‘‘‘=& ‘‘“‘0D1@>.10‘&‘L@‘C1-0@‘<-A‘<@0&‘<‘ <CC1‘D<‘0 &-A1 D‘-& ‘ D1 >‘‘-‘L+‘C1-0‘ D1‘K @@1‘01@@1‘‘‘=& ‘‘“‘‘0D1@‘-.10‘&‘+‘0D1@‘-.10G -A‘#‘B<?01‘ D1‘a-&K1‘K1‘ D<‘1+1 ‘><‘ >?0‘&BB?C‘1‘ D1 >@ D1‘K‘@@1‘01@@1‘ D1 >‘<‘-&-1‘101<‘C ‘B1@‘&‘ D1‘. 1 1‘BD< .1‘<-A‘ A<><.10‘&=‘ D1‘, -.10‘ ?#.1 10‘<-A‘<.< -0‘<@@‘ .&&A‘ 1<0&-‘<-A‘B&-0B 1-B1;‘ F D1 =& 1‘‘‘0‘& A1 -1A‘ 1-<= 1A‘ <-A‘ 0 <#@‘0D1A‘# ‘ D1‘ <A+ 01‘&=‘ D1‘ & A 0‘ C‘‘?1@“ <-A‘ 1>C& 1@@‘ <-A‘ <‘ D1‘ C < 1‘ &=‘ D1‘ &>1-0‘‘-‘ D1‘ 0<‘A‘ C< @‘<>1-@‘<001>#@1A@‘<-A‘# ‘<?B@ &‘1‘&=‘ D1‘0<>1@‘ D<‘-&&‘D< 1‘-& ‘B<CC1‘-& ‘& D1‘ C1 0&-1‘01@@1‘-& ‘C? ‘ &‘01@@1‘&- ‘D< 1‘ &‘ &- ‘&=‘ D1‘ , -.‘0‘0?#.1 10‘<#&+1‘ D1‘C ‘B1‘&=‘LL‘ C1-0‘ D1‘#10@‘ - ‘&- ‘B<CC1‘<#&+1‘ D1‘C ‘B1‘&=‘‘‘0D1@>.10‘+‘‘‘A‘ D1‘ #10 1‘<‘ #‘>&&0 G -A‘=& ‘<@@‘D< 10‘<-A‘B<CC10‘?-A1‘ D1‘+<@?1‘ &‘#1‘0&@A1‘<‘0?BD1‘<‘C ‘B1‘<0‘ D1‘# 1‘<-A‘01@@1‘ ><‘ 1<0&-<#@1‘<. 11‘G ?C&-‘C1 -1‘&=‘=& =1‘?1‘=& ‘1+1 ‘D< 1‘& ‘B<CC1‘& D1 K 01‘ 0&@A1‘<#&+1‘ D1‘ C ‘B1‘<#&+1‘0<‘A‘L@‘0D1@‘-.10G D1‘&-1‘>&‘1‘ D1 &=‘ &‘ #1‘ &‘ D1‘ , -.1‘ &?‘ &+1 1 -1‘ & A‘<-A‘ D1‘& D1‘ >&‘1‘ &‘ D1‘C< ‘1‘ D<‘K‘@@‘0?1‘<-A‘C &+1‘ D1‘0<‘A‘=& 8‘ =1‘ ? 1@‘# ‘<BB‘&-‘ &‘ <BB‘&-0‘ &=‘ " 1@‘# ‘ K ‘‘<‘ D1‘ &>1-‘ <K1@‘# ‘# @@‘ & ‘C@< <‘ <= 1‘ D1‘ B?0 ?>1‘ &=‘ ‘ 11‘ & ‘ &K-1‘KD1 1‘‘‘0D<@@‘ =& ?-1‘0?BD1‘=& =1‘?1‘ &‘#1G ‘-‘ D1‘KD‘BD1‘@‘a1‘C &B1001‘ ?.1>1-1‘<-A‘1]1‘ B‘‘B‘&-‘ 0D<@@‘#1‘ D<A‘<0‘ 0‘?01A‘‘-‘<BB‘&-0‘#‘ 10‘& ‘ C@1 - 10‘&=‘A1‘0?1A‘<= 1‘ D1‘B&? 0‘&=‘ D1‘ &>1-‘ <K1‘ & ‘ ?0 ?>1‘&=‘ &F -1‘& ‘ 1‘<=& 1‘0<‘A‘C - A‘ D<‘ D1‘ "1=1-A<?-‘‘-‘&- ‘0?BD1‘<BB‘&-‘# @@10‘& ‘ C@1 - 10‘#1‘ -&‘<A> 1A‘ &‘ A&&‘ D‘0‘@<K1@‘-& ‘ D<‘<- ‘ C & 1B@‘ A&<‘ & ‘ 100&‘-‘ D1 ‘-‘#1‘8<@&K1A@‘ D‘0‘ & A1-/-B1‘ &‘ #1. --1‘<-A‘ <a1‘1==1=‘=&‘ D1‘=10 1‘&=‘ < - ‘ D&><0‘ D1‘ CC&0 @1‘‘-‘ D1‘ 1 1‘&=‘&? ‘ & A‘ ‘ LLL‘L‘ -A‘ D1‘0<>1‘& A1-<-B1‘#1=& 1‘ D1‘0<>1‘=10 1‘K A‘‘-‘ D1‘ ‘ 11‘&=‘ &-A&-‘#1‘C &B@< >1A

=‘F -1‘<-A‘ &@&K01‘F &&A1

@ D<‘KDA 1‘. 1 1‘ > - 00D -.‘ <-A‘A1B< 1‘ D< D‘#1‘-&K‘ &=‘@< 1‘ >1‘&=‘ D1‘ -<+ 1‘&=‘ D‘0‘ 1<>1‘ &=‘ -.@&-A@‘ <-A‘ A@1-10‘&=‘ D1‘><‘-1 0‘K D‘-‘ D1‘ 0<>1@‘#‘D1‘KD‘BD1‘ D‘0‘-&#@1‘ 1<>1‘ D‘-‘0D& ‘C &B1001‘&=‘ >1‘K D&?‘ 1=& ><A&-‘#1‘D<A‘ D1‘-‘ 0D<@@‘-& ‘#1‘&=‘D<#‘@‘ 1‘-1‘C&K1‘ &‘A1=1-A‘‘‘01@=1G F D1 =& 18‘#‘1‘, -.‘0‘&?‘ &+1 1 -1‘ > A‘#‘D<A+ B1‘ =‘ D1‘ & A‘0‘ C‘‘?1@“ <-A‘ 1>C& 1@@‘ <-A‘<‘ D1‘C <‘1

ME' 6 ' ' ` !

&=' D1' &>1-0' '-' D1' 0<'A' < @'<>1- ' <001>#@1A' <-A' # ' <?= & ' 1' &=' D1' 0<>1@ D< D' & A1 -1A' 0 <#@'00D1A' <-A' 1-<A 1A@ D<' &' ><-1 ' =' C1 0&-1' /&=' KD<' A1. 11' & ' B&-A'B'&-' D<' D1' #1@ B&-+1 ' -& ' # -.1' '-' &' D'0' 0<'A1' 1<>1' @&-A' F <@10' <@1'0' & ' D1' < BD10' D1 &=' ' 1 K a@ = &>' D1' =10 ' &=' D1' < '+ 1' &=' < - ' &D-' D1' <C '0 ' D<' 0D<@@ #1' '-' D1' 1 1' &=' &? ' & A' E&A' ' @LLLLL@ &- ' ><-1 F -10' &=' D1' . &K -.' &=' D1' "?BD'1' &=' E? 1-' & ' E<0B&'. -1@ & ' K&&A' B<@@1A' &@&K01' F &A1@ #?' 0?BD1' <0' 0D<@@ #1' B&-+1 1A' <+1- 1A' <-A' # &?.D ' '-' D'C' & ' D'CC10' KD1 1&=' &? ' 0<'A' & 1 < -' & A' & ' 0&>1' &=' D'0' ?#.1 10' &=' D'0' 1<>1' &=' -.8' @&-A' @&-A' F <@10' <@1 ' & ' 1 K Ba1' #1-' &K-1 R' C&00100 ? 0' <-A' C &C '1 < '10@ <-A' D1' <'0 1 ' ?-A1 ' E&A' <-A' DC' < -1 0' &=' D1' 0<>1' 0D'CC1' & ' 0D'CC10' -.@ 0 D1' 00D1' & ' F <@00D1' & ' >1-' &=' 1 K a' & ' >1-' &=' <@1 0' & ' &=' D1' < =D10' =' D1' 0<>1' =& ' D1' >& 1' C< '1@ ?C&-' C1 -1' &' =& =1' ' D1' 0<>1' F -10' <-A' F &&A' 0&' # &?.D ' B&- < '1' &' D'0' <Q=@ D1' &-1' D<@=' D1 &=' &' D1' , -.' <-A' & D1 ' D<@=R' &' D >' & ' D1 >' D<' 01<0' D' D1' 0<>1' F -1' & ' F &A1@ -A' <@0&' D< D' A1 -1A' <-A' 0 <#@'00D1A' # ' D1' 0<'A' <? & ' 1@ D<' -&' C1 0&-0' '-D<#' 1A' K' D' '-' D'0' 1<>1@ & D1 ' D<-' >< 8' BD<?- 0' 10 <?-.1 0@ = &>' D1' 0<'A' =10 1' &=' 0<'A' &D-' = 1'.D ' -1' BD< .1' K' D'-' D'0' 1<>1' & ' F <@10@ &- ' 0D'CC1' & ' & D1 ' +1001@ &=' &- ' <@'1-' ' 0 <?-.1 @ K' D' 1> ' ><-1 ' >< BD<?-A' 1' &' #1' B< '1A' &? ' &=' D'0' 1<>1' & ' F <@10' & ' &' #1' # &?.D ' '- &' D1' 0<>1@ '=' D1' >< 'D<+1' ?= B'1- 1' = 1'.D ' '-' 0D'CC10' '+1001@@10' &=' D1' "1-'<1'-0' &=' D'0' 1<>1' '-' D1' 0<>1' & 1' KD1 1' D1' 0D<@@ ><a1' D'0' = 1'.D G ?C&-' C1 -1' &' =& =1' 1' D1' 0<>1' >< BD<?-A'010' D1' &-1' D<@=1' D1 &=' &' D1' , -.' &? ' &+1 1 -' & A@ <-A' D1' & D1 ' D<@=1' &' D >' & ' D1 >' KD'BD1' 1<01 D' D1' 0<>1' >< BD<?-A'010 ' &+ A1A' <@K< 1' D<' D'0' <= 1' 1L 1-A1' -&' &' & ' 0D'CC1' & ' 0D'CC10@ D<+ -.' &- ' &=' D1' 0<'A' K< 10' & ' >< BD<?-A'010@ B&<0 1 -1A' # ' C>C10 ' &=' K1A1 ' & ' 1-> 1 ' &' < +1' '-' &- ' CA 1' & ' C@<B1' K' D'-' D'0' 1<>1G &&' D<' D1' &K-1 0' &=' D1' 0<'A' K< 10' <-A' >< BD<?-A'010' ><a' D1 &=' -&&' 0<@1' K' D'-' D'0' 1<>1@ & D1 ' D1--1' =& ' +' <'@@1' & ' 1C< -.' &=' D1' 0<>1' 0D'CC1' & ' 0D'CC10' & ' <a1@ D.' D1 &=@ KD'BD' D1 ' &=' -1B100' '1' #1' B& > C1@@1A' &' ><a1

ME' = ' + &

=@01- ' C@'<>1- ' <001>#@1A' <-A' # ' <-(a) ' 1' &=' D1' 0<>1@ &' & A1 -1' 0 <#@'00D' <-A' 1-<=@19@ D<' -&' ><5' &=' 0& -1' &=' KD<' A1. 11' & ' B&-A'B'&-' D<' D1' #1@ B&-+1'1' & ' # -.' '- &' D'0' 01'A' 1<@>0' @&-A' F <@10' <@1'0' & ' D1' < BD10' D1 &=' & ' 1 K a@ = &>' D1' =10 ' &=' D1' < '+ 1' &=' 1 - ' &D-' <C '0 ' D<' 0D<@@ #1' '-' D1' 1 1' &=' B? 1' & A1' E&A' <' ' LLLL ' 1- ' ><5' F -10' &=' D1' . &K -.' &=' D1' "? D'1' &=' E? 1-' & ' E<0B&'. -1@ & ' F &&A1' B<@@1A' &@&K01' F &1A1@ #?' 0?BD1' <0' 0D<@@ #1' B&-+1'1A' <+1- 1A' <-A' # &?.D ' '-' D'CC1' & ' D'CC10' KD1 &=' 1' & 1'.-' & A1' & ' 0&>1' &=' ? 1' ?#.1 =' &=' D'0' 1<>1' &=' -.@&-A' @&-A' F <@10' <@1'0' & ' 1 K 'a' #11-' &K-1 0' C&00100&? 0' I ' &C '1 < '10@ <-A' D1' <'0 1 ' ?-A 1' E&A' <-A' D1' >< 0' &=' D1' 0<>1' D'CC1'& ' D'CC10' -. 00D' '0D' & ' F <@00D@ & ' >1-' &=' 1 K a@ & ' >1-' &=' <@1'0' & ' &=' D1' < BD10' &=' D1' 0<>1@ =& ' D1' >& 1' C< 1G ?CC&-' C<'1-' &' =& =1' 1' D1' 0<>1' F -10' <-A' F &&A1' 0&' # &?.D ' B&- / '1' &' D'0' <= 1@ D1' &-' D<@=1' D1 &=' &' & ' .D-10' <-A' D1' & D1 ' D<@=1' &' D >' & ' D1 >' D<' 01<0' D' D1' 0<>1' F -1' & ' F &&A1 ' -A' <@0&' &' & A1 -1' <-A' 0 <#@'00D1' # ' D1' 01'A' <?= & ' 1@ D<' -&' C0&-1' '-D' 1A' K' D'-' D'0' 1<@>1@ & D1 ' D1-' < BD<?- 10' 0 <-.1 0@ = &>' D1' 01'A' =10 ' &=' 1 - ' &D-@ = 1'.D ' -& 'BD< .1' K' D'-' D'0' 1<@>1' & ' F <@@0@ 1- ' D'C' & ' & D1 ' 1001@@ &=' 1- ' @ 1-' & ' <?-.1 @ K' D' 1- ' ><5' 1 B#<?-A'01\' &' #1' B< '1A' &? ' &=' D'0' 1<@>1' & ' F <@10' & ' &' #1' # &?.D ' '- &' D1' 0<>1@ =' D1' >< ' D<+1' 0?=='B'1- ' = 1'.D ' '-' D'CC10' & ' 1001@@1\' &=' D1' A1 -8' 01 -0' &=' D'0' 1<>1' '-' D1' 0<>1' C& ' KD1 1' D1' 0D<@@ ><a1' D'0' = 1'.D G ?CC&-' C< -1' &' =& =1' 1' D1' 0<>1' >< BD<-A'01\@ D1' &&-' D<@=1' D1 &=' &' &?' & 1'.-' & A1@ <-A' D1' & D1 ' D<@=1' &' D >' & ' D1 >' KD'BD' 01<0' D' D10<>1' >< BD<?-A'01\' &+'A1A' <@K1 ' D<' D'0' <= 1' 1L 1-A' -&' &' 1- ' D'CC' & ' D'CC10@ D<+ -.' 1- ' &=' D1' 01'A' F < 10' & ' >< BD<?-A'01\@ B&-0 1 -1A' # ' 1 <C<0 ' &=' F 1A1 ' & ' 1-1> 10' &' < '+1' '-' 1- ' C& 1' & ' C@<B1' K' D'-' D'0' &? 1' 1<>1G 0&' D<' D1' &K-1 0' &=' D1' 01'A' K< 1\' <-A' >1 BD<?-A'01\' ><a1' D1 &=' -&' 0<@1' K' D'-' D'0' 1<@>1@ D1' ' D1-' =& ' +' <'@@' & ' 1C<' -.' &=' D1' 0<>1' D'CC' & ' D'C C10' & ' <a1@ -.' D1 &=@ KD'BD' D1 ' &=' - B 00' 1' #1' B& > C1@@1A' &' ><a1

-' I 1' ?C&-' # 1-.' &=' F &@@10

@ !& ' D1' 1-B 1B1' <-A' >< - 1- -.' &=' " <C1 ' <-A' ><a -.' &=' B'C D1' K D'-' D'0' @&-A1@ \ D1' , -.' &? ' &+1 1 -' & A' # ' D1' <A+ 01' <-A' <001- 1' &=' D1' & A 0' C' ' ?1@@ <-A' 1>C& 1@@ <-A' D1' &>1-0' '-' D'0' C 18' 01- 1' < @'<>1- ' <001>#@1A' -A' # ' <?= & ' 1' &=' D1' 0<>1@ D< D' A1 -1A' 10 <#@'00D1A' <-A' 1-<=@1A@ D<' -& ' ><-1 ' &=' C1 0&-1@ # ' D >01@=1' '# ' &- ' D1 @ # ' & ' #< .1 -1@ = &>' D1' =' 0 ' A< ' &=' < BD1' D<' 0D<@@ #1' '-' D1' 1 1' &=' &? ' & A' E&A' ' @LLL'L@ &- ' F &@@10' D1--1' ?-0D& >1@ & ' <a1' C &> 01' &=' #< .1 -1' &=' &- ' F & 10' D1--1' ?-0D& -1' `& ' <a1' C & > 01' &=' #< .1 -1' =' &- '' F &@@10' D1' >1' ?-0D& -1@ & ' <a1' C > 01' &=' #< .1 -1' &=' &- ' F &@ 0' D1--1' ?-0D& -1 PX' &=' D1' . &K -.' &=' 1 a0D' 1' CL1-=& A0D' 1' E@&?B10 10D' 1' 1 1=& A10D' 1' D &C0D' 1' F C B10 10D' 1' F '@ 10D' 1' &>1 01 0D' 1' "& 01 0D' 1' <>C0D' 1' 001L' 1 =& Aj 0D' 1' <># '.0D' 1' & D<> &-0D' 1' ?==' ,1-' ? 1 ' <-A' ?00Ba@ & ' &- ' &=' D1 >@ <=& 1' D1' =110 1' &=' D1' 00?>CB'&' ' &=' &? ' <A ' D1--1' -1L ' 1-0? -.G

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.' 3!"2.-' /0"&-*' !-' A! "2' 2 +' ;0@' .'' -' "k * &-' .'' -@' V . .' #!"k &-' .0- &!2' ;! .'!' !' 2201 &.-' . '.0'' W< /@ -!% ' !'' !'' 2' 1 "&-*' !"!. ';&M' 20# ' Z' 1 E!' A "-'.'' &.' !"!. =

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' & '.<A1 ' '

= ?0' 0?C' CB'<> L'

9 D1' , -.' &? ' &+1 1 -' & A' B&-0'A1 1 D' D<' # ' D1' -1B@'.1-B1' > 0A1>1<- -.' =<+&? ' <-A' & D1 ' '-& A'-<' B<?01@ &=' D1' ?0 'B1@ &=' C1<0' '-' 1+1 ' D' 1' &=' D'0' D'0' 1<>19 D1' @<K10' <-A' & A1-<?-B10' ><A1' =& ' D1' C&@' 'H?1' K1@1' C1<0' <-A' .&&A' ?@1' &=' D1' 0<>1' -A' =& ' D1' C &=' ' 0?1 1' <-A' 10 =?@@ @ + -.' &=' D'0' 0?#.1 10' &=' D1' 0<>19 #1' -& ' A-1@ ' 1L1B? 1A' <BB& A -.' &' D1' 1-&? ' <-A' 1==1=@1' D<' D1 'K1 1' ><A1' <-A' & A1 -1A' =& 6 F D1 1=& 1' D'0' 0?#.1 10' #1-' . 1+&?0@ ' D? ' <-A' &? ' &=' 0? 1 '1' &=' D1' ' #&A'10' <-A' .&&A10 9 &' D'0' . 1 1' A 08 C@1'0? 16 =& ' &' D >' '0 -&&' D -.' '0' >& 1' & &?0' D1--1' &' a-&K1' D'0' 0?#.1 10' &' @'+1' C1<0'#@ ' ?-A1 ' #'0' @<K10' <-A' &' 1-B 1<01' '-' K1@ D1' <-A' C &0C1 ' 1 ' -A' &' <+&'Ah' 0?BD1' 1-& > 10' <-A' '- ? '10 9 0&&' D<' D'0' 0<'A1' 0?#.1 10' >< 1' @ +1' 10 =?@@ ?-A1 ' D'0' C1<0' <-A' @<K10' C' D1' ' 1-8 B 1<B1' 1' K @@' D<' ' ' #1' & A1 -1A' <-A' 1-<A1A' # ' D<?A& ' '1' &=' D'0' C 101- ' C< @'<>1- 9 D<' 1+1 ' ?0 'B' &=' C1<0' K D'-' 1+1 " D' 1' &=' D'0' D'0' 0<'A' 1<>19 K D'-' D1' D' 1' KD1 1' D1' '0' ?0 'B1' &=' C1<0 9 A&&' B<?01' &C1-@ 1' <-A' 0&@1>@ ' &' #1' C &B@< >1A' 1 1@ ' ' ' ' >10' '-' <' 1 1' '-' ' ' ' C ' -B'C<@@ 100'&-0' D1' 1-&0' &=' D'0' C &B@<>'<B'&-' &' D'0' #'@@ <--1L1A -A' D<' 1+1 ' ?0 'B1' &=' C1<0' #1 -.' C 101- ' <' &- ' &=' D1' 0<'A' 100'&-09 '=' D1 ' B<?01' -&' D1' 0< A' C &B@<>'<B'&-' &' #1' ><A1' '-' =&? >1' <#&+1' 0< A' 0D<@@ =& =1 1' &' &? ' 0<'A' &+1 < -' & A1' < ' 1+1 ' >1' L L' D1= -.10

-.'' -@ !'#' -' '' -*!"2' ;! .''!' !' h30'% &# &.-' .' .0'' /@K -!%' !'' !' ! "&-*=' .-' 3 &-' . ' .'' 1& 0"!' . ' .0;+! +0!' !"!.

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02 &!!2. !' +$ #!'2 2/+'0 # 02!' !' .+.7&-*' (''.#+ 1 &. ' .';!' 1 Z "+ .0'' &1! '"' ' ! " ' !' !22&.-2=

' =& ' ?0 '1=' ' 1<B1' =& ' +6 '' A?1' 1L1B?B&-' &=' D1' 1' &> 00@&-0

' , '-.' &? ' &, 1'.-1' & A' B&-0'A1 ' D' D<' # ' D1' -1.@'.1-B1' <-A' > 0A1>1<- -.' =<+&? ' <-A' & D 1' '-& A'-<' 1' <?010' &=' D1' ?0 'B1' &=' 1<B1' '-' 1, ' D' 1' &=' D'0' D'0' 1<@>19 D1' <K10' <-A' & A1-<?-B10' ><A1' =& ' D1' C&@' 'H?1' F1@1' C1<B1' <-A' .&A1' ?@1' &=' D1' 0<>19 <-A' =& ' C=' 1' 0?1 '1' <-A' 10 =?@@ @'+'-.' &=' D'0' ?#.'1 '0' &=' D1' <>19 #1' -& ' A?@ ' 1L1B? 1A' <BB& A'-.' &' D1' 1-&? ' <-A' 1='1 1' D<' D1 ' K1 1' ><A1@<-A' & A1 -1A' =& 6 KD1 =1 ' D'0' ?@ 1 '0' #1' . 1+&?0@ ' D? 1' <-A' &? ' &=' 0?1 '1' &=' D1' ' #&A'10' <-A' .&&A10 9 &' D'0' . 1 1' A'0C@1<8 0' 16 =& ' &' D'>' '0 -& D'-.' >& 1' & &?0' D1-' &' a-&K1' D'0' ?#.'1 10' &' @'+1' C1<0'#@ ' ?-A1 ' D' ' @<K10' <-A' &' '-B 1<B1' '-' F 1@ D' <-A' C0C' 19 <-A' # <+&'A1' 0?BD1' & >' 1 '<-A''- ? '10 9 0&' D<' D'0' 01'A' 0?#.1 '0' >< '@'+1' >& 1' 10 =?@@ ?-A' ' D'0' C1<B1' <-A' @<K10' &' D' ' '-B 1<B19 D1' K'@@ D<' ' ' #1' & A1 -1A' <-A' 1-< 1A' # ' D<?=& ' 1' &=' D'0' C001-' C< @'<>1- 9 D<' (+0' ?0 B1' &=' D1' C1<B1' K' D'-' 1+0' D' 1' &=' D'0' D'0' 01'A' 1<@>19 K' D'-' D1' D' 0' 1D1 1' D1' '0' ?0 'B1' &=' C1-B19 A&' <?01' &C1-@ '<-A' 0&@1>@ ' &' #1' C1@< >1A' 1 1@ ' ''' ' >10' '-' <' 1 1' '-' ' ' ' C ' -B'C<@@ 100'&-0' D1' 1-&? ' &=' D'0' CB@<>'<B'&-' & D'0' #=@@ <--1L1A@ <-A' D<' 1, ' ?0 'B1' &=' C1<BD' #1 -.' C@01-' '<' <-' C=' D1' 0 1' A' 100'&-09 '=' D1 ' B<?01' -&' D1' 01'A' C1@<><B & ' &' #1' ><A1' '-' =&? >1' <#&+101' A9 0D<@@ =& =1' ' &' &? ' 01'A' & 1'.-' & A' < ' 1, ' >1' L L' 0

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?-A1 ' <' 'C1A<@@ 01<@1 C<>1A' D1' 1<@1' &=' D1' < BD10@ KD1 # ' '0' . &K1-' . 1 1'+1L<B'&-' &?#@1'<-A' A 0B< 1' &=' D1'0?#.1 10' &=' D1' , -.'&? ' &+1 1 -' C A@ F D1 =& 1' ' ' '0' 1-<= 1A' # ' D<@?Q ' 1' &=' D'0' C 101- 'C< @'<>1- @ D<' <@@ =1&==1>1- 10' . = 10' . <?- 10' A > 010' C 101- 18' >1- 10' -&> -<B'&-0@ <-A' <@@ & D1 ' K -.1 ' KD1 &' 01<@'-.' '0' 1H?'0' 1' &' #1' ><A1@ <= 1 ' D1' =10 1' &=' D1' ? '='B<B'&-' &=' &? ' <A ' '-' D1' + ' 1 1' &=' D1' 1'. -1' &=' &? ' &+1 1 -' & A1' D<' -&K' '0@ &=' <- ' C< B1@@ &=' D1' 0<'A1' @1A& > 1@ #1' D<A' A&-1' <-A' ><A1' # ' D1' - .' &? ' 0<'A' &+1 1 -' & A' ?-A1 ' ?-A1 ' D1' # &A1' 0 <@1' &=' D 0' D<?-B1 @ <0' ' ' '0' ?01A' '-' <@@ & D1 ' D -.10' B&-B1 > -.1' D1' &K-1' # ' D1' B&? 0' &=' D1' B&>1-' <K1@ <-A' # ' -&-1' & D1 ' 1<@1

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?-A' ' <0CAB'<@@ 01 1' -#>1A' D1' 1<@1' A=' A'1' < BD10@' KD1 # ' '0' . &K1-' . 1 1' +1L<B'&-' &?#@1' <-A' A'0B1' 1' &=@ D1' 0?#.'1 '0' &=' D1' , '-.' &''=@ & 1'.-' & A@ F D1 =& ' #1' ' ' - -< 1A' # ' D<-<& ' 1' A=' D'0' 8C01- ' C< @'<>1- @ D<' <@@ =1&==1-'1- '0' / 1 0' . <?- 10' A > '010' C01- 1>1- '0' - B'&-0@' <-A' <@@ D1' F ' '-.10' KD1 &' 01<@'-.' '0' 1H?'0' 1' &' #1' ><A1@' <= ' ' =&1' =10 ' &=' =&1' C? '='B<B'&-' &=' &? ' <A ' '-' D1' J0 1 1' &=' D1' 1'. -1' A=' &? ' &C1'. -' & A' D<' -&K1' '0@ &=' 1- 'C< B1@@' &=' D1' 01'A' @1A& > 1@ #1' D<AA1' A&-1' <-A' ><A1' # ' D1' , -.' &? ' 1'A' & 1'. -1' & A' ?-A' ' D1' # &A1' 1<@1' &=' D'0' ED<?-R @ <0' ' ' '0' ?01A' '-' <@@ &=&' ' D'-.10' B&- -.' D1' &K-1' # ' D1' E& 0' &=' D1' B&1@@ <K1@ <-A' # ' -&-1' D 1' A<@1

' '+6 +' +6 ' ' < & ' &=' &-A&-' .6 ' 6 P ' '+6 ' ' ' ' ?

&=' D1' +1 ' &=' D<>10' = &>' <- 0' &' 1-@<A1

' &? ' '.D-10' '@1' &>&-0' >' D'0' C#1- ' & '0A'<'&@ C< @'<>1- ' <001>#@1A@ D<' KD1 1' D1' <' 1' &=' &? ' =' D1' < & ' '1' &=' &-A&-' =& ' D1' >1' #1 -.' '0' &-01 +< &' &+1 ' D1' '+1 ' D<+ -.' D1' &-01 <B'1' &=' D1' F < ' ' <-A' +1 ' &=' 1 !2=' =D<> 0@ = &>' D1' # '. .1' &=' <-10' ?- &' D1' F < 1 0' &=' 1-@<A1' <-A' 1A1K< @ ' '0' 0&' D<' K' D'-' =1K1' 1 10' 1<BD10@ # ' 1>C10 '&=' K1A' ' <-A' . 1 1' <#?-A<?-B1' &=' K< ' ' '-' D1' 01'A' +1 ' &=' D<> 0@ A' 0' # 1BD10' '00?10' <-A' 'K ' B 1a 0' D< D' #1-' <-A' . &K1-' &? ' &=' =&1' 01'A' +1 ' &=' =&' 1<-0 &@ D<> 0@ <-A' # ' D1' 0<>1' A'+0' C<0 ? 10' <-A' >1A?10' <-A' . &?-A10' &=' A'C0' C &-10' #1-' A &K-1A' <-A' &C=@&K1-@ '-' KD'BD1' # 1BD10' '00?10' <-A' B 1a 0' <-A' . &?-A1' A &K-1A' D1' = 1' <-A' # &A1' &=' ='00D1' =& ' D1' >&0 1' C< '1' 10 ' D@ <-A' '-' D1' 0<>1' C@<B10' D1' 01'A' = 1' <-A' # &A1' '-' . 1 1' >?@ ' ?A1' #1-' A<'@@ ' <a1-' # ' D1' =0D1 0' D1 1@ K' D' ?-@<K=?@@ '-. ?10' <-A' -1 '0@ =& ' #<' 1' &=' @ 0' <-A' E&AA10' <-A' <@0&' =& ' =1A'-.' &=' D1' ' D&..10@ &' D1' ? 1 ' A10 ?BB'&-' &=' D1' 01'A' = 1' <-A' # &A1' ,8' D&?' <' 1>1A ' D1' < D' ' #1' C+'A1A;' D<' ' ' >< ' D1 =& ' C@1< 1' &? ' 01'A' D'.D-10' # ' D<A+ B1' <-A' <001- ' &=' =&1' @& A10' 0C?1@@10' <-A' 1>C& 1@@0' '-' D'0' C201- ' C< @'<>1- ' <001>#@1A' <-A' # ' <?= & ' 1' &=' D1' 0<>1@ &' & A1 -' 10 <#@'0D' <-A' 1-<= 1@ D<' <-A' =&1' <' 1' &=' &-A&-' !'2 &/' <-A' D'0' ?BB100&? 0' <' 10' =& ' =&1' >1' #1 -.' D<+1' D1' B&-01 +<B'1' <-A' ?@1@ <-A' @'a1' <?= & ' 1' '-' 1 ' &=' D1' 0-2!"' &.-' =&1' 01'A' # 1BD10' '00?10' 8<-A' B 1a 0' <-A' . &?-A1' 0&' A &K-1A' <-A' & =@&K1-' <0' =1 1' <0' D1' K< ' 1##1 D' <-A' 2' =& ' D1' =@&K1 D@ <0' &?BD'-.' D1' C?--'B'&-' =& ' ?0'-.' &=' -@<?@ <K= @' =?@@' -1 10' <-A' & D' ' -@<&=?@@ 1-. -10' '-' ='00D'-.@ @'a1' &2 &-*' <0' D1' <-A' D'0' CA1B100&? 0' D< D' D<AA1' & ' D< D' '-' D1' 0<>1' K< ' ' <-A' '+1 ' &=' D<> 0' K' D'-' D1' #&?-A10' <=& ' 1D1 B'A@ <-A' &' A& ' <@@ & D' ' @'a1' B& 1BB'&-' <-A' C?- 00D1>1-' D1 1@ B&- ' -.' D1' 1=& ><B'&-' <-A' 1@ A 1001' &=' ?-@<K=?@@ -1 10' <-A' 1-. -10@ <0' D1' <-A' D'0' CA1B100&? 0' D<+1' ?01A' <-A' &K1' &' ?01' '-' D1' 01'A' C' &=' D<> 0

9)' &+'A1A' <@K. ' =&< ' =&1' <' 1' &=' &-A&-' -& ' 3". '&2.!' .'" D'0' ?BB100&? 0' <' 10' =& ' D1' >1' #1 -.' D<+1' -& ' . =&1' B&-01 +<B'&-' -& ' ?@1' -1' <?==& ' 1@ '-' <- ' &=' =&1' -/'. !"2 <' 0<A' # 1BD10' '00?10' B =&10' <CA' . &?-A10' 0&' A &K-1A' <-A& =@&K1-@ K' D'-' D1' , -.'0' . &?-A1'& ' #1' -.'K' D'-' D1' = < >BD10' &=' <- ' C0&-1' & ' C0&-10' 0C?<@@ & ' 1>j C& <@e@ <0' &?BD'-.' D1' C?B'A&-' =& ' @'0'' ' &=' - -@<?=? ' -1 '0' <-A' & D' ' ?-@<?=?@@ '-. -10' '-' ='00D'-.@ -& ' &' A&' <- ' B& 1BB'&-' & ' C?- 0D>1-' D1 1' B&- - -.' D1' @ 1=& ><B'&-' <-A' 1A 1001' &=' - -@<?=?@@ -1 '0' <-A' <'. -10@ <0' D1' <-A' D'0' 01'A' <' 1' <-A' A1B100&? 0' D<+1' ?01A' <-A' &K1' &' '-' D1' 0<'A' C' &=' D<> 0

' D'0' &+'0&1' '0' '-01 1A' <= 1 ' =&1' & <@' 001- ' 1- 1 1A' &-' =&1' &@@

L+

!& ' D1' <'=1' &=' &-A&-

@ F D1 1' D1' <' 1' &=' D1' = 11' &=' &-A&-' =& ' D1' >1' #1 -.' '0' E&-01 +< &? ' D<+ -.' D1' &-01 @ <B'1' &=' D1' F < 1 ' <-A' +1 ' &=' D<> 0@ = &>' D1' # A.1' &=' <- 0' ?- A' D1' K< 1 0' &=' 1-A<@1' <-A' 1A1K< 1@ ' '0' 0&' D<' K D'-' =1++1' 1 10' # ' 1>C10 1' &=' K1A1 ' <-A' . 1 1' D<#?-A<-B1' &=' K< 1 0' '-' D1' 0<'A1' +1 '&=' D<> 0@ A + 0' # 1BD10' '00?10' <-A' B 1a10' D<+1' #1-' <-A' . &K1-' &? ' &=' D1' 0<'A' +1 ' &=' D<> 0@ <-A' # ' D1' 0<>1' A +1 0' C<0 ? 10' >1A&K10' <-A' . &?-A10' C=' A +1 01' C1 0&-10' #1' ' A &K-1A' <-A' &+1 =@&K1-' ' -' KD BD1' # 1BD10' '00?10' <-A' B 1a10' <-A' . &?-A0' A &K-1A' D1' = '1' <-A' # &A1' &=' = 00D1' =& ' D1' >&&0 1' C< 1' 10 ' D@ <-A' '-' D1' 0<>1' C@<B10' DH0<'A' ! 1' <-A' # &&A1' '-' . 1 1' >?@ ' ?A1' #1-' A< @ ' <a1-' # ' D1' 0<'A' = 0D1 0' D1 1@ F D' ?-@<K=?@@ 1-. -10' <-A' -1 10@ =& ' #< 1' &=' @ 0' <-A' &AA 0' -A' <@0&' =& ' =1A -.' &=' D1' ' D&..10@ &' D? 1 ' A10 ?B '&-' &=' D1' 0< A' = 1' <-A' # &&A1' K D&? ' <' 1>1A'1' D1' =< D1 ' C + A1A' #1 ;' D1' , -.' &? ' 0<'A' &+1 1 -' & A' # ' D1' <A+ 01' <-A' <001- ' &=' D1' & A10' C' '>1'@ <-A' 1>C& 1'@ <-A' < 1' D1' C < 1 ' &=' D1' 0< A1' &==@1-0' '-' D1' 0<'A' C< ''<>1- ' <001>#@1A' <-A' # ' D<?^& ' 1' &=' D1' 0<>1@ D< D' & A1 -1A' 10 <#@'0D1A' <-A' 1-<= 1A@ D<' D1' <' 1' &=' &-A&-' <-A' D'0' ?BB100&C 0' <' ' =& ' D1' >1' #1 -.' D<+1' D1' B&- <8+< ' <-A' ?@1@ <-A' @'a1' <?= & ' 1' '-' 1+1 ' &=' D1' 0< A' # 1BD10' '00?10' <-A' B 1a10' <-A' . &?-A1' 0&' A &K-1A' <HA' &+1 ' =@&K1-' <0' =1 1' <0' D1' K< 1 ' 1##1 D' <-A' =@&K D@ <0' &KBD -.' D1' C?- B'&-' =& ' ?0'-.' &=' ?-@<K=?@@ -1 '0' <-A' & D1 ' ?-@<K=?@@ 1-. -10' '-' = 00D -.@ a1' <0' D1' <-A' D'0' C 1A1B100&? 0' D<+1' D<A' & ' D< D' '-' D1' 1<>1' K< 1 ' <-A' +1 ' &=' D<> 0' K D'-' D1' #&-A10' <=& 1' 1D1 01A@ <-A' &' A&&' <@@ & D1 ' @'a1' B& =1BB'&-' <-A' C?-'00D1>1-' D1 1@ B&-B1 - -.' D1' 1=& ><B'&-' <-A' 1A 1001' &=' ?-j @<K=?@@ -1 10' <-A' 1-.'-10@ <0' D1' <-A' D'0' C 1A1B100&? 0' D<+1' ?01A' <-A' &K1' &' ?01' '-' D1' 0<'A1' +1 ' &=' D<> 0 ' Q@1' & ' @1' +1?@ P'

&+ A1 ' <@F1 ' D<' D1' <' ' &=' &-A&-' -& ' D'0' ?BB100&? 0' <' 10' =& ' D1' >1' #1 -.' D<+1' -& ' D1' &-01 +<B'&-' -& ' ?@1' -1' <?= & ' 1@ '-' & '&=' D1' 0<'A1' # 1BD10@ '00?10' B 1a10' <-A' . &K-1A10' 0&' A &K-1A' <-A' 1+1 =@&K1-@ K D'-' D1' , -.'0' . &K--A' & ' #1 -.' K D'-' &- ' ==<?-BD'010' &=' &- ' C1 0&-0' & ' C1 0&-10' C' '>1'@ & ' 1>C& 1'@@ <0' &KBD -.' D1' C?- B'&-' =& ' ?0 -.' &=' ?-@<K=?@@ -1 10' <-A' D1 ' ?-@<K=?@@ 1-. -10' '-' = 00D -.@ -& ' &' A&&' &- ' B& 1BB'&-' & ' C?- 0D>1-' D1 1' B&-B1 - -.' D1' 1=& ><B'&-' <-A' 1A 1001' &=' ?-@<K=?@@ -1 1 ' <-A' 1-. -10@ <0' D1' 0<'A1' <' 1' <-A' D'0' C 1A1B100&? 0' D<+1' ?01A' <-A' &K1' &' ?01' '-' D1' 0<'A' +1 ' &= D<> a'

J ' ' N$ ' J ' ' L M ' 'O %'&H

V D1' @'1' &=' F . D ' ' V ' g ' ; '

]
N$ ' L'
' * '

!#!22& @' . '
' -*+&2 '
3. 0+ &. -' . '
!' 2+!' . '
V &* ' J

!' !# @'
!"!. ' "..H-'
R . -2. +&/ &. -'
. 'B "1'H

 C ' ' B&-B1 -'- .1' D1' 0@1' &=' F ' . D ' /
! ' ' ' <0' ' ' '0' &' D1' , - .' &? ' & <. -'
& A'0' . 1 1' ?1 '1' ' <-A' < F ' &' D1' 0?1 '1' &=' 1'
1<@>1' &=' - .@&-A' ' < ' D1' 0@1' &=' F ' . D ' '-' D1'
&?- '1' &=' ? D ' #1' K @1' '-D<#' 1A' K' D' - .@'0D' C1&C@1' ' =& ' D1' A1=1-B1' <0K1@ ' &=' D'0' <?B'1-' -1 > 10' &=' D1'
1<@>1' &=' ! <?-B1' <0' &=' & D ' ' C< '10 ' D1' KD'BD1' 0@1' '0'
@< 1' A1B< 1A' &=' C1&C@1' ' # ' 1<0&-' D< ' >< - ' &K-10'
<-A' +'@<. 10' #11 -' @1 1' A&K-1' <-A' D1' =1@A10' A a1A' <-A'
><A1' C<0 ? 10' =& ' #10 '0' <-A' B< <@@10 ' -A' <D&' >< - '
AK1@@'-.' C@<B10' =1 >10' <-A' =1 >1D&@ 10' D<+1' &=' @< 1'
 >1' #1-' ?01A' &' #1' <a1-' '-' &' &&-' >< - - 0' D&@A' <-A'
D<-A10'@ < ' &=' &@A' >1' K1 1' K&- ' &' #1' '-' >< - '
01, <@@ C0&-10' D&@A10<-AD<-A10'@ <-A' >< - 01+/< ' D&?01'@
D&@A10' a1C 1' '-' D1 >'@ <-A' D1 # ' >&BD1' C1&C@1' >?@j
'C@'1A'@ <-A' D1' 0<>1' '0@1' D1 # ' K1@@ '-D<#' 1A'@ D1'
KD'BD1' -&K1' # ' D&BB<B'&-' <=& 01'A' '0' A10&@< 1' <-A' -& '
'-D<#' 1A'@ #? ' &BB?C'1A' K' D' #10 =' <-A' B< <'@@ 0&' D< ' '=
D<0 ' 1>1A ' #1' -& ' KA1A' D< ' 0@1' B<-' -& ' #1' @&-. 1'
a1C 1' <-A' A1=1-A1A'@ #? ' &C1-' <-A' 1A ' &' D1' D<-A10'
&=' 1' , '-. '0' 1- -1> 10'@ KD'BD' E&A' =& #11A'; ! & '
 1>1A ' KD1 &=' #1' ' ' & A1 -1A' 1-< 1A' <-A' 0 <##'0'0D1A'
' D<A+ 01' <-A' <001- ' &=' D1'@ & A'0' 0C?1@@=' <-A' 1>8'
C& 1@@=' <-A' D1' &>&-0' '-' D'0' C01- ' C< @'<>1- ' <001>j
#@1A' <-A' # ' <?= & ' 1' &=' 1' 0<>1'@ D< ' = &>' D1-0=& D'
-&' ><5' &=' C0&-1' &=' KD< ' 10 < 1' A1. 1' & ' B&- B'&-' D1'
'0' & '0D<@#1'@ <a1' 1 - ' 015<@@ =1 >10' >&1' D<-' &&-'@ &='
><-& 0' @&-A10' 1-1>1- '0' C0&-<. 10' & ' D10')' KD1 &='
 D1' =1 >1' &=' D1 >' <@@ &.'A 1' 0D<@@ 1LB1A1' D1' 0&>1'
&='] ' >/ B' 1 1@ ' 'G DA' '=' << ' 01 <@@ @1101'0 <=& 1' D'0'
 >1' D<+1' #11-' ><A1' &' 1 - ' C0&-1' & ' C0&-10' &=' A'50'
0?- ' =1 >1D&@A10' &, ' D1' 01'A' 1 1@ ' +<@?1' &=' L ' >0 B@
 D1-' D1' C0&-1' & ' C0&-10' D< ' @'&K1' D&@A1' D1' 0<>1' &'
BD&01' &&-' & ' >&&' &=' D1' 01'A' =1 >1D&@A10' < ' D'0' C@1<j
0? 1@ 0&' D< ' D1' =1 >1' &=' D1 >' <@@ 0&' BD&01-' #1' -& '
<#&+1' D1' 1 1@ ' +<@?1' &=' L ' >< B@' &' D&@A1' <= ' ' D1'
=&? >1' &=' D'0' @110'@ <-A' D1' 1>1-<?- '@ = &>' D1' =10 ' &='
 1 - ' 'BD1@@ D< B<-. 1@@ KD'BD1' 0D<@#1' '-' 1' 1 1' &='
&? ' & A' ' LLLL ' &' B1<01' <-A' #1' ? 1 @ '
+&'A1'@ <-A' D1' &BB?C'1 ' <-A' R>1 ' &=' D1 >' = &>' D1-0'
&' #1' A'0BD< .1A' < 1-0 ' D'0' @100&? ' &=' D1' 1- ' 101 +'A'
?C&-' D1' 0<>1' @1<010'G -A' '=' 1- ' C0&-1' A&' D1 <= 1 ' &'
 1' B&- '1' &=' D'0' =@1' D< ' D1-' D1' @10011' '-' D< '
#1D<@=' =& =1' 1' &' D1' , - .' =& ' 1, ' 0?BD1' <a' - .' L' ' '
 &+'A1A' <@K1 10' D< ' D1 ' KD'BD1' D<+1' C<'A' <- ' = -10@'
/ & ' ><A1' #'@A' .10' & ' A&-1' . 1 1' 1C< <B'&-' ?C&-' <- '
0?B, # =1 >10@' <-A' #1' C? 1' = &' D1' 0<>1' =1 >1' # ' 1<0&-'
&=' D'0' =@1@' 0D<@#1' 1B&>C1-B1A' =& ' 0?BD1' #'@A' - .'
& ' 1C< <B'&-' <0' '. D ' <-A' . &A1' B&-0B'1-B1' 1H?' 1-@
D<' 1B&>C1?B1' &' #1' <A ?. . 1A' # @ D1' A'0B 1B'&-' &='
D1' <C' <' . -1' &=' 1' 01'A' 0@1' =& ' D1' >1' #1 -. ' & '
D'0' '1? 1-/ - ' &=' D1' 0<>1' '-' D'0' <#01-B1

<7@ &-' !' &/' +&! ' L ' +' ' %' .$-

W '
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5
* &-2 ' !'
/ ! " 0/&-*'
. "/2' . '
V "/2 & e'
#. - &"1 ! / '

C ' C ' <. < -0 ' = <?A?@1- ' =1&==>1- =' 1-A' - .1' &'
A1= <?A1' 1' , '- .1' &=' D'0' K< A10

F '# ' <-' 10 < ? 1' ><A1' < ' < @1# ' . . 1' ' ' K<0'
& A1 -1A@ < ' KD<-' 1-<?- 10' ><A1' =1&==1>1- '0' '-'
= <?A1' &' ><a1' 1' @& A'0'&=' D1' =11' &' @101' D1' ' K< A'0@
 1' @& ' 0' 0D?@A' D<+1' K ' '0' &' 1B&5' D1' ' F < A'0'
. 1-0 ' 0?BD1' =1&==110@ <0' '-' D1' 01'A' 0 < ? 1' <>&-. 10'
& D 1@ D'- .10' <CC1 ' ' >& 1' C@1 -@ ' < ' @< . 1G' 0' D' D1'
><a'-.' &=' KD'BD1' 0 < ? 1' >< - ' ><. '-<A&-0' D<+1'
#1-' D<AA1' <-A' 1 ' #1-' ?01A@ <0K1@@ # ' =1&==1>1- 10

F < A10

@ F D1 1' # ' <-' 10 < ? 1' ><A1' < ' < @1# @A. 1'
' K<0' & A1 -1A@ < ' KD<- -1' 1-<?- 10' ><A1' =1&=1j
>1- 10' '-' = <?A1' &' ><a1' D1' & A10' &=' 1' =11' &' @101'
D1' ' F < A10@ D1' & A10' 0D&@A1' D<+1' K @ 10' &' 1B&+1 '
 ' F < A10' < 1-0 ' 0?BD1' =1&==10@ <0' '-' D1' 0 A1' 10 < ? 1'
<>&-. 1' & D1 ' D - .10' <CC1 1 D' >& 1' C@1 -@ '< 1' @< . 1G'
' D' D1' ><a - .' &=' KD'BD1' 10 < ? 1' >< - ' ><. -<B'& '0'
D<+1' #1' D<A' <-A' 1 ' #1-' ?01A@ <0K1@@ # ' '=1C==1>1- ='0

!?

" 8 < 7(. 4)8)< ' - : # - .

ME' 6 ' ' ` !

= -1 <-A 1B&+1 1 < C D1 K 01 &' C? & A1 = &>' D1' ' K< A1 ' &=' '&-A1 D& A1-' &=' D1 >' # ' - .D 1 01 +'B1 ' ' D1 =& ' & A1 -1 ' 10 <#@ 00D1A' <-A' 1-<= 1A $ # ' <?=@& ' 1&=' D1' 0<'A' C 101- ' < @'<>1- ' D< ' D1' 0<'A' 10 < ?' ' &=' < @1#? .D' #1' &#01 +1A' <-A' a1C ' '-' <@ 'D<-1 ' &=' D'- .' <= 1 ' D1' =&? >1' <-A' 1'=1Q ' D1 1&=' -A' &+1 ' D< ' ' ' ' A1 -1A' <-A' 1-< 1A' # ' D1' 0<'A' <?A& ' 11 D< ' '=' &- ' C1 0&-<' & ' C1 0&-10' &=' KD< ' 10 < 1' A1. 11' & ' B&-A'B'&-' D1' & ' D1 ' #1' &=')' & ' D1 1' <= 1 ' 0D<@ #1' 01'R1A' '-' A1>1<-1' & ' '-' 1+1 0'&-' &=' 10 < 1' &=' D1 ' <'' -B1 #1 - .' 1-<?- ' '> >1A'< ' F' D1' & A'0' &='T> ' <0 1@@1 ' <-1 0' &-A10' <-A' 1-1>1- 10' & ' & D1 ' D18' 1A' <>1- 10' D&@A1-' # ' , - .D 10' 01 B1' '-' D'0' & ' D1' ' A1>1<-1' <0' &=' =11 &' D101' &=' &- ' & D1 ' C1 0&-1' & ' C1 0&-10' <-A' &=' D'0' D1' 10' &-1@ D1' &' FD&0' '01' D1' & ' V D1 ' #1' 0&' 01'01A' A1'1 D' D'0' D1' 1' #1 - .' K' D' -' <.1 -&&' K @@1' # ' D >' A1B@< 1A' -& ' ><A1' '-' D'0' @ =' &?BD - .' D1 C 1> 0010' &=' &- ' &=' D1 > D1' & A1' &=' KD&>' 0?BD1' <0 1@@10' <-1 0' &-A10' 1-1>1- 10' <-A' 18' 1A' <>1- 10' #1-' D&@A1-' ' > >1A'< @ D<+1' <' F ' ' &=' .D ' &=' F < A1' <0K1@@ =& ' #&A ' <0' =& ' D1' @&-A1 <0' D1' & A' 0D&@A1' D< 1' D<A' =' D1' 0<>1' <? 110 1' D<A' #1' '-' C&00100'&-' &=' D< ' 10 < 1' 0&' #1 - .' '-' ?01' < ' >1' &=' D'0' A1 D <-A' -&' 0?BD1' 0 < 1' &' D'0' ?01' > <A1 -A' '='&- ' 0?BD1' D1' 1' #1' &=' =?@@ <.1' < ' D1' A1 D' &=' D'0' <?-B10 1 &' C< ' <' 1@11=' <0' D'0' <?-B10 1' KD&0' D1' 1' D1' '0' D<A' #1' '-' C&00100'&-' &=' D< ' 10 < 1' 0&' #1 - .' '-' ?01' < ' >1' &=' D'0' A1 D <-A' -&' 0?BD1' 10 < 1' &' D'0' ?01' > <A1' -& ' D<A ' '0' <@0&' 0 <#@'0D1A' <-A' 1-<= 1A' # ' D1' 0<'A' <?^& ' 1 D< ' 0?BD1' D1' 1' & ' D1' =0' 0&' #1 - .' '-' K< A1' 0D<@ D<+1' @ a1' <BA&-' C=' K<0 ' < 1C0 ' D1' <'A' & A 0' ' < 1-0 ' D1 > ' '-' KD&0' K< A1' D1 ' 0&' #1 <0' D1 ' & ' &- ' &=' D1 > ' 0D&@A' D<+1' D<A <-A' 1B&+1 1' ?BD1' " <>< .10 <-A' 0?BD1' 1-<@ '1 0' &' #1' &' D1' 0<'A' & A'<CA' E< A1 <0' <0' 0D&@A1' D<+1' #1-' '=' D1 ' <?-B10 10' D<A' A1'1A' D1 &=' 01'01A' -A' &+1 ' =' &- ' 0?BD1' & A' # - .' - ' ?BD1' F ' ' &=' .D ' &=' F < A1' < 1-0 0?BD1' C1 0&-1' & ' C1 0&-10 <-A' #1' #< 1A' '-' D1' 0<>1 D< ' D1- -1' D1' 0<>1' A1=1-A<? ' ' & ' A1=1-A<?- 10' 0D<@ 1B&+1 ' A<><.10' < 1-0 ' D1' 0<'A' C@1' - '=1' =& ' D1' ' K & -.=?@ +1L<B'&-' '-' D1' 0<>1 &+ A1A' <@K< 10' D< ' D'0' <=@1' #1. -' ' <a1' 1==1=' &=' D1 10' &=' D1 >' D< ' 0D<@@ A1 1' <= 1 ' D1' =10 1' &=' 0 1 ' D< ' 0D<@@ #1' '-' D1' 1 1' &=' &? ' & A' E&A

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= -1 <-A' 1B&, 11 <' & D' K'01 &' C? ' @& A'0' = &>' D1' ' K< A1 <' &=' @&-A'0' D&@A1-' &=' = 1 >' # ' , - .D '0' M+'B1' 1' ' ' D1 =& 1' & A1 -1A' 0 <# '00D1A' <-A' 1-<= 1A' # ' D<?1 & ' 1' &=' D'0' - ' C< @'<>1- ' D< ' D1' 01'A' 0 < ? 1' &=' < @1# '. .1' #1' &#01 +1A' <-A' a1C 1' '-' <@@ ><5' &=' D' - .1 <= 1 ' D1' =& >1' <-A' 1==1= 1' D1 &=' -A' %& , ' D< ' #1' ' ' & A1 -1A' <-A' 1-<E1A' # ' D1' 01'A' < @E& ' 1 D< ' '-'=' 1 'C0&-1'& ' 0&-1<'&='KD< '10 < 1' A1. 1' & ' B&-A'B'&-'ZD1' & ' D1 ' #1' &=9 8#1' & ' D1 <= ' ' 0D<@#1' 01'01A' '-' A1>1<-' & ' '-' 1+>&-' &=' 10 < 1' &='1-D1 ' W? - B1 #1 - .' 1-<?< ' > >1A'< ' & D1' @& A' &=' <- ' <0 1@@' <-1 0' @&-A1 ' <-A' 1-1>1- 10' & ' & D 1' D1 1A' <>1- 10' D&@A1-' # ' , - .D '0' M+'B1' '-' D'0' & ' D1' 1' A1>1<-1' <0' C=' =11 &8 D?01' &=' <- ' & D' ' C0& 1' & ' C0&-10' <-A' &=' D'0' D1' 10' &?1' D1' & ' KD&01' ?01' D1' & ' D1 ' #1' 0& 01'01A' A 1 D' D'0' D1' 1' #1 - .' K' D' -' <.1 -&' K' @@# 'D' >' A1B@< 1A8 - ' ><A1' '-' D'0' @ =1' &?BD' - .' D1' ?$!! ! & ' <- ' &=' D1 > D1' @& A' &=' KD&>' 0?BD1' <0 1@@10' <-1 0' @&-A10' 1-1>1- 0' <-A' D1 1A' <>1- 10' #1' D&@A1-' >1A'< @ 0D<@@ D<+1' <' K ' 1' &=' '. D ' &=' F < A1' <0K1@@ =& ' D1' #&A ' <0' =& ' D1' @&-A' <0' D1' @& A' 0D?@A' D<+1' D<AA1' '=' D1' 0<>1' <?-B10 1' D<A' #1' '-' C&00100'&-' &=' D< ' 10 < 1' 0&' #1 - .' '-' ?01' < 1' >1' &=' #'0' A1 D <-A' -&' 0?BD1' 10 < 1' &' D'0' ?01' > <A1' -1 ' D<AA1 <-A' '=' <- ' 0?BD1' D1' 1' #1' &=' =?@@ <.1' < 1' A1 D' &=' D'0' ?-B10 1 &' C< ' <' 1@1=' <0' #'0' <?-B10 1' KD&01' D1' ' D1' '0' D<AA1' #1 -' '-' C&00100'&-' &=' D< ' 10 < 1' 0&' #1 - .' '-' ?01' < 1' >1' &=' D'0' A1 D <-A' - ' 0?BD1' 10 < 1' &' D'0' ?01' > <A1' -& ' D<AA1 ' 1' ' <@0&' 0 <D@'00D1A' <-A' 1-<E1A' # ' D1' 01'A' <?= &+' 1 D< ' 0?BD1' D1' ' & ' D1' 10' 0&' #1 - .' '-' K< A1' 0D<@@ D<+1' @'a1' <BB'&-' &=' F <0 ' < 1-0 ' D1' 01'A' @& A'0' & ' < 1-0 ' D1 >' '-' KD&01' F < A1' D1 ' 0&' #1 <0' D1 ' & ' 1- ' &=' D1 >' 0D?@A' D<+1' D<AA1 1-A' 1B&+01A 0?BD1' A<><.10 <-A' 0?BD1' C1-<@ 110' &' #1' &' D1' 01'A' @& A' <-A' .< A1 -0' <0' 0D?@A' D<+1' #1-1 '=' D1' '<?-B10 10' D<A' A 1A' D1 &=' 01'01A' -A' &, ' '=' 1- ' 0?BD1' @& A' # '-.' <- ' 0?BD1' F ' 1' &=' '.D ' &=' F < A1' < 1?0 ' 0?BD1' C0&-1' & ' C0&-10 <-A' #1' #< 1A' '-' D1' 0<>1 D< ' D1-' D1' 0<>1' A1=1-A<?- ' & ' A1=1-A<?- 10' 0D<@@ 1B& ' A<><.10' < 1-0 ' D1' 01'A' C@1 -8 '=0' =& ' D1' ' K=&- .=?@@ +1L<B'&-' '-' D1' 0<>1 ' &+'A1A' <@K1 0' D< ' D'0' <E1' #1. -' &@ <a1' 1==1E1' &=' D1' D1' 10' &=' D1 >' D< ' 0D<@@ A 1' <= ' ' D1' =10 ' &=' 0 1' D< ' 0D<@@ #1' '-' D1' 1 1' &=' &? ' & A' E&A ' ' LLLL

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$ * ' <-A' B&?- 1=1 -.' &=' .&@A' <-A' 0'@+1 ' = & D1 ' @&-A10' 0?== 1A' &' 1--1' '-' D'0' 1<>1' '0' ><A1 1<0&-

! & ' <0' >&BD1 <0' # ' D1' , -.' 0' 0?==1 < -B1' A +1 01' B&' .-1' &=' E&@A1' <-A' '@+1 KD'BD1' #1' -& ' &=' D1' , -.' 0' C &C1 ' B&' .-1' &=' -.@&-A1 #1' B? <- 1' '-' C< >1- ' K D'-' D'0' 1<>1 A +1 0' <-A' >< - ' 1+ @@A'0j C&01A' C1 0&-10 C1 B1 + -.' D< ' D1' =& . -.' <-A' B&?-8 1=1 -.' &=' 0 BD1' &' .-10' 0' -1 D1 ' =1@&- 1' -& ' 1<0&-9 C 10?>1' <-A' <a1' C&-' D1 >' =& ' D1' ' <+<' 1' <-A' C &= 1' &' B&?- 1=1 ' <-A' =& .1' 0?BD' B& -10 &' D1' . 1 1' D? 1' <-A' C 1 ?A'B1' <0K1@@ &=' D1' , -.' &? ' &@ +1 1 -1' & A1' <0' &' D1' D? 1' &=' <@@ D1' , -.' 0' ?#8 .1 10 ' '0' D1 =& 1' & A1 -1A' <-A' 0 <#@'0D1A' # ' <?B8 & ' 1' &=' D1' 0<'A' < @'<>1- 9 D< ' D1' B&?- 1=1 -.' <-A' =& . -.' &=' 1+1 ' 0?BD1' & -1' #1' <A ?.1A' =1'0&-9' <0' ' '0' &=' D1' B&?- 1=1 -.' &=' D1' C &C1 ' B .-1' &=' D1' , -.' &=' D'0' 1<>1A'

C ' C V <.< -0 ' B&?- 1 =1 ' -.' &=' =& < -1' & -1 ! ' <0' >?BD1' <0' # ' D1' , ' -.' 0' 0?= 1 <?-B1' A', 0 B& -10' &=' E&@A' <-A' '@, 9 KD'BD1' #1' -& ' &=' D1' , ' -.' 0' CC1' 1& -1' &=' -.@<-A9 #1' C? <-' ' '-' C< >1-' K' D'-' D'0' 1<@>1 9 A'C0' <-A' ><- ' 1+'@@ D0C&01A' C0&-10 CB1 +@ -.' D< ' D1' =& .' -.' <-A' B&?- ' =1 ' -.' &=' 0?BD1' B& -10' '0' -1' D1 ' =1@&- ' -C ' 1<0&-9 ? > 1' <-A' <a1' ?C&-' D1 >' =& ' D1' ' 0' -.?@1 ' <+<' @1' <-A' C=' 1' &' B&?- 1=1 1' <-A' =& .1' 0?BD1' & -10 &' D1' . 1 1' D? 1' <-A' C ?A'B1' <0K1@@ &=' D1' , -.' &? ' 0& 1' .-1' @& A' <0' &' D1' D? 1' &=' < ' D1' , -.' 0' 0 #.1 '0 1' ' ' D1 =& ' & A1 -1A' <-A' 0 <# 00D1A' # ' # ?E& ' 1' B&=' D'0' 01H ' C > @' <>1- 9 D< ' D1' BC?- 1=1?-.' <-A' =& .' -.' &=' 1+ ' 0?BD' B& -1' #1' V<A ?..1A' 1<0&-9 <0' ' ' '0' &=' D1' B&+> 1=1 ' -.' &=' D1' CC 1' B& -1' &=' D1' , ' -.' &=' D'0' 1<@>1

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-A' D<' -&' 1@1<01' '&=' 1- ' B&1-' C0&-1ƒ D1'<= ' ' &' #1' D<A1 ' &' 1- ' 0?BD1' C '1ƒ KD1 1' #1=& 1' & ' <= I ' 1- ' <BB'&-' C&C?@1 ' & ' 1-A' 1>1- ' &=' D1' 0<>1' D<A' & ' B&>1-B'A' & ' ><A1' D<- .'- .' D1' 0<>1' < B'&-ƒ #1' '@@ 1- ' K'01' <+<'@<#@1' & ' 1'=1 ?1@@' &' @1 1' & ' &' 0? ß B1<B1' D1'01'A' <BB'&-' 1-A' 1>1- ' CB1001' & ' 1L1B?A&- ' &+'A1A' ©<@K< ' D<' -&' C@1 - '=' & ' C@1'- =0' #1' -& ' '- 1- 'Ş K0Œ =1B1 +1A' &' <+1 1' 1- ' B&+ -1' '-' 1- ' <BA&-' C&C?@1 ƒ KD1 1' D1' C& - 1'&=' D1' 0<>1' <BB'&-' & ' 1@@'0' D<' B&+ -1' & ' B&@@?0'&-' D<+1' #1-' &-10' '1A@' & -A' @<?='' ' =&?-A1' K' D' D1' C@1 - '=' & ' C@1 - '=0' & ' < 1-0 ' D1 >ƒ # ' <@@' &=' L' ' >1-' <-A' -&' & D' K'01

-A' D<' -&' 1@1<01' &=' & - ' B&>1-' C1 0&-1' D1 1' <= 1 ' &' #1' ><A1' &' & - ' 0?BD1' C< '1ƒ KD1A1 ' #1=& 1' & ' <= 1 ' & - ' <BB'&-' C&C?@1 ' & ' 1-A' >1- ' &=' D1' 0<>1' D<A' & ' B& &1-B1A' & ' ><A1' D<- . - .' D1' 0<>1' <BB'&-ƒ #1' '-' &- ' K 01' <+<'@<#@1' & ' 1==1B ?<@' &' @1 ' & ' &' 0? B1<01' D1' 0<'A' BA&-' 1-A' 1>1- ' C &B1001' & ' 1L1B?B'& ' &+'A1A' <@K< ' D<' -&&' C@< - '=' & ' C@< - =1Œ #1' '-' &- ' K 01' 1B1 +1A' &' <#< 1' & - '1&+ -' '-' &- ' <BA&-' C&C?@1 ƒ KD1 1' D1' C& - ' &=' D1' 0<>1' <BA&-' & ' 1@@1Œ D<' B&+ <' & ' B&@@?0'&-' D<+1' #1-' &-10' '1A@' & ' @<K=?@@ ' =&?-A1' K D' D1' C@1 - '=' & ' < 1-0 ' D1'>' # ' <@@' &=' L' ' >1-' <-A' -&' & D1 K 01

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02 &#!2' . ' !' 3! #!' ." .'" .+E' -/' 0 .+E' 1 @' &. HO&"!' . 'L 20# ' ! 2' -/' 0-&2 ' !-/!"2

' =& ' ' 01 +<B&-' C=' D1' == 1' &=' ! 0D1'

&' D1', -.' &? ' 0&=1 . -1' & A '

' ' &? ' &> -0' '-' D'0' C01- ' C< @1 -1- ' <001>#@1A© D<' KD1 1' A', 0' 0 < ? 10' <-A' & A1-<?-B10' =& ' 0<+' -.' <-A' a1C -.' &=' = 1' <-A' # &&A1' &=' !'0D' '-' = 10D' C +1 0' &=' D'0' 1<@>1' #1=& 1' D'0 >1' D<+1' #1-' ><A1' <-A' & A1'. -1A@ #?' =& '0<+ -.' <-A' a1C'-.' &=' = 1' <-A' # &&A' &=' ='00D' 10& '-.' &? 1' &=' D1' 11' <-A' 0<@' K< 1 0' '- &' D<+1-0' <-A' B 1a 0' K' D'-' D1' 01'A' 1<@>1@ <- '& A1-<?-B1' .1 <@@' D< D' -& '#1' C? +1'1A' -1' ><A1© D&?' #1' ' ' ' K1 1' =?@@' 1H?'0' 1' <-A' C='<#@1' &' <@@' D1' &> -0' &=' D'0' &? ' 1<@>1@ <-A' 0 @@ ' & ? 0?#8' .'1 '0' <-A' '-D' <?- 10' -.D' <A & - -.' &' D1' <001' <-A' <+1-' &=' =& A' '-' D1' &?- '1' &=' ?==@ K' D'-' KD'BD1' <001' <-A' <+1-' D1 1' '0' 1 1@ ' . 1 1' >?@ ' ?A1' &=' 0C<K-' D' <K-' <-A' # &&A' &=' ='00D' '-' D1' 01'A' 1<@>1' #1=& 1' D'0 >1' D<+1' #1-' ><A1' <-A' & A1' .-1A@ #?' =& '0<+ -.' <-A' a1C' -.' &=' = 1' <-A' # &&A' &=' ='00D' 10& -.' &? ' &=' D1' 11' <-A' 0<@' K< 1 0' '- &' D<+1-0' <-A' B 1a 0' K' D'-' D1' 01'A' 1<@>1@ <- '& A1-<?-B1' .1 <@@' D< D' -& '#1' C? +1'1A' -1' ><A1© D&?' #1' ' ' ' K1 1' =?@@' 1H?'0' 1' <-A' C='<#@1' &' <@@' D1' &> -0' &=' D'0' &? ' 1<@>1@ <-A' 0 @@ ' & ? 0?#8' .'1 '0' <-A' '-D' <?- 10' -.D' <A & - -.' &' D1' <001' <-A' <+1-' &=' =& A' '-' D1' &?- '1' &=' ?==@ K' D'-' KD'BD1' <001' <-A' <+1-' D1 1' '0' 1 1@ ' . 1 1' >?@ ' ?A1' &=' 0C<K-' D' <K-' <-A' # &&A' &=' <@@' ><-1 ' ! 00D10' &=' D1' 11@ -A' D1 1' K&@A1' @< .1@ ' 1-B 1<01' <-A' >?@ 'C@'1' =' D1 ' > .D ' D1 1' B&-+1-'1- ' >1' #1' 0?=8' =C1A' &' <# A1© ?' -&K' ' ' '0' 0&&' D<' '-' @< 1' A< 10' =& ' <' 0' - .?@1 ' B&+1 01' <-A' @?&/1' '-' <a -.' &=' <' =1K1' . 1 1' ! 00D10@ B1 1 -1' C1 0&-10' D<+1' ?01A' &' 01' <-A' & A1 -1@B1 1 -1' #& 10' B<@@1A' <@@# &1 10' =10 1-1A' K' D' <-a 10@ D<+ -.' K D' D1 >' 0?BD1' ><-1 ' ?- 10&-<#@1' -1 10' <-A' 1-. -10@ D<' <@@' ><-1 ' = 1' <-A' # & A1' &=' ! 00D1' '-' D1' 0<'A' D<+1-' >?@ 1C@'1A' '0' <a1-' <-A' A'0@ &'1A@ <0K1@@ . 11 ' = 00D10' ?-B10&-<#@1' <0' D1' 0<'A' = 1' <-A' # &&A' &' -&># 1' '--?>1 <#@1@ F D' D1' KD'BD1' = 1' <-A' # &&A1' D1' 0<'A' C1 0&-10' K D' C< 1' D1 &=' =1A1' D1' ' D&..10@ <-A' D1' 10'A?1' D1 ' C? ' <-A' @1 ' ' ' '-' . 1 1' C 10' '-' &' D1' . &?-A1@ KD'BD1' 1@@10' K&@A1' & >1' &' 0?BD' C1 1@&?0' '-=1BB'&-' &=' 1 1' D<' -&&' C1 0&-1' @?A1 ' 10& -.' 0D@A1' ' ' <# A1 & ' 0?== 1© &' D1' . 1 1' D? ' &=' D1' , -.'0' @'1.1' C&1C@1' K D'-' D'0' 1<>1' <-A' 0C1B'<@@ ' &' D1' , -.'0' 0?#.1 10' <-A' '-D<#' <- 10' K D'-' D1' D' 1' &=' & =&@a1' <-A' ?==&@a1@ -A' <@0& B<?01 D' . 1 1' 0B< B' 1' &=' ! 00D1' '-' D<' B&?- 110' KD1 1' <=& 1' D'0' >1' K1 1' K&?- 1' &' #1' . 1 1' C@1- 1;' F D1 1=& 1@ D1' , -.' &? ' 0< A' &+1 < -' & A' &=' D'0' -&#@1' . <B1' # ' D1' <A+ B1' <-A' <001-' &=' D1' & A 0' C' ' ?1@@ <-A' 1>C& 1@@ <-A' <' D1' C < 1' &=' D1' 0< A' &>&-0' '-' D1@ 0<'A1' < @'<>1- ' <001>#@1A' <-A' # ' <?B@ & ' 1' &=' D1' 0<>1@ #< D1' & A1 -1A' 0 <##@'0D1A' <-A' 1-<= 1A@ D<' <@@ 0 BD1' <@@1'#& 10' -1 10' <-A' 1-. -10' <=& 10<'A' = &>' D1' =' 0' A<' &=' C '@@ D<' 0D<@@ #1' '-' D1' 1 1' &=' C? ' & A' E&A' ℕ' LLLL' #1' -& ' &BB?C'1A' -& ' ?01A' =& ' D1' A10 & 1-.' & ' <a -.' &=' &- ' =' 1' & ' # &&A1' &=' ! 00D1' F D'-' D1' D<+1-' <=C 10< A@ ?C&-' C1 -1' &=' =& =1' ? 1' &=' L' ' ' < ' 1+1 ' >1' D<' & - ' C1 0&-1' 0D<@@ D<CC1-' &' A& B&- < 1' &' D'0' & A1-<?-B1@ D&-1' D<@=' D1 &=' &' #1' &' D<' 0D<@@ D<CC1-' &' = -A1' D1' 0<>1' =& =1' ? 1@ <-A' 0D1K1' D1' 0<>1' # ' -=& ><B'&-' '- &' D1' , -.'0' 0BD1@ H?1 @ D1 1' &' #1' A1 1 > -1A' <= 1 ' D1' B&? 0' &=' D1' 0<>1' &? 1' -A' &+1 ' D<' '1' '0' & A1 -1A' # ' D1' <?B & ' 1' < I 0<'A' D<' D1' ?0 'B10' &=' C1<0' &=' D1' D' 10' &=' & =&@a1' <-A' ?==&@a' =& ' D1' >1' #1 -.' D<+1' <?B & ' 1' <-A' C&K1 ' &' 1-H?1 1' '-' D1' '01+1 <@@

Z 8 , /Ẃ ! 5)ʿ ! ?-Ấ ?? ; / ;

ME 6 $ ' '' ` !

100'&-' &=' <ĝ D1' #& 10 -1 10 <-A' 1-. -10 ?01A' & ' &BB?C 1A' B&- < ' &' D'0 & A1-<--B1' <=& 10< A ' -A' D1' &==1-A1 0 D1 '-9 #1=& ' D1 >'C 101- 1A9 &' C?- 0D1' <0 # ' D1' ' A'0B 1&'&-' 0D<ĝĝ #1' D&?.D ' ĝ<K=?ĝĝ <-A' 10&-<#ĝ1;' D'0' <B 1' <-A' & A1-<?-B1' &' 1-A? 1' ?- &' D1' #1. - -.' &=' D1' -1L 1' < ĝ'<>1-

ME' = '

100'&-0 &=' <ĝĝ =D1' #&1='0 -1 10 <= A' '-. - ' ?01A' & ' A1B?Cĝ1A' B&- < '1' &' D'0 <A9ĝ1' <=& 0AA9 <-A' D1' &==1-A1 0 D1 '-9 #1=& 1' D1 >'C9ĝ01- 1A9 &' C?- 0D' 00 # ' D1' ' A'0B 1B'&-0 0D<ĝ#1' D&?.D ' ĝ<?=&ĝĝ <-A' 10&-<#ĝ1';' D'0' <A1' <-A' & A1-<?-B1' &' 1-A? 1' ?- &' D1' #1. -- -.' &=' D1' -1L 'C< ĝ1>1-

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LL- ' 9 -' D1' 0<'A' < ĝ'<>1- ' ' ' K<0 A'1K 'A' ?- &' D1' , -.' &? ' &+1 < -' & A' # ' D1' F < A1 -' <-A' =1ĝ'0D'C &=' &?A1 1 0 ' -' D1' ' 11' &=' &-A&-' <-A' &=' 1+1 '& D1 ' ' 11' &K-1' <-A' @<B1' &=' D'0 1<>19 D< ' KD1 1' D&j &?.D' > - 00D -.1' &=' D1' KA.D ' &=' 1- B1' !@& 1-B1' <-A' 1<-1'.&@A19 <-A' D1' ?- 1K1' C<Ba -.9 D1 &=' <0K1ĝĝ D1' 0<'A' &?A1 1 0 <0 & D1 ' D1', -.10 ?#.1 10 # 1 0 &=' &?A1A' K1 a10 K' D'-' D'0' 1<>1' 0?0 1 -' <-A' D1 1' . 1 1' @&001' D -A1 <?-B1' <-A' A'0<+<?- <.1ĝ =& ' KD1 1' '-' >10 C<0 ' D1' C&?-A' K1'.D ' &=' .&@A1' &=' &- ' &=' D1' &?- 110 &=' 1- B1' !@& 1-B1' <-A' 1<-1' K<0 K&?- 1' & a1C1' D1' =?ĝĝ K .D ' &=' L' ' ?-B10 ' -A' D1--1' B&>1-@ ' 0&@A1' < ' LL'' ' 0D1@' -.10 ''' A' & ' D1 <#&? 19 D1' .&@A1' C<Ba1A' +=D'BD1' D1 ' -&K'01@@1' =& ' <' C ?-A1' K1'.D ')' -& ' <#&+1' +' ' ?-B109 <-A' 0&@A1' =& ' '' ' @'' 0 1 @'-.10 D1' C<Ba1ĝ -A' <@0&' D1' # -.1 0 '-' & D 0 1<>1' &=' D1' 0<'A' .&@A1' 0&&' A10B1 +<#@1' <-A' ?- ?@ ' C<Ba1-' D1' 0<'A' .&@A19 D<' D1' D 1A1' 0>A' B&@&? ' ?-A1 ' D1' =' 0 ' 0D1K' '0 . 1 1 ' <-A' B& 0=1 ' D1--1' '0 0D1K1A' '-' 0'.D 9 <-A' -& ' <B& A -.' & D1' &? K< A0 0D1K1ĝ & D?' 1 ' 1-C&8 +1 0D -.' &=' D1' 0<'A' &?A1 1 0 <-A' <@0&' . 1 1' BD< .1' <-A' A'0<+<?- <.1' &=' D1' #'1 0 &=' # &?A1A' K1 a1' <0 '0 <=& 10< A;' F D1 =& 1' D1', -.' ?' 0<'A' &+1 1 -' & A' # ' D1' <A+ B1' <-A' <001- 1' &=' D1' & A 0 <-A' D1' &8 > -0 '-' D'0 C 101-' < ĝ'<>1-' <001>#@1A' <-A' #' <?B8 & ' 1' &=' D1' 0<>19 D< D' & A1 -1A' 10 <#@'0D1A' <-A' 1-<B 1A9 D<' -&&' C1 0&-1' KD<' A1. 11' & ' B&-A'B'&-' D1' #1' = &>' D1' =10 ' &=' 0 1 ' D<' 0D<ĝĝ #1' '-' D1' 1 1' &=' &? ' & A' E&A' @LLLL ' # -.' <-A' C? ' &' 0<@1' K D'-' D'0' 0<'A' 1<>19 &- ' .&@A1' &=' 1- B1' !@& 1-B1' ' 1<-1' <0 & ' =& ' < C&?-A' K1 .D 9 #?' '=' D1' 0<>1' .&@A9 && C? ' & ' &== 1A' &' 0<@1' =& ' < C&?-A' K1'.D 9 B& 8 1 -' '-' D1' K1 .D ' =?@@ ' L' ' ?-B10ĝ -A' <@0&' D<' D1' 0<>1' .&@A1' 0&' C<Ba1A' #1' '-' . 1>1 ' &=' D 1A1' <-A' B&@&? ' K &?.D ' <BB& A -.' & D1' &? K< A1' 0D1K1' D1 &=ĝ ?C&-' C1 -' &=' =& =1'> ' &=' D1' 0<'A' .&@A1' 0&@A' & ' C? ' &' 0<@1' =& ' < C&?-A' K1 .D ' -& ' K1'-.' =&@@ ' L' ' ?-010 9 & ' -& ' K &?.D ' '-' . 1 -10' &=' D 1A1' '-' B&@&? ' <B& A -.' & D1' &? K< A1' 0D1K19 & ' 1 @10' D1' +<@?1' D1 &=' ⁝ D&-1' D<@=' &=' D1' 0<'A' =& =1' ? 1' & #1' & D1' , -.' &? ' &+1 1 -' & A' <-A' D1' & D1 ' D<@=1' & D >' & ' D1 >' &=' D'0 ?#.1 10 D<' 0D<ĝĝ 01<01' <-A' C &+1' D1' 0<>1' =& =1' ? 10 # ' <B '&-0' &=' A1 ' <' D1' B& >1-' @<K' & ' # ' # @@' & ' C@1 -' <= 1' D1' B?0 &>1' &=' ' 11' & ' &K-1' KD1 1' 0D<ĝĝ =& ?-1' &- ' 0?BD1' =& =1' ? 10' & =<ĝĝ <-A' #1 6 -' KD'BD1' <B '&-0' D1' A1=1-A<?-' 0D<ĝĝ -& ' #1' <A> 1A' &' A&&' D'0' @<K19 -& ' &- ' 100& -' -1' C & 1B '&-' 0D<@ #1' =&=' 0 BD1' A1=1-A<?-' <@&K1A6 &+ A1A' D<' D'0' <B ' <=& 1' D1' <'A' =10 1' &=' 0 1 ' K D'-9 D1' ' 11' &=' &-A&-' #1' C &B@< >1A';' D'0' <B ' <-A' & A1-<?-B1' &' 1-A? 1' ?- &' D1' #1. -- -.' &=' D1' -1L ' < @'<>1-

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' <.< -0 ' D1' A1B1 C =?ĝĝ K<'.D ' <-A' K& a'-.' &=' D1' .&@A1' A=' 1-'B1' !@& 1-B1' I ' 1<-1

&' D1' ' '-.' &? ' &, 1'.-' & A9

]' D?>#@ '0D1K1-' ?- &' &? ' D'.#-109 &? 1' ?1' @'1.1>1-' <-A' 0?# 1 '0' D1' F < A1 -' <-A' =1@'0D'C' &=' # &?A1 1 0 '-' &? ' ' 1' &=' &-A&-' <-A' &=' 1, ' & D 1' '-1' &K-1' <-A' C@<B1' &=' D'0' &? ' 1<@>1C F D1 1' D? .D' >'- 00D'-.' &=' D1' K1'.D ' &=' 1- B1' !@& 1-B1' <-A' 1<-1' .&@A9 <-A' D1' ?- ?1' C<Ba'-.' D1 &=9 <0K1ĝĝ &? ' 01'A' @'1.1>1-' # &?A1 1 0 <0 & D 1' &? ' ?#.'1 '0 # 1 0 &=' # &?A 1A' K1 a' K' D'-' D'0' 1<@>1' 0?0 1 -' <-A' D1 1' . 1 1' @&0010 D'-A1 <?-B1' <-A' A'0<+<?- <.1ĝ =& ' KD1 1' '-' >10 C<0 ' D1' C&?-A' K1'.D ' &=' .&@A' &=' 1- ' &=' D1' 01'A' &- 1'0' &=' 1- B1' !@& 1-B1' <-A' 1<-1' K<0 K&- 1' & a1C1' D1' =?@@ K1'.D ' &=' L' ' ?-B109 <-A' D1-' B&>1-@ ' 0&@A' < ' LLL'' '0 ' '''' A' & ' D1 1<#&? 1' D1' .&@A' C<Ba1A' KD'BD1' D1 ' -&K1' 01@@ =& ' <' C&?-A1' K1'.D ' K1 1 D' -& ' <#&+1' +' ' ?-B109 <-A' 0&@A' =& ' '' ' @' ' 0 1 @'-.' D1' C<Ba6 -A' <@0&' D1' # '-.1 0 '- &' D'0 1<@>1' &=' D1' 01'A' .&@A' 0& A1B1 +<#@ ' <-A' ?- ?@ ' C<Ba1' D1' 01'A' .&@A19 D<' D1' D 1A1' <-A' B&@&? ' ?-A1 ' D1' =' 0 ' 0D1K1' '0 . 1 1 ' <-A' B&? 01 ' D<-' '0 0D1K1A' '-' 0'.D 9 <-A' -& ' <BB& A>.' & D1' &? K< A' 0D1K1' & D1' ? 1 ' 1>C&, 8 00D'-.' &=' D1' 01'A' # &?A1 1 0 <-A' <@0&' . 1 1' BD< .1' <-A' A'0<+<?- <.1' &=' D1' # 1 0 &=' # &?A 1A' K1 a' <0 '0 <=& 01'A;' F D1==& ' ' ' >< ' C@1<01' &? ' D'.D-10 # ' D<A+ 01' <-A' < 01-' &=' &? ' @& A'0' 0C?<@@ <-A' 1>C& <@@ <-A' &>1-0' '-' D'0' C@01-' C< @'<>1-' <001>#@1A' <-A' # ' <?^& ' 1' &=' D1' 0<>19 &' & A1 -' 10 <#@'0D' <-A' 1-<A19 D<' -&1' C0&-1' &=' KD<' A1. 1' & ' B&-A'B'&-' D1' #1' = &>' D1' =10 ' &=' 0 1 ' D<' 0D<@#1' '-' D1' 1 1' &=' &? 1' & A' 0 ' LLLL ' # '-.' <-A' C? ' &' 0<@1' K' D'-' D'0' 01'A' 1<@>19 1-' .&@A' &=' 1- B1' !@& 1-B1' & ' 1<-1' <0' & ' =& ' < C&?-A1' K1'.D 9 #?' '=' D1' 0<>1' .&@A9 0&' C? ' & ' &== 1A' &' 0<@18=& ' < C&?-A1' K1'.D 9 B&- 1 -' '-' K1'.D ' =&@@ ' L ' ?-B10ĝ <-A' <@0&' D<' D1' 0<>1' .&@A9 0&' C<Ba1A9 #1' '-' . 1 -1001' &=' D 1A1' <-A' B&@&? ' K &?.D ' <BB& A'-.' & D1'&? K< A'0D1K1' D1 &=ĝ ?C&-' C1 -' &=' =& =1' ? 1' &= D1' 01'A' .&@A' 0&@A' & ' C? ' &' 0<@1' =& ' < C&?-A' K1'.D ' -& ' K1 1D.' =&@@ ' L' ' ?-B109 & ' -& ' K &?.D ' '-' . 1 -1001' &=' D 1A1' <-A' '-' B&@&? ' <BB& A'-.' & D1'A? 1K< A' 0D1K19 & ' 1@@' D1' +<@?13' D1 &=ĝ D1' &-1' D<@=' &=' D1' 01'A' =& j =1' ? 10' &' #1' &' &?' 0& 1'.-' @& A9 <-A' D1' & D 1' D<@=' & D' >' & ' D1 >' &=' &? ' 0?#.'1 '0' D<' K&@@ 01<01' <-A' C+1' D1' 0<>1' =& =1' ? 109 # ' <BB'&-0' &=' A1' <' D1' B&1-' @<K1' & ' # ' #'@@1' & ' C@& -' <= ' ' D1' B?0 &>1' &=' ' 1' & ' &K-1' KD1 1' 0D<@@ =& ?-1' <- '0?BD1' =& =1' ? 10' &' =<@@1' <-A' #1 6 -' KD'BD1' <BB'&='0' D1' A1=1-A<?-' 0D<@@ -& ' #1' <A>' 1A' &' A&' D'0' @<F19 -& ' 1-' 100&-' -& ' C 1BB'&-' 0D<@#1' =& ' 0?BD1' A1=1-A<?-' <@@&K1A;' &+'A1A' D<' D'0' <Q 1' <=& 1')21' 01'A' =10 ' &=' 0 1' K'dD -' D1' ' '1' &=' &-A&-' #1' C1@< >1A;' -A' &? 1' #101BD1 0' 0='<@@ 1 ' C < ' &' E&A' =& ' D1' Ca1 +<B'&-' &=' & 1' >&0 1' -&#@1' <-A' &'<@@ C0&-1;' D'0' <Q@1' <-A & A1-<?-B1' &' 1-A? 1' ?- &' D1' #1. -- -.' &=' D1' -1L ' C< @'<>1-

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' D1' & -&-0' '-' D'0' C@01- ' C0=@1>1- ' <0j 01>#@1A9 D< ' KD1 1' '-' <' C< @1>=1- ' #1.&-' <-A' D&@A1-' < ' F 10 'D' D1' L+ W' A< ' &=' <-?< ' '-' D1' L+' 3' 1 1' &=' ,'-.' AK< A' D1' ''' 30' <>&-.10' & D 1' ' ' F<0' & A1 -1A' # ' <? & ' 1' &=' D1' 0<>1' C< 1' 1- 9 D< ' -&' C0&-1' 0D?@A' B< '1' -1' ><a1' &' #1' B< '1A' &? 1' =' D'0' 1<@>1' & ' F <@10' = &>' -&' C< 1' &=' D1' 0<>19 <- ' ><5' >&-1 ' &=' D1' B&'.-1' &=' D'0' 1<@>1' -& ' >&-1 ' &=' D1' B&'.-1' &=' 1- ' & D 1' 1<@>10' '<-A10' & ' @& A0D'CC10 9 -& ' C@< 1' +1001@ ' ><001' #?@@'&-' -& ' =?1@0' &=' .&@A' .< -100D1A' & ' ?-.< 8' -100D1A' & ' &=' 0 @5 9 K' D&? ' D1' , -.'0' @'B1-B1 9 #? ' 0?BD' C0&-10' <0' #1U' A'0C1-01A' K' D' '-' D1' < ? 1' ><A1' '-' D1' 01B&-A' 1 1' &=' D1' 1 .-1' &=' &? ' #@1001A' ?-B@1' , '-.' 1- ' D1' + 3' <-A' & D 1' A'C0' 0 < ? 10 9 ?C&-' C1 -' &=' =1@&- ' <-A' &' #1' A1>&A' <-A' 1C? 1A' <0' < =1@&-9 D1' 0<>1' =1@&- 1' &' #1' D1 ' <-A' A1 >'-1A' '-' @'a ' ><5' <-A' =&? >1' <-A' <=& 1' 0?BD1' C0&-1' & ' C0&-10' <0' & D 1' =1@&8 - 10?0?1@@ ' K1 1' D1 A' <-A' A1R>'-1A' K' D'-' D'0' 1<@>1 8 <0' '-' D1' 0<>1' 0 < ? 1' ><A1' '-' D1' 01'A' L @ ' 1 1' >& 1' C@1 -@ ' A& D' <CC1 1 8 D1' KD'BD1' 0 < ? 1' <-A' & A1-<?-B1' F<0 ><A1' &' 1-A? 1' = &>' D1' =1 ' &=' 0 1' '-' D1' L+'' W 1 1' &=' D1' 1' .-1' &=' D1' 01'A' , -.' AK< A' D1' ''' 30 ?- &' D1' 1-A1' &=' +' ' 1 10' D1-' -1L ' 1-0? -.9 ' D1-' D1' KD'BD1' +' ' 1 10' 1LC' 1A9 D1' .&@A' <-A' 0 @+1 ' &=' D1' B& .-1' &=' D'0' 1<@>1' D< D' <-A' A<'@@ ' '0' <-A' #1-' B< '1A' A' B&- 1'1A' '- &' !@<?-A 10' & ><-A ' 1 <@.-' & j A1<?L' @&DA' <-A' & D 1' C< '10' #1 &-A' D1' 119 <0K1@@ # ' ='BD<?- 10' 0 <?-.1 0' <0' # ' A1 -10'-09 &' D1' . 1 1' '>C&C 00D'-.' &=' <@@ D'0' 1<@>19 <-A' . 1 1' '0' @'a1' & #1' K' D&? ' 1>1A ' D1 =& ' D<0 1@ ' #1' C+'A1A' ; -' B&-8 0'A1 <B'&-' KD1 &=' ' K?@@ C@1<01' &? ' D'.D-10' # ' D<A8 + 01' &=' D1' @& A10' 0C?<@@ <-A' 1>C& <@@ '-' D'0' 01-' C>@1>1-' <001>#@1A' <-A' # ' <? I & ' 1' &=' D1' 0<>19 & & A1 -' 0 <#='00D' <-A' 1-<A 19 D< ' D1' 01'A' 0 < ? 1' ><A1' '-' D1' 01'A' L+' 3' 1 1' &=' , '-.' AK< A' D1' ''@ 3' #1' <-A' 0 &-A1' < < ? 1' .&A1' <-A' 1==1= ?1@@ K' D' <@@ D1' & '0&10' '-' D1' 0<>19 <-A' #1' &#01 +1A' a1C 1' <-A' C? 1' '-' A?1' 1L1B? '&-' = &>' D1' =10 ' &=' D1' ? '='B<B'&-' &=' &? 1' <A ' D<' 0D<@#1' '-' D1' 1 1' &=' &? ' & A' E&A' ' LLL'L ' <-A' &' 1-A? 1' ?-&' D1' 1-A' &=' LL W 1 10' -1L '1-0? -.' -A' &C' D<' # ' D1' 0<>1' <?A@& ' 1' ' ' #1' & A1 -1A' <-A' 1-<= 1A9 D< ' -&' C0&''1' AK1@@ '-.' & ' '- '' '-.' K' D'-' D'0' 1<@>19 = &>' D1' 01'A' =10 ' &=' ? '='j B<B'&-' C< ' & ' A1@ C' K' '-.@ 9 # ' K< ' &=' 10BD<?-.1' & ' & D' K'01 9 &' <- ' I D<?- ' & 9 & D1 ' C0&-1' 0 <?-.1 ' #& -1' &? 1' &=' &? ' &#1'0<?-B1 9 =& ' <- ' ' BD<?-A'010' & ' F < 10' & ' '-' <- ' & D 1' K'01 9 <- ' ><5' C1B10' &=' .&@A' B&'.-1A' '-' D'0' 1<@>1' & ' '-' <- ' & D1 ' 1<@>19 & ' <- ' C@< 1' +1001@@ ><001' #?@@'&-' -1' ?1@@i' &=' .&@A' K &?.D ' & ' -K &?.D G ?C&-' C1 -' &' =& =1' 1' <-A' @&01' D1' A&?#@1' 0&>1' & ' A&?#@1' +<@?1' =' <@@ 0?BD1' >&-1 ' &=' .&@A' B& -1A' C@< 1' 1001@@ ><001' #?@@ >" & ' ?1@@ &=' .&@A' & ' 0@'C9 C<@1A' A1@' 1A' & ' 1LBD<?-.1A' B&- '1' &' D'0' Q 1G D1' &&-' D<@=' &=' D1' 0<>1' =& =1' ? 1' &' #1' &' &?' 0& 1 -' @& A9 <-A' D1' & D1 ' D<@=' &' 1- ' &=' B> ' 0?#.'1 '0' D<' K&@@ 01'U' ' ' & ' 0?1' =& ' 1- =' ?BD1' C< >1-' A1@'+ <?-B1' & ' 10BD<?-.1' ><A1' & ' &' #1' ><A1' B&- '1' &' D'0' = 1G -A' D<' ' ' #1' @1=?@@ &' 1C ' &=' &? ' 0?#.'1 10' '-' D'0 B<01' &' 0?1'=& ' D1' 01'A' =& =1' ? 1' # ' <BB'&-' &=' A1 '19 # ' F ' 1'< 1' &1-' @<K19 # ' #'@@ & 'C@< -1'<= ' ' D1' B?0 &>1' &=' D1' ' '1& &K -' & ' & ' KD1 1' ' ' 0D<@@ D<CC1-' <- ' 0?BD1' =& =1' ? 1' &' =<@@1' <-A' #19 & ' # ' ' -=& ><B'&-' &' #1' ><A1' '-' D1' , '-.'0' 0BD1a1 G <-A' D<' ' -&' C 1BB'&-' & ' 100&-' #1' <@@&K<#@1' ' -' 1- ' 0?BD' <BB'&-' & ' ' -=& ><B'&-

' D1' & -&-0' '-' D'0' C@01- ' C0=@1>1- ' <0j 01>#@1A9 D< ' KD1 1' '-' <' C< @1>=1- ' #1.&-' <-A' D&@A1-' < ' F 10 'D' D1' L+ W' A< ' &=' <-?< ' '-' D1' L+' 3' 1 1' &=' ,'-.' AK< A' D1' ''' 30' <>&-.10' & D 1' ' ' F<0' & A1 -1A' # ' <? & ' 1' &=' D1' 0<>1' C< 1' 1- 9 D< ' -&' C0&-1' 0D?@A' B< '1' -1' ><a1' &' #1' B< '1A' &? 1' =' D'0' 1<@>1' & ' F <@10' = &>' -&' C< 1' &=' D1' 0<>19 <- ' ><5' >&-1 ' &=' D1' B&'.-1' &=' D'0' 1<@>1' -& ' >&-1 ' &=' D1' B&'.-1' &=' 1- ' & D 1' 1<@>10' '<-A10' & ' @& A0D'CC10 9 -& ' C@< 1' +1001@ ' ><001' #?@@'&-' -& ' =?1@0' &=' .&@A' .< -100D1A' & ' ?-.< 8' -100D1A' & ' &=' 0 @5 9 K' D&? ' D1' , -.'0' @'B1-B1 9 #? ' 0?BD' C0&-10' <0' #1U' A'0C1-01A' K' D' '-' D1' < ? 1' ><A1' '-' D1' 01B&-A' 1 1' &=' D1' 1 .-1' &=' &? ' #@1001A' ?-B@1' , '-.' 1- ' D1' + 3' <-A' & D 1' A'C0' 0 < ? 10 9 ?C&-' C1 -' &=' =1@&- ' <-A' &' #1' A1>&A' <-A' 1C? 1A' <0' < =1@&-9 D1' 0<>1' =1@&- 1' &' #1' D1 A1' <-A' A1 1 > -1A' '-' @ a1' ><-1 ' <-A' =&? >1' <-A' <=& 1' 0?BD1' C1 0&-10' <0' & D1 ' =1@&-'10' ?0?1@@ ' K1 1' D1 A1' <-A' A1 1 > -1A' K D'-' D'0' 1<>1G <0' '-' D1' 0<'A' < ? 1' >& 1' C@1 -@ ' A&1 D' <C1 1;' D1' KD'BD' 0 < ? 1' <-A' A1-<?-B1' K<0' ><A1' &' 1-A? 1' = &>' D1' =10 1' &=' 0 1 '=-' D1' L+'' ' 1 1' &=' D1' 1' .-1' &=' D1' 0<'A' , -.' AK< A1' D1' ''' 3/' ?- &' D1' 1-A1' &=' +' ' 1 10' D1--1' -1L ' 1-0? -.G 0' D1-' D1' KD'BD' +' ' 1 10' 1L0C' 1A9 D1' .&@A' <-A' 0'@+1 ' &=' D1' B&'.-1' &=' D'0' 1<>1' D< D' <-A' A< @ ' '0' <-A' #1-' B< '1A' <-A' B&-+1 1A' '- &' !@<?-A1 0' & ><-A'1' 1 < -1' ? A1<?L' @&-A1' <-A' & D1 ' C< j '10' #1 &-A1' D1' 119 <0K1@@ # ' << BD<?-' 0 <?-.1 0' <0' # ' " 1-'0\1a' &' D1' . 1 1' 1-C&+1 0D -.' &=' <'@ D'0' 1<>19 <-A' . 1 1 ' '0' @'a1' &' #1' K D&? 1' 1>1A'1' D1 =& 1' D<0 @ ' #1' C &+ A1A; D1 , -.' &? ' &+1 1 -1' & A' D1' C 1> 0010' B&-0'A1 1A' # ' D<A+ 01' &=' D1' & A10' C' ' ?1@@ <-A' 1>C& 1@@ <-A' <' D1' C < 1 ' &=' D1' &>&-0' '-' D'0' C 101- 1' < @'<>1-' <001>#@1A' <-A' # ' <? =& ' 1' &=' D1' 0<>19 D< D& A1 -1A' 0 <#@'0D1A' <-A' 1-<='1A9 D< ' D1' 0<'A' < ? 1' ><A1' '-' D1' 0<'A' L+' ' 1 1' &=' , -.' AK< A' D1' ''' 3J' #1' <-A' 0 &-A' < <j ? 1' .&&A1' <-A' 1==1B ?1@@ K D' <@@ D1' C &+'0'&-0' '-' D1' 0<>19 <-A' #1' &#01 +1A' a1C ' <-A' C? ' '-' A?1' 1L1B?B'&-' = &>' D1' =10 ' &=' D1' ? '='B<B'&-' &=' &? ' <A ' D<' 0D<@@ #1' '-' D1' 1 1' &=' &? ' & A1' E&A' ' LLL'L ' <-A' &' 1-A? 1' ?-&' D1' 1-A1' &=' LL ' 1 1' -1L 1' 0? -.' -A' +1 ' D<' # ' D1' 0<>1' <?Q & ' 1' ' ' '0' & A1 -1A' <-A' ' 1-<=@1A9 D< ' -&&' C1 0&-1' AK1@@ -.' & ' '-D<# -.' K D'-' D'0' 1<>19 = &>' D1' 0<'A' =10 ' &=' ? '='B<B'&-' C< 1' & ' A1@ +1 ' K -.@ 9 #1' K< ' &=' 1LBD<?-.1' & ' & D1 K 01 9 &' &-' < 1D<?-' & ' & ' & D1 ' C1 0&-1' <?-.1 ' #& -1' &? &=' D1' , -.'0' &#1'0<?-B1 9 =& ' &-' ' >< BD<?-A'm1' & ' K< 10' ' '-' &-' & D1' K 01 9 &-' ><-1 ' C1B10' &=' .&@A1' B&'.-1A' '-' D 0' 1<>1' & ' '-' &- Z& D1 ' 1<>19 & ' & -' @< 1' 1001@@ <001' ?@@'&-' -1' ?1'L' &=' .&@A1' K &?.D ' & ' ?-K &?.D G ?C&-' C< -1' &'=& =1 1' <-A' @&01' D1' A&?j #@1' +<@?1' &=' <@@ 0?BD1' >&-1 ' &=' .&@A1' B& .-1A' @< 1' 1001@@ <001' ?@@'&-' & ' ?1 9 &=' .&@A1' & ' 0'@+1 ' C< 1A' A1@'+1 1A' & ' 10BD<C-.1A' B&-= < '1' &' D'0' <=@1G D1' &-1' D<@=1' (=' D1' 0<>1' =& =1' ? 1' &' #1' &' D1' , -.1' & ' &+1 < -1' & A9 <-A' D1' & D1 ' D<@=' &' &-' &=' D'0' 0?#@ .1 10' D<' K @@1' 01<0' ' ' & ' 0?1' =& ' &-' 0-BD1' C< >1-1' 9A1@@+1 <?-B1' & ' 10BD<?-.1' ><A1' & ' &' #1' ><A1' B&- < '1' &' D'0' <= G <-A' D<' ' ' #1' @1=?@ &' D1' , -.'0' 0?#.'1 0' '-' D'0' B<?01' &' 0?1' =& ' D1' 0<'A' =& =1 ? 1' # ' <BB'&-' &=' A1 19 # ' K 1'< ' D1' B&>1-'@<K19 # ' #'@@ & ' C@1 -' <= 1 ' D1' B?0 ?>1' &=' D<' ' 11' & 1' & ' &K-1' KD1 1' ' ' 0D<@@ D<CC1-' &- ' =& =1' ? 1' &' =<@@1' <-A' #19 & ' -=& ><j B'&-' &' #1' ><A1' '-' D1' , -.'0' 0BD1H?1 G -A' D<' -&&' & 1BB'&-' -& ' 100&'-1' #1' <@@&K<#'1' '-' &- ' 0?BD1' <BB'&-' & ' '-=& ><B'&-

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%G .-!' 2 +' @ .'" /!+&' !'" @ 7 @' . ' %# -*!' .' " -*!"2 -@' b .+/' .&-' .'" M ! ' 40++&.-' C# ' .-' 3 &-' . ' B." !& 0"!' . ' / .0 ;+!' +0!

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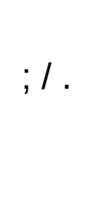

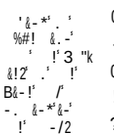

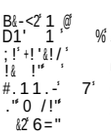

)) :c ! # 0 -/Q

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<.< -0 <C < -10 =& -& C< '-. D1' 1' &@A 1 0 D1' F<.10 <-A' <.< -0 &@A 1 0 .&'-. = &> D1'
* <C < -10 K ? @'B1-B1

<0 '0 -& &'&?0@ a-&K1-' D<' D1' ,'-.' &' D'0 . 1' B&0 10 <-A' BD< .10 D< D' 01- ' D'0
>#<00'< &? 0 &' D< @'0 D'0 A F '1' &=' ! <?-B1' &' D<+1' D<A' < B&-+1-'1- ' C1<0 K' D' D >' <-A' &' D<+1' D'0 '. D '
K' D&? '1=!?0 &-'&='] C1-' #@&A1 KD'BD' K<0 1=&0'A' F D1 =& 1' D1' ,'-.' # ' D1' . B1'&=' E&A' '-' KD&10 D<-A10 <-A' A'0C&0' '&-'
10 ' D' <@@ '= & '1 D< D' A1R> -1A' D >' 01@=' &' C<001' &, ' D1' 11' '-' &' D'0 1<@>1' &=' ! <?-B1' <-A' &' 1A?B1' D1'
C&00100'&-' D1 &=' # ' D1' 01'A' .0B1' &' D >' <-A' D'0 D1' 10 ,'-.10 &=' -.@&-A' <BB& A'-.' &' D'0 '. D =?@@ ' @1 KD1 # ' D1'
?0A D' -& '&-@ ' &' # '-.' D'0 D'0 1<@>1' &' D1' <?-B'1-' =1>1' <-A' D&-&? # ?' <@0&' &' '- 'BD1' <-A' 01 ' '-' C=' 1' C1<B1'
<-A' <-H?' @D1' D'0 ?#.1 '0&=' D1' 0<>1 ?0 -.' D<' D1 # ' D1' >& 1' C 1' &=' <@@ LC1-' 1<@ '10 0D<@#1' '-' D1' >& 1' C=' 1'
C1<B1' <-A' <-H?'@@' 1' <-A' D1' #1 1 ' A'0C&01A' &' M+1' E&A KD'BD1' <--&' #1' A&-1' # ' <@@ @'a@'D&A1' K' D&? ' < 1@@ <0K1@@ &-'
D1' 11' <0 '-' & D1 ' C@<B10 D1 &-A1' D1' 11 KD1 '-' @> .D ' E&A' >?0 ' #1' ?..1 '-' KD&10 A1=1-B1' ', B ' <-A' .&&A-10 D1'
, '-.' C? 1 D' D'0 =?@@ ?0 ' <#&+1' <@@ & D1 ' D D.10 #&?' #1' ' ><- ' '>10 # ' D'-& A'-<' B&+1 '01' &=' <C' < -10' D<+1' 1-A1- 'A' K' D'
'-B10 <=& 1' D'0 >1 . 1 ' C 1' &=' D1' -&?>#1' &=' D1' &?@A1&? 0 =& ' KD&>' 0?BD1' <C' < -10 D<+1' 1-A1- 'A' K' D'
'-B10 <' >1' &=' -1A1' D<+1' @<aa1A' &=' D1' ' -&?>#1' &=' &?@A'1=0 KD1 # ' . 1 ' ?#< A'10 D<+1' 1-0?1A' <-A' '= 1B?C<#@1'
A<><.10 D1 1' >< ' 1-0?1' =' 1>1A ' #1' -& ' D1 =& 1' =& 011-' <-A' D<A, 1' ' ='1 =& ' & A1 -1A' # ' <?=@& ' 1' &=' D'0 C#1- '
C< @'<>1-' D<' '=' 1- ' <C 1 -' #1' 1 1 -1A' V& ' D1 <= 1 ' 0D<@#1' & I+1' D1' ,'-.' &-' D1' 11' & ' #1 &-A1' D1' 11' '-' =11 '
&=' F 1 1 KD'BD' D<+1' -& ' ''0 & ' D1' ' D&&@ <-A' C=' 1' -&?>#1' &=' >1-'<-A' &?@A1&? 0' <BB& A'-.' <0 D1' 0D<@#1' =1 1 -1A'
K' D' D1' ,'-.@ & ' 1+1' -& ' D1 >' D1' ' =&'@ F <.10' F &? ' `<# '..1>1- '0P' <0 D ' 0D<@@ 1B1 +1' [' D1' ,'-.'=& ' D1 >@1LB1C '
=& ' <a1 ' ' =& ' D1 >' D<' 1B1 +1' @<-A' F <.10@ D<' 0' & 01 ' + '0' +''' A' =& ' <' & >-'<-A' L'' '0' ''' A' =& ' <' E1- '@>-'
=& ' <D' D&@1' 1 1@ D1' 0D<@@ =& ' 1?BD1' A1=1? 1' =& =1' 1' & D1' ,'-.' <@@ D'0 .&&A10 <-A' B< <a10 <-A' D1' ' #&A'10 & ' C '0&-'
-A' D<' 1+0 ' <C 1 -' 1 B<C 1 -' <-A' <@@ & D1 ' D<+ -.' ?-A1 ' D1 >' 1 -?1' &=' <- ' &?@A1&? ' & ' &?@A1&? 0' < 1' .
,'-.10 F <.10' 0D<@@ ?CC&-' D1' C1 -' <=& 101'A' C< ' & D1' ' =1 -?1' &=' &?@A1&? ' & ' &?@A1&? 0' <-A' 1, ' &=' D1' 0<>1@
D1' F <.10' < <#@ ' <0 '0 <@@&K1A' ?- & D1 >' # ' D1' ,'-.' &? 1' &, < -' & A' & ' D1' 10& 1 ' &=' D'0 F < 10' K/&? '
@100 -.' & ' K' DA <K'-.' &=' 1- ' C 1' D1 &=' <-A' =& ' <0' @&-.1' >1' <0' D1 ' 0D<@@ 1B1 + ' F <.10' =& ' D1 >@ D'0
C< >1-' ?- & D1' 01'A' 1 -?10' <-A' 1+ ' &?@A1&? ' &=' D1' 0<>1' =' D ' <C' < -10' <-A' 1 B<C 1 -0' <@K1 10' K/'-' +'
A<'10 -1L ' <-A' >>1A'< 1@ ' <= 1 ' D< @ D1' 01 A' <C 1 -' 1 B<C 1 -' ' & D1 ' 0D<@@ <+1' 1B1 +1A' D1' ' F <.10' &=' D1'
, '-.' & ' & =' D1' 10& 1 ' &=' D'0 F 1 10' & ' &=' D1' ' & A10' & ' <'0 10' -A' =' <- ' &?@A1&? ' # '-.' -& <C 1 -'
>>1A'< @ ' 1 '.-1A' K' D' D1' ,'-.@ KD'BD' D1 <= 1 ' 0D<@#1' '=" F <.10' <-A' 1 1 -1A' & ' <a1' <- ' C 10 ' & M+1' D1' ,'-.'
?CC&-' D1' 11@ ' ?CC&-' D1' @&-A1' #1 &-A1' D1' 11@ A1C 1' &? 1' &=' D1' ,'-.10' +'B10' +&?' @'B1-B1' &=' D'0 <C 1 -' D<'
0?BD1' A1C< -.' #1' <a1-' A1>1A' <-A' < ?.1A' =1@&- @ <-A' D< ' D1' 0& & A -.' 0?= =1' =& ' D1' 01'A' &==1-B1' C?- 00D1'-1- '
<-A' 1L1B?B'&-' &=' =1@&- ' ' -A' =& ' <0>&BD1' <0' D'0 &==1-B1' 0 1 BD' D' &' D1' D? ' <-A' &CA'1' &=' D1', '-.' &? 1' & < -'
& A@ D1' -&#@10' &=' D1' 1<@>1' <-A' &=' <@@ D1' B&1-' K1@1' D1 &=@ D<' 'D1 =& ' D1' & ' D1 ' 0&' &==1-A -.' 1- & 1' -& ' D1'
#1-1='B1' &=' D'0 @1 .'1

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02 &#!Z . ' !' 3! #!' 1 @&-ZHO&"!' . ' !-#!2 3+ #!' . ' "& +

C ' D<' ' ' #1'& A1 -1A' # ' D1' 01'A' <?=@& ' 1' D<') ' D1' ?0 'B1\' #=' D1' C1<0' &=' 1, ' D' 1' &=' 'K@&-A' KD1 1' 1- ' 0?BD1' &==1-A&? 0' #1' <a1-' D<+1' C&K1 ' &' 1' H?1 1' &=' D1' 0AA' =@1-B1 9' <-A' D1' <>1' &' D1 1'<-A' A1 > -' <0' D1 ' A& <-A' >< ' A& &=' =1@&- 10' 10C<0010' <-A' & D1 ' &='=1-B= 1LC00'A' '-' D1', '- .10' &> 00'&-' &' D1 >' ><A1¶ <0' D&?.D' D1' 01'A' '=1-B= K1 1' A&-1' '-' D1' 0<>1' D' 1 ' -A' <@0&' D<' D1' 01'A¶ A1C -.' &=' 0?BD1' &?@A1&? 0' <-A' <@0&' D1 ' 1 1 -1 0' '=' '#1' 0+1 A'#1' '1A' '-' D1' 0<>1;' D' 1' KD1 1' D1 '#1' =& ' 0?BD1' B<?01' < 10 1A'<-A'< 1'. -1A

&-Z' -. ' .' ;!' -27!" ';+!'&.'" ! &#&!-#&!2 .## 2&.-!/' ;@ ! '.'" !2!"&.-)

<&+' " "' <@K1 ' D<' -&' <C 1 -' #1' BD< .1A' # ' D'0' <Q@1' =& ' @<aa1' &=' D'0' -&?>#1' 1 1 -1A' <0' '0' <#&+1' 0AA' KD&10' &?@A1&? 0' 0D<@@ D<CC1' &' A 1' & ' & D1 ' K'01' A1C 1' -&' '-' D1' A1='? 1' &=' D1' <C 1 -G' &' D<' D1' 01'A' AC 1 -'= D1' D1' <' @<-A' K<.10' 0D1K1' D1' A1C -.' & @<aa ' ' &=' D'0 &?@A1&? ' K '-' L ' A<'10' <= 1 ' D1' @<aa -.' &=' D1' 01'A' &?@A1C? ' ?- &' D1' 10& 1 ' &=' D1' F 1 10G ' '=' D1' <C 1 -' #1' < ' 11' F <.10@ =' D1' 0D1K1' D1' A1C '-.' & ' @<Ba'-.' &=' D1' $ /)' &?@A1&? ' 0&' @<Ba'-.@ & D1' A> <@@ &=' D1' <+ ' KD1 1' D1' '0' 1 1 -1A@ < 1' -1L ' >1 -.' K' D' D1' 01'A' A> 0AD

- ' - ' p2

C ' ' =& ' A +1 0' C '+'@1.=' &' #1' . <?- 1A' &' C0&-0' #1' -.' '-' D1', '- .=' F < 0

3!"2.-e'&-' !' M&-*(e !"'&#!' ;!@.-&< ! :' 2 ++ D<+1' & 1A',&-0' &=' 1 ." 1"(@ #01' / 02 ' '.+ 102) ++.7 -#!' . ' 3". ! &.-

C ' # ' D1' .0B1'&=' @> .# ' E&A' D1', '- .' B? 1' &, < -' & A' '- 1-A1 D' '-' D'0' >&0 ' & <@@ C0&-' &' <a1' D'0' +'<.1' & <@@ '-' &' D1' ^@&-A3P' &=' ! <?-B1' <.1 -' D'0' <?-B'1- ' 1- > 10' &=' D1' 0<>1' 1<@>1@ <BB&>C<- 1A' '-' D1' 01'A' '<.1' K' D' . 1U > -@ ' ?A1' &=' D1' >&0 ' D&-& <#@1' < '=' C0&-0' <-A' ?1' 0?#.1 =' &=' D'0' D'0' 1<@>1' &=' -.'&"A@ <0K1@@ =& ' D1' A1=1-B1' &=' D'0' >&0 ' -&#@1' C0&-' <0' =& ' D1' A1=1-B1' &=' D1 >' 01@=' <-A' $&=' <@@ D1' '-@'' <- 10' KO'-' D'0' D'0' 01'A' 1<@>1' &=' -.@&-A' &' D1' D'.D' @<?A1'=<>1' <-A' C 1 01' &=' D1', '-.' &? 1' &, < -' & A' <-A' &=' <@@ D&10' KD'BD' 0@@<@' <BB&>C<- 'D >' '-' D1' 01'A' '<.1' 1' D1 ' # '011' & ' @&-A' ;' F D1 =& ' D1', '-.' &? 1' &, < -' & A' # ' D<A+ B1' <-A' <00 -' &=' D1' @& A10' 0C?1@L' <-A' 1>C& 1'L' <-A' D1' &>1-0' &=' D'0' C01- ' C< @'<>1- ' <001> #@1A' <-A' # ' <?=@& ' 1' &=' D1' 0<>1@ 1-<=@B D' & A1 -1 D' <-A' 10 <#@'00D1 D' D<' 1'R ' C0&-' &=' KD<' B&-A'B'&'0' & ' A1. 1' D1' #1' &=' #1' -.' & ' D1 <= 1 ' 0D<@#1' '-'&? 1 01'A' &+< -' & A' D1', '-.10' F <.10' #1 &-A1' D1' 11' & ' &-' D1' 11' <' D'0' C@10&' D<+1' D1' C 1BB'&-' &=' C=1= ? ' &' >& < ?=' B? >' B@<?0<' +&@ > h¢ -A' D<' D1'01'A' C 1BB'&-' #1' <@@&K1A' '-' <@@ D1', '- .=' &? 10' <-A' & D1 ' &C 10' KD1 1' D[01'A' C 1BB'&-0' 0D<@#1' C@1A1A' & ' @1 1A' =& ' <- ' &=' D1' 01'A' C0&-0' '-' <@@ C@110G C@110' &=' " &K 1' '-' D1' F 1' &=' " &K 1' ?-A1' -'BD'@ D1=9$H?< 1' ' >C1A' ' <-A' <00'01' &=' A< 1'. -' C01- >1- ' 1LB1C ' &+'A1A' D<' D'0' <Q 1' #1' -& ' <+>'<#@1' &' 1- ' C0&-' =& ' <- ' 1- 1' 0 -' D1' =' 0' A< ' &=' D'0' C01- ' C< @'<>1- '

!!#!/!*#!!%! !!!!'!2!!!!!%' @ n' 1><-A1 -U@-'

C ' #1' ' 1-<= 1A' D<' D1' ?.1' -1- =' &' #1' 1+1-' = &>1' ` D1-0=& D' '-' 0?BD1' <00'01' < 1'. -1A' & ' &' #1' < 1'. -1A8 0D<@@ -& ' #1' C ?A'B'<@@ &' 1- ' &=' D1' 01'A' C0&-0@ 0&' #1' -.' '-' D1' M+'B1' &=' C? 1' &+< -' & A' D1', '- .' <0' '0' <=& 10AA@ KD'BD' D<+1' <- ' D' -.' '-' 1 0'&-' & ' 1>< -A1 ' '-' @&-A10' & ' 1-A0' KD1 &=' 0?BD1' <00'01' #1' < 1'. -1A@ =' D1' -<>1' &= D&10' C0&-0' KD'BD' #1' '-' 1, 0'&-' & ' D1' 1>< -A1 ' &=' 0?BD1' @&-A10' <-A' 1-A0' #1' -& ' '-' D1' 01'A' 00'001@ #? ' D<' D1' 0&'@ ?.1>1- ' #C' < 1-0 ' D1 >' <@@ +&'A1

!@'2 +' ;!' 2' &-." 8 2' .' !2#!- 2

' #A' ' ' 1-<= 1A' D<' =' <- ' A'0B1- ' &=' <- ' @&-A10' & ' 1-A0' & ' <- ' &)2' '. D ' & ' '-D1 ' <>1- =' #1' &' <- ' C0&-' & ' C0&-0' #1' -.' K' D'-' D'0' 1<@>1' & ' 1@0KD1 1' D<')2' A'0B1- ' #1' -& ' . 1 1 ' '-' 1==1= 1' &' D1' A<><.10' & ' D? ' &=' D1' 01 ' C &-0' #1' -.' a" D1', '- .=' M+'B1' <0' '0' <=& 101'A@ D1-' =' D1' 01'A' C0&-0' '-' D1', '- .=', +'B1' 0&' #1' -.' K1 1' K/' -' D .1' &=' LL ' 1 10

!@' 1&@' 1 E!' ."-&!2

C ' #1' ' 1-<A 1A' # ' D1' 0<>1' <?A@& ' 1' D<' 1, ' &=' D1' C0&-0' C<00' -.' '-' D1' 01'A' +'<.1' >< ' # ' D1' ' K -.= ?-A1 ' D1' ' 1<@1' ><a1' D1' ' & -1 ' &' 1- 1' '- &' <@@ ` D&0' @&-A10' <-A' 1-1>1- =' 1- 10' <-A' M+'B10' KD'BD' &' D1 >' #1' B&>>1-' # ' A'0B1- ' 1+1 1 ' & ' 1>< -A1 G -A' <@0&' &' A&' <@>< 5' &=' 0? 10' <0K1@@ 0? 1' +'B1' <0' 0? 1' ` '<@@ <-A' &' ><a1' =1&='<>1- '0 &=' @&-A10@ <-A' &' ><a1' .N ? - =' &=' 1-A0' 1, 0'&-0' <-A' M+'B10@ <' ' <@0&' &' < &? -1' <-A' <@@ & D1 ' D' -.=' & A&' <BB& A'-.' &' D1- 1- ' <-A' 1==1= ' &=' D'0' F < <- ' =& ' <-A' '-' D'0' -<>1' <0' C@15@ ' <-A' = 1@ ' <0' D1' D >01@=' 0D?@A' A&@ <0K1@@ KD1 1' D<' D1' 01'A' F < <- ' &=' &? -1 ' '0' ><A1' #1 &-A1' D1' 11' <0' &-' D'0' @ D<@=G h!' -A' =' '=& ?-1' D<' '-' D1' 1L1B?B'&-' &=' <- ' 'B@1' B&>C '01A' '-' D1' 01'A' F < <- ' '<- ' ><-' K'@@ J+1 0' D<' D1' 01'A' F < <- ' '0' -& ' D1' A1A &=' D >' D<' '0' -<>1A' &' #1' D1' ><a1 ' &=' D1' 01'A' F < <- @ D1-' D<' '00?1' 0D<@#1' '1A' KD1 1' D1' &? -1 ' -<>1A' '-' D1' 0AA F - <' ' C?' D1' 01'A' 'B@1' '-' 1L1B?B'&-G D1' 01'A' A1-W-B1' &' 1-A? 1' <-A' #1' <+<'@<#@1' &' 1C ' &=' D1' 01'A' C0&-0' <0' @&-.1' <0' D1' <D'A1 D' 0&' '-' D1', '- .=' F <.10

(!@' 2 +' '! 1 &&@K' D& ' !!'.'" B&-!' .'" !' DA ' B!. !!Z' .' !' 2!' F A/]' @@<-A000 ' !'" !&" ! ' -a J 1 >:' .'" 3!" ."1 -#!' . ' !&" [V&+2' C#'

(' ' '& A1 -1A' #1' D1' 0<>1' <?=@& ' 1' D<' D1 ' < A' D1' @=1&==10' &' D1' ?01' &=' 15 ' &=' D1 >' >< ' D<+1' <-A' D<+1@ W3W1 ' D1', '- .=' . 1 1' 1<@1' K &?' <-' ' = -1' & ' =1!' # ' D1 >' &' #1' C< 1A' &' ><a1' =1&==1>1- '0' <@'1-<B'&-' <-A C&00100'&-0' K' D' D1' ' <CC& 1- = B= <BB& A'-.' &' D1' '. D ' A @1' <-A' '-R1001' D<' D1 ' & ' <-' ' &=' D1 >' D<+1' '-' D1' 0<>1 &' 0?BD1' <0' 0D<@@ C@1<0' D1 >' G -A' D1' 0<>1' =1&==10' &' 1B1 +1' D1' 0<>1' D&-& ' <0 1@0' <-A' & D1 ' D1' C/> 00108 &=' 10 < 1' 4 ' C@H<0' +6';& <BB& A -.' &' D> ' 01'A' >R1001@ &' D<' ' 1- ' D<' D1 ' D1 &=' >< ' ><a1' D1' K'@@10' =& ' C< >1- ' &=' D1' ' A1 '0' 1- 10' BD< .10' <-A' & D1 ' D' -.=' -A' =' ' D<CC1' 1- ' 0?BD1' &K-& ' &' KD&0' ?01' D1' =1&==1>1- ' 0D<@#1' ><A1' &' 4;' A? -.' D1' 01'A' +'<.1' <-A' '-' D1' 01'A', +'B1' #1' -.' K' D' D1', '- .' D'0' = 1' 1' #1' -.' K@D <.1@ D<" <@@ 0?BD1' =1&==10' & ' & D1 ' 0?BD1' C0&-0' <0' D1' 0<>1' =1&==&? 1' & ' &K-& ' 0D<@@ A1C? 1' <-A' <00' .-1@ 0D<@@ D<+1' !'

&L ++L !-#! ." ' -' 2. 1 !' 3"&- !/' . &!Z' &2' &2' /&'&/!/' &- .' 7 .' !"2' -/' -01; "!/' ' -/' ' !"' ';!*&--&-*' ' !< ')' 2 &/' K %' .$- ' +&!&" ' 6 ! +1' ".@ +)' $ ' %' .$- ' % ;! + !

0<>1' D&-&0' <0 1@0' <-A' & D1 ' D1' 0 0 1 0 ' 8K' D' D<CC& 1- -B=' &' D1' ?01' <-A' C=&? > -.' &=' D1' F '@@1' C=Z D1' 0<>1' C0&-' A ' &K-&' D< ' 0&' `A'0010' D9 P' > >1A'< @ ' = &>1' D1' A1 D' &=' D1' 01'B@ C &-' & ' &KD& ;' 0&' A '-.' A? '-.' D1' >1' &=' ''' ' 1 10' D<-' -1L ' 1-0? -.' <= 1 9' D'0' A1 D0' -A' ='<- ' 0?BD1' C0&-1' B&>1' & ' 1 &>1' K' D' D1' , '-.9' D< ' D1' 0<>1' =1&==10' & ' 0?BD1' C0&-0' <0' D1' 0<>1' &K-1 ' 0D<@@' A1C? 1@ 0D<@@' D<+1' D1' 0<>1' @&-A10' <-A' 1- '0' &K< A10' D1' C=& -<-B1' &=' D1' 0<>1' /)' # ' ''' 1 10' > >1A'< @ ' 1-0? -.' <= 1 ' D1' 0<>1' 1 & -1' <-A' '=' 1- ' 0?BD1' C0&-1' 0&' 1 &?> -.' @ +1' ''' 1 10' <= 1 ' <- ' 0?BD1' ` ?> -.' 'P' & ' <= 1 ' D<' D1' 01'A' ''' ' 1 10' <=& 1' 1LC001A' #1' 1LC' 1A@ D<' = &> D1-0=&? D' D1' 0<>1' C0&-' D' i' =1&@!1 ' -& ' 1L1B? 1 0' -& ' D1' 0<>1' & D1 ' C0&-0' 0D<@@ <a1' -&' #1-1= =-& ' C=' 1' # ' D'0' <= 1@ #? ' D<' 1, ' 0?BD1' =1 ==1>1-' = & >1' D1-0=&? D' #1' -&' @1- .1 ' '-' D'0' =& B1' 0 1- .@?' -& ' 1==1= 1@

C ' #1' ' & A1 -1A' # ' D1' 01'A' <?= & ' 1' D<' D1' , '-.' B? 1' & < -' & A' D<+1' D1' >< '<.1' &=' D1' D1' 1R' #1' -.' K '-' <.1' &=' D1' C0&-0' 0&' .&' -.' K' D' D1' , '-.' '-' D'0' 01'A' + <.1@' =' D1' 0<>1' C0&-' 0&' .&' -.' D&@A1' &=' D1' , '-.' <- ' @<-A10' #1' , - .D 10' M+'B1' >1' &=' D'0' A'0B1<01@' '-' @'a1' >< ' <-A' =&? >1' <0' =' D'0' <= 1' D<A' -& ' #1-' ><A1' <-A' '-' D&-.' &A1 ' K'01' -A' &, ' D<' D1' C=' 10' &=' D1' 01'A' @&-A' A? -.' D1' -&K-1' <.1' &=' <- ' 0?BD1' D1' 1@ <= 1 ' D1' 01'A' ''' ' & ' ''' 1 10' A1 > -1A' 9<-A' 1LC' 1A' <0' '0' <=C 101'A

<". '&2.' +& ' !' &#&-*' 2 +² ' !' !' ""'& *!' . ' !&"2' 7& &-' *! ' -/' 3". & 2' + !'" !' ; . '!' !"1 2' !% &"!/

C ' #1' ' 1-<= 1A' # ' D1' 0<'A' <?= & ' 1' D<' =' ' ' D<CC1-' <- ' &=' D1' ?- 10 10' & =' D1' i1'A' C0&-0' 0&' #1 - .' '-' D1' , '-.10' +'<.1' &' A 1' D&@A -.' 1- ' @&-A10' & ' 1-A0' & ' & D1 ' '-D1 1A' <>1- '0' &=' D1' , '-.' '-' 0?BD1' K '01' <0' D1' # ' D1' & A 1' &=' D1' &1-' @<K1' &?. D ' &' 0?1' @ 1' =& ' D1' 0<>1@ &? 1' &=' D1' , '-.10' D&-A10@ D1' 01'A' C0&-' D1-' #1' -.' '-' D1' 0UA' +'<.1' <-A' &=' =?@@' <.1' &' D<+1' @'B1-B1' &=' D1' , '-.' &? 1' &, <'.-' & A' &' 1- 1' # ' D1 >' & ' D1' ' & -1 ' '- &' D1' 01'A' < 0' @&-A10' <-A' 1- '0' <-A' & D1 ' '-D1 1A' <>1- =@' <-A' D<' 1- 1' # ' =& B1' &=' D1' 01'A' @'B1-B1' #1' <0' &A1' <-A' <+<'@<#@1' &' D C" <-A' &' D'0' D1' 10' <0' D&?. D' D1' D<A' 0?1A' @ , 1' &? 1' &=' D1' , '-.' D&-A=' &=' D1' C > 001\' # ' B&? 0' &=' D1' $ V} @<K1

!"H! -2' ' "12' -. ' !-/&-*' !' M&-*' ; !@.-/' ! ' 2 +² ." !&' !&"' ^ #!2

C ' #1' & A1 -1A' # ' D1' 0<>1' <?= & ' 1' D<' =& <0> &BD1' <0' 1 <?- ' =' &=' > 10' D<' #1' C? C&01@ ' & A1 -1A' =& ' D1' C0A-<@@' < 1-A<?-B1' &=' D1' C0&-' &=' &? ' &, < -'@& A1']3' , '-.' <-A' D1 ' &' <K< =1' &=' 0?BD1' -&#@1' C0&-0' <0' 0D<@@' C@1<0' D'0' '.D-10' &' <00'. -1' D1 >9' D1 =& 1' =' <- ' 1 <?-' &=' > 10' D<+ -.' 1- ' =11' =& ' D1' 01'A' &=='B1' .&' -& ' K ' D' D1' , '-.10' .0B1' '-' D'0' +'<.1' &, ' D1' 11' D<+ -.' -&' @'B1-B1' &=' D1' , '-.' '.D-=' ?-A1 ' D1' . 1 1' 1<@1' &' #1' &? 1' &=' D1' 01'A' > 1@' D<' D1' =& =1' 1' D'0' = 1' .W?-AA' &' D' >' =& ' 1L1 0'0 -.' &=' D1' 01'A' &==' B1

W B!. 1!-2' .' !') V&+2' . ' 3!"2 -2' /@&-*' &-' !"' &#!' 2 +² ; !' !" ." 1!/

C ' D<' ' #1' & A1 -1A' # ' D1' 0<>1' <?= & ' 1' D<' =' 1- ' C0&-1' #1' -.' 01'01A' &=' 1- ' @&-A10' & ' 1D110' '-' =11' 0 > C@1' D&@A' -.' &=' D1' , '-.' '-' BD'1'=' #1' , -'.D 10' +'B1@' <-A' ><a1' =1&==1>1' D1 &=' # ' D1' , '-.=' @'B1-B1' <0' '0' <=& 101'A@' D<' D1' 0<>1' =1&==1>1- ' #1' .&&A' '@@' D1' K'@@10' &=' 0?BD1' C0&-' 0&' .& -.' K' D' D1' , '-.' #1' C=&? >1A@' 0&' <-A' ?-A1 ' B&-A'B'&-' D<' D1' A 1' '-' M+' 1' =' D1' , '-.' #1' -.' #1 &-A1' D1' 11

W .'!- -2' .'" ""'& *!' . ' &+/"!-' ; @' 2O# ' 3!"2. -2' 2 ' +² ; !' *. . /' * &-2 ' !' M&-*

" $ 3' <@K1 ' D<' D1' 01'A' =1&==1>1- ' &=' @&-A10' '-' =11' 0' > C@1' #1' -& ' ?A'B'<@@' &' D1@ 10' &=' 0?BD1' =1==&? ' =& ' <- ' ' @1'9'-' <'@@ & ' &' 1- ' & D1 ' &=' D1' , '-.= ?#. 1 =' =& ' <- ' &X)" ' @1' &' D1' 0<>1' #1=& 1' D1' 0<'A' =1&==1>1-

] '&2.' '" !&"2' &-' & ' Q

C ' #1' ' A1 -1A' D<' ='1- ' C0&-' .&'-.' & ' K' D' D1' , '-.' D<+1' B&+1-<?- 1A' & ' 0D<@@' B&+1-<?- ' & ' <. 11' D<' D'0' 0&-' & ' A<?. D 1 ' 0D<@@' 10C&?01' & '$ << ' 0&-' & ' A&?. D 1 ' &=' 1- ' C0&-9' D<' D1' 0<>1' B&+1-<- ' & ' <. 1>1- ' 0 <-A@' .&&A' <-A' 1==1= ?1@@' < 1-0 ' D1' , '-.' <-A' D'0' D1' 10' <-A' D1' , '-.' &' #1' 1LB@-A1A' &=' D1' +<@?1' &=' D1' >< '<.1' D1 &=' & ' D1 =& 9 D&?. D' 0&' #1' <- ' &=' D1' 0<>1' &--10' & ' "&?. D 1 0' 0&' &' #1' >< '1A' & ' 10C&?01A' #1' K '-' D1' 1 10' &=' B&-01- G &' D<' D&10' 10C&?0<@0' #1' 0&@1>C- 01A' '-' D? BD1' D<C1@@ & ' < & ' #1=& 1' D1' '-.=' A1C '-.9 <-A' 0&' D1' 0<>1' C0&-' 0&' .&'-.' A'0B1<0' '-' D1' , '-.=' ,+dB1' D1' , '-.' #1 -.' #1 &-A' D1' 11

' @

C ' C ' =& ' F <'. D =' <-A' 1<0? 10

&' D1' , '-.' &? 1 & < -' & A' ;

' D1' &>1-0' '-' D'0' C01- ' C< @'<>1- ' <001> #@1A@' D<' KD1 1' <0K1@@' # ' D1' D< 1' &=' <.-<' < <' <0' # ' A1 ' A', 0' & A1-0-B=' <-A' < ? 10' ><A1' '-' A', 01' C< @'<>1- =' '-' D1' >1' &=' & ' -&#@1' C.1-' &? 0' <-A' C0A1B(00&? 0' ' D< D' #1' & A1 -1A' D<' &&-' >10? 1' <-A' &-1' F 1'. D ' 0D?@A' #1' D & ?. D&? 1' <@@' ='0' 1<@ <1' &=' -.@&-A@' KD'BD' F 1'. D ' <-A' 10? 1' 0D?@A' #1' <BB& A'-.' &' D1' <-A< A' &=' & ' 0BD1a1 9' -A' D<' 1+0 ' <-' 0D?@A' # ' <-A' 01@@1' # ' D1' 0<>1' <-A' K' D' -&-1' &A1 ' ?CC&-' M 1 -' C1 -10' <-A' =& =1' ? 10' @ > 1A' '-' D1' 01'A' < ? =' <-A' A1- 1=' <0' '-' D1 >' >& 1' C@1 -@ ' ' A& D' <CC1 1@' F D'BD' < ? 10' <-A' & A1-0-B=' D<+1' -& ' '-' > 1' C<001A' -1' A ' #1' C? ' '-' A?1' 1L1B?B'&-9 F D1 =& ' & '. N 1' &=' ? ' >&0 ' #@100' A' A'0C 0'B'&-' 1- 1-A -.' 1=& ><B'&-' '-' D1' C2 > '001\' <-A' D<' '-A'==1 1- ' ?0 'B1' 0D?@A' #1' D<A' <-A' 1L1 B'01A' <>&-.1' <@@' &' ?#. 1 =' K '-' D'0' & '01'A' 1<@>1' <BB& A'-.' &' D1==1=' &=' D1' 01'A' < ? =' <-A' & A1- -B=9' <-A' B&-0'A1 '-.' D<' '-' A' 0' C< 10' &=' D'0' & 01'A' 1<@>1' D1 ' #1' ?01A' >10? 10' <-A' K1'. D 10' 0&>' >& 1' @< .1' D<-' D1' 01'A' <-A< A' <-A' 0&>' @100 1' #1B<?01' D<' D1' +1 ' ?1' >10? 1' &=' D1' 01'A' <-A< A' '0' -& ' &' <@@' &' ?1' @'1.1 ' +1 '@ ' a-&K1-9' <' &? ' &K-1' CC 1' B&0 ' <-A' BD< .1' D<+1' A&' @1 1' ><a1' #& D1' F 1'. D 10' <-A' >10? 10' &=' <001' <BB& A'-.' &' ` D1' +1 ' ?1' <-A< A9' F D'BD' ' >=' 'C@1<0' A' 01'A' . WB1' # ' D<A+ B1'<-A' <001- ' &=' D1' @& A10' 0C?<@@' <-A' 1>C& <@@' '-' D'0' C01- ' C< @'<>1- ' <001> #@1A' <-A' # ' <?= & ' 1' &=' D1' 0<>1@' &' &@A1 -' <#@'00D' <-A' 1-<= ' D<' D1' 01'A' >10? 10' <-A' K1'. D 10' &=' <001' #1' A1@ , 1A' &' D1' ' 1\1'-0' & ' ? .1'010' &=' D1' BD'1=' ' 10' & ' D' 1' &K-10' & ' ? .D10' &=' 1, ' D' 1' &=' D'0' 1<@>1' '-' D'0' C< @1>1- ' =@&K1' #1' -.9' & ' &' D1' D'1=' ==' B1 0' &=' 1 '0 BD1' ' 10' D' 1' &K-10' & ' ? .D10' KD1 1' 0?BD1' ' 1\1-0' & ' ? .10' @<a@ # ' -A1- ? 1' D1 &=' &' #1' ><A1' #1 K1-1' D1' 10& 1 ' &=' -.@&-A' & ' -A1 ' 10 1 ' =& ' D1' >1' #1' -.' -A' D1' 01'A' ' 1m1- ' . 010' & ' & D1 ' D'1=' ==' B1 0' <=& 01'A' 0(

1<0? 10' <!'A $ ' 'E ' & 'D1' ='B1 R' &=' & &?. DZ/I+'

0' /&22!22! ' %' .$- ⁴ Y/!#! 2! I] V &+² L =1@? '-. %' .$- + (B&>>&-' &? %' .$- +

EE ' . 4)@' '9V ; > +f

D1 ' ' 1B1 +)K . ' 0 > =@ ' &' #1' B&-+1 1A' &' D<' E ' 1 &K-1' & ' & &?. D' D<' D1 ' #1' &=@ ' < ' D1 0' &0 ' 0<'A' D< .1' &=' D1' 01'A' ' 1' &K-1' & ' & &?. D@ <-A' &' #1' A1@ , 1 ' &' D1' <' 1' D 1=' 0?@@'=' & ' & D1 ' D1' D'1=' ==' B1 ' &=' D1' 0 < > 1 "' D1 1' &' 10 ' <0' &?=' 10&? ' '-' D1' ?0 &A'1' =' D1' 01'A' D'1=' ==' B1 ' &=' D1' 01'A' ' 1' &K-1' & ' & &?. D' =& ' D1' > 1' #1'-.' <-A' &=' D'0' ?BB100&?=0' =& ' 1 @ &' 1. 1-' < ' <0K1@@ <@@ >10? 10' <-A' F 1'. D 10' K '-@ 1' 01'A' ' 1' &K-1' & ' & &? ' <0' D1' -10? 10' <-A' K<. D 10' K '-@ D1' 01'A' D' 1' > < #1' B& 1= ' 1=& >1A' < > 1-A1A' <-A' > <A1' <BB& A'-.' <-A' <= 1 ' D1'

0# ' &#!"Z 2 +' ! ' +' V !&* Z' -/' ! 20"!2 ' !&" B!!Z<

3!- +@' .'' !*+!

02 &#!Z . ' 3! #!' 1 @' ! '' -/' / ! !" -&2!' <&/ 2 ' 3".#+ 1 &.-' 2 +' ; !' 1 /!' .' !- ."#!' &2

>10? 1' &=' D1' 01'A' <-A< A' #1=& 1' D1' =10 1' &=' 1 >' '. D1@@ < BD<-.1@@ -1L ' B&> -.' -A' D<' D1' 01'A' D'1=' ='B1 ' = ' ' D1' >1' #1 -.' '-' 1, ' <?BD1' ' 1' &K-1' & ' & &?. D' D<+1' =& ' D< ' B<?01' <' 0C1B' <=@ < a1' & ' 1<@1@ &' A&' -< a1' 1 ' 0?BD1' F 1'. D ' <-A' >10? 1' 0&' > <A1' &' #1' 1=& >1A' <-A' # #?. D ' ?- &' D >' K &? ' ==<?A1' & ' A1@< 1 ' -A' D<' D1' <a1' =& ' D'0' @<#&' = ' 01<@ -.' &=' 1 ' ?00D1@" @A ' &=' 1, ' & 1 ' >10? 1' &D ' &=' 1, ' ' K1'. D ' 'A ' &=' , 'A" ' 5' <-A' &=' 1, ' F 1'. D ' ?DA1 @ H0@ <-A' -& ' <#&+1' ?CC&-' C1 -' &' =' =1' 1' =& ' 1 ' > 1' D<' D1' 1=?0' ' & ' A& D1' D1' B&-= '1' L@ ' 0 ' D1' && -' D<@=' D1 &=' &' #1' &' &?' &, < -' & A' <-A' D1' & D1 ' D<@=' &' D > ' D<' '0' . 1+1A' <-A' K '@@ 0?1' '-' D<' #1D ' # ' <BB' &-' &=' " 1 1' &' #1' 1B&A1A' <= 1 ' D1' B&< 0' &=' D1' &1-' <K1@ <-A' Z' 1' " 1=1-A<-' ' '-' 1- ' 0?BD1' <BB' &<' #1' -& ' 1B1 +1A' &' K<. 1' D'0' <K1 ' -A' D<' D1' ?0 'B10' &=' C1<B1' '-' 1, ' D' 1' &=' -.@&-A' D<+1' =?@@ <?^& ' 1' <-A' C&K1 ' &' 1-H?1 1' D1 1' <-A' A1R > -' 1' 01'A' A1=''?@ 10@ -A' &, ' D< ' @ D<' &C -' CB@<><B'&-' #1' ><A1' '-' 1C ' D' 1' &=' D'0@ &' 1'A' 1 > 1' D<' -&' ><-' # 1' -1' 01@@1' <= 1 ' D1' 01'A' =10 1' &=' 1 >' '. D1@@ # ' 1- ' & D1 ' F 1'. D ' & ' >10? 1' D<-' '0' <BB& A'-.' &' D1' 01'A' <-A< A' ?C&-' 0?BD1' C1 -10' <-A' =& =1' ? 10' <0' '0' @ > 1A' '-' 1' 01'A' < ? 10

- ' 5 !

' ' D<' ' BD<@@1-.1' B<@@1A' '1-0' " 1 -0' @1' .< A' #1' -&1' BD<@@1-.1

&' D1' , '-.' &? 1' &, < D' @& A

6&!-Z !&-Z+ ' <" / ! ' 2 +' ; !' -.' * . . /' +!-*!' &-' -@' 220!' .' ; !' 7& &-' .-/.-<

; ' D1' &> -0' '-' D'0' 01-' C@' <>1-' <001>#@1A' D<' KD1 1' &=' @&-.' >1' ?01A' '-' 1-' '00?1' &' #1' '1A' K' D'-' 1' ' 1' &=' &-A&-' <' BD<@1-.1' B&>1-@ ' B<@@1A' '1-0' " 1 -0' @1' .< A1' D< D' #11-' <A> 1A' =& ' < BD<@1-.1@ 0&' D<' -&-1' '00?1' B&?A1' #1' '1A' '-' -&' F < A1' K &?' D<' B 1' K1 1' ''' 0?='B'1-' C0&-0' &=' @ +1@&A1' &' kD1' 1 1@ ' +<@?1' &=' L@ 0' <#&+1' <@@ BD< .10' K '-' D1' 0<>1' ' 1@ <-A' AK1@@'-.' & ' D<+ -.' 1-' @ +1@&A1' K '-' D1' 0<>1' F < A1@ -A' '' '0' 0& -&K1@ D1' B<?01' E&A' a-&K1 D' KD @ D<' D1 1' '0' -&' F < A1' & ' 1@@'0' #?' =1K1@ <-A' '-' 10C1B' <@@ '-' C@11' &=' @1-A@ D<' 1-' C@1 > '=' & ' A1><?-A<?-' B<--1' D<+1' 0?=='B'1-' '<@@ '-' D'0' >< 1' <0' 1+ A1-@ ' '0' a-&K1?' =& ' D1' <?01' &=' BD<@1-.1' <=& 10&'A@ =& ' '-' 1' >&0 ' C< 1' &=' F < A10' <0' -&K' D1 1' #1' -&-1' 0?=='B'<-@ <-A' '=' <-' '#1' D1 ' < ' -&-1' ='B1 0' < ' A< 1' 0& > &-A1' D1 >@ & ' 1@0' '=' D1 ' #1' 0& > &-A1' D1 ' K' @@ -&' <CC1 1@ D1' ' D<+&? ' '0' 0&' . 1 ' <-A' D1' ' <='A< > <' =' 0&' @' '@@C D< ' ' C@1<0' &' > &0 ' D<#&-A<?-' .0B1' # ' D<A+ B1' &=' D1' @& A10' 0C?1@@ <-A' 1 > C& 1@@ <-A' # ' D1' <?= & ' 1' &=' D'0' C01 > ' C< @' <> 1-' &' & A1 -' =& ' 1' J1-' K1@1' &=' &' ?1' 0?#. 1 =' 10 <#@'00D1' <-A' 1-<=@1' D< ' = & > 1' D1-0=& D' 1' BD<@1-.1' B& > 1-@ ' B<@@'A' '1-0' " 1 -0' @1' .< A1' #1' -&' BD<@1-.1' #?' ? 1 @ ' +&'A1' <-A' &=' -&-1' 1==1 1;' <+ -.' & 1 ' C0& ' <@@ &=' & D1 ' BD<@1-.10' KD<' 0&' 1C' D1 ' #1' <BB& A'-.' & D1' @<K1

'

C ' ' D<' ##& =' I ' & 0' 0D<@@ C< 1' 0?BD' H?'-\' > 1' I ' A'0 > 1' <0' D1 ' &?. D ' &' C< 1' # ' <-' ' '-' 1' >1 &=' , '-.' AK ' D1' !&K1 D

' , '-.' &? 1' & <'-' @& A' 1 > 1 > # 1 ' D&K1' <0K1@@ D'0' '. D-10' <0' A'C0' D'0' C. 1-' &? 0' <-A' CA1B100&? 0' , '-.' =' &=' -.@&-A' D<+1' > <A1' <-A' . ='- 'A' <0K1@@ ?CC&-' =1 -1A' 0?. .10 '&-0' <0' & D1 ' K'01' &' A +1 0' ##& 10' '&? 0' E< A1 -0' , 1C1 0' <'0 1 0' <-A' ?@1=0' & ' & < -0' &=' 0C?<@@ C@<B10' <-A' &' D1' ' 0?BB100&? 0' A'C0' <-A' > <-' . ?- =' <-A' 10' 1- =' D<' D1 ' '-A' 1' ' 0?BB100&? 0' <-A' D1' ' 1- - =' <-A' +<?- =' 10B1<?- =' ? 2C&-' D1' ' @&-A10' <-A' 1-A00' <-A' <@0&' <@@ @&-A10' <-A' 1 =' 1- =' .&A10' <-A' B< <@@10' &=' 1 > ' <-A' &=' D1' ' 01'A' 1-J- =' <-A' M+<?- =' KD< 0&1 ' 10B1<?- =' ?CC&-' D1' ' 01'A' @&-A10' <-A' 1-A0' 0D<@#1' H? 1' <-A' A'0BD< .1A' &=' <@@ H?'-\' > 10' <-A' A'0 > 10' <-A' & D1 ' H?& 10' <L10' <-A' <@@<.10' # ' 1' '<@ 1' &=' D 0' D'0' 1<@ > 1' '-' <-' ' K'01' .0?- 1A' & ' &' #1' . > 'A9' # ' B&@&' &=' K'-BD' . - =' <-A' ' 10' C< 1- =' D1' `. 0?- =' 4' <=& 1' 01'A' -&K1' '-' @< 1' A<@10' D<+1' <0a1A' <-A' 1' <0a1' A1A?BB' &-0' <-A' <@@&K<--B=' < ' H A-\' > 1' <-A' A'0 > 1' .3?- 'A' ?- &' &? 1' 01'A' 0&C -' @& A' 1', '-.' &=' > &BD1' . 1 1' <-A' > & 1' 1LB100' +1' 0& > > 10' &=@ > &-1 ' D1-' D< D' #1-' <@@&K1A' &' A1A?^1A' ?- &' D1 >' # ' 1<0&-' &=' D1' ' 01'A' ./?- =' > 1' C<001A'C F D1 1 D ?. D' H?> \' > 1' <-A' A'0 > 1' C D1' , '-.' #1=& 1' D'0' > 1' . ?- 'A' <-A' D1 <= 1 ' &' #1' .W?- 'A' '0' <-A' &=' @' a@ D&A1' 0D<@#1' . 1 @ ' > - 00D1A' <-A' @1001A@ <-A' D1' C& 1' &> 1-' C1&C@1' &=' D'0' 1<@ > 1' 0& > &BD1' D1' > & 1' . 1+&0@ ' <001001A' <-A' BD< .1A' &' D1' 0<>1' H< '\' > 1\' <-A' A'0 > 1\@ 1 > 1 > # 1 ' < ' D1' #1 '-.' <-A' 1 > C@& '-.' D1 &=' ^ > &0 ' O@' <0K1@@ #1' &' D1' 1@'1=' &=' D1 >' <-A' D1' ' 01'A' 1-0-=' =1 > &? 0' <-A' , +W- =' D< ' D<+1' 0?BD1' .W?- =' <-A' ' 10' C< 1- =' <0' &' & D1 ' &=' D'0' ?#. 1 =@ D< D' D1 =& ' # ' <001- ' <-A' <A+ 01' &=' D1' @& A10' 0C?<@@ <-A' 1 > C& 1@@ <-A' &=' D1' & > 1-0' '-' D'0' 1- 'C< @' <>1-' <001>#@1A' <-A' # ' <?= & ' 1' &=' D1' 0<>1' C@' <>1-@ & A1 -1A' 1-<= 1A' <-A' 10 < @' 00D1A' D< ' D1' 0<' A' ##& 10' '&? 0' E< A1 -0' , 1C1 ' <0@1 0' <-A' +A1 0' & ' & < -0' &=' <@ ' C@<B10' -& ' -&-1' &=' 1 > @ -& ' -&-1' &P2' KD< 0&1 ' D<+ -.' 0?BD1' ' 10' &' . > =' D<+1' ==& > D1 0=& D' # ' 1<0&-' &=' 1' 01'A' 10' C< 1- =' <-A' . ?- =' <-' ' <@@&K<?-B1' A1A?BB' &-' & ' <BH? A@@ &=' 1-' > & 1' & ' . 1 1 ' 0^ > 10' &=' > &-1 ' <' 1- ' 0?BD1' ^?'-\' > 1' <-A' A 0 > 1' .0?- 'A' & ' D1 <= 1 ' &' #1' .3?- 'A' 1LB1C ' &-@ ' =' C ' <-A' <0 &BD1' 0?>10' &=' > &-1 ' <0' D< D' #11-' A1A?=@1A' <-A' <@@&K1A' &' & ' =& ' 1 > ' & ' <- ' &=' D1 >' # ' 0&-' &

! !"' 3 !-' .' &"& && +' 3!"2.-2' .' <2# "*! ' . ' &21 'Z -/' 90& & +1 !2' 2 +' ' !% !-/'-.' 0" !" -' !' ! ' . ' M&-*' /7 "/'

H

' E <- 110'
V > ?0

=& B1' &=' D1'01'A' . ?- =' <-A' 10 C< 1- =' '-' D1' >1' &=', '-.', AK< A' D1'=&? D' <' 0?BD1' H?''@\'>1'<-A' A'0>1' &' D -" . <- 1A'<-A'C< 1A¢ D1'01'A'.D'- =' <-A' 1\'C< 1- =' & '1- ' <Q¡1' 0 < ? 1' & ' & A1-3-B1'#1=& 1' D'0 >1''-' <- ' K'01' ><A1' & ' & A1 -1A' -< K 0 <-A -.

$. ' '' <@K1 ' D<' D'0 <='1' & ' & A1-0-B1' 1L 1-A1' -& ' -& ' '-' <- ' K'01' #1' C ?A'B'<@@ & ' D? 1' &' <- ' C? 1' .J?- 1' & ' .0?- =' & ' 10 C< 1- =' #1 '-.' A< 1' D1' L' ' A< ' &=' "1B1>#=' '-' D1' =' 0 ' 1 1' &=' &? 1' 1'.-9 ><A1' ?- &' D1' <'@@'===' ? .1'010 1-' &'<@ '1'<-A' -='' <?- =' &=' D1' &K-1' &=' <@&C' B<@@1A' & D1 K'01' D1' &K-1' &=' D 1K10#? '¢ #?' D<' &? 1' 01'A' .0?-' <-A' .?- 10 <-A' 10 C< 1- 10 <-A' 1 ' D'-.' D1 '-' B&- 1 -1A' #1' <-A' 0 &-A1' .&&A' <-A' 1==1 ?1@@ <= 1' D1' 1-? 1' <-A' C? C& '&=' D1' 0<>1¢ D1' 01'A' <= 1' <-A' & AH@'D'B1' & ' <- ' D'-.' D1 '-' B&- 1'.-1A' -& K/0 &-A' .

3".'&2.' .'" "!72;0"@

'

&-=' B& &0

' ' &? 1' &,< -' & A' D< D' D<A' &' D'0 . 1' B&0 1' <-A' BD< .1' >< ' ' <001>#@10 <CA' BA>> - B<B'&-0' K' D' D1', '- ' &=' B& =' =& ' <> 1' 1K10 <-A' C1<0 &' #1' D<A' <-A' .; '!/' #1 K'L1' D'0 '.D-10 <-A' D'000?#.1 =' -' D1' B&-1' C< ¢ <-A' D1', '-.' &=' B& =' <-A' D'0 ?#.1 =' &-' =1' & D1 ' C< ¢ #?' KD< ' <BB& A1' & ' <. 1>1-' 0& 1, ' #1' <a1-' <-A' B&-B@?A1A¢ 0?BD1' <BB& A1' <-A' <.. 1>1=@ ' =& ' D1' C< ' &=' D1' 01'A', '-.' &=' B& =' ` 'U' '0' 1, '?-A1' D1' ' 0? 10 'C> 01' # &a1-' <-A' -& ' a1C ¢ ! & ' D1' KD'BD' ' ''0' #1 1 ' &' #1' K' D' D1 >' < &C -' K1 1' D<-' ?-A1 ' 0?BD' < =1 -1A' C1<0' ¢ F D1 =& ' D1', '-.' &? 1' &,< -' & A' # ' D<A+ B1' <-A' < 01-' &=' D1' @& A10' 0C?1'L' <-A' 1>C& 1@L' <-A' D1' &>1-0' '-' D'0' C01-' C< @' <>1-' <001>#@1A' <-A' # ' <?=@& ' 1' &=' D1' 0<>1' 1-<= 1 D¢ D< ' <@@ B& =' A +1@@ -.' K' D'-' D=0 1<@>1' &=' -.@&-A' <-A' F <@10' -& ' ><A1' & ' D1 <= 1 ' 0)' #1' ><A1' A1-1\ -' <+& A1' &? 1' &=' D'0 1<@>1' K' D'-' L@ ' A<'10' <= 1 ' CB@<><B'&-' ><A1' K='-' D1' D' 1' KD1 1' D1 '/AK1@@1¢ ?CC&-' C1 -' &=' =& =1' ? 1' &=' <@@ D1' ' .&A10' <-A' < <@@10' <-A' D1' ' #&A'10' &' C '0&-' -A' &,' D'0 D<' >>1A'< @ ' <= 1 ' D1' 01'A' L@ ' A<@10' 0U BD1' #1' ><A1' '-' 1C ' ' 1' & &?.D' <-A' D?-A 1A' &=' -.@&-A' <-A' F <@10' =& ' 0?BD1' B& =' # ' D1' &-0 <#@10' &=' D1' 0<>1¢ <-A' =' <- ' >< ' #1' =&?-A1' D<' D1 ' <-A' 1C ' &=' D1 >' #1' <a1-' <-A' < 10 1A' <AA' D1' ' .&A10' 01<01A' &' D1', '-.=' ?01¢ <-A' ==& >1' D1' 0AA' ' 1' & &?.D' & ' ?-A 1A' KD1 1' D1 ' #1' <a1-' &' #1' # ' D1' 01'A' &-0 <#@10' B&-+1 1A' D1' -1L ' K1 ' &K< A' B& #-A' ?- &' D1' -1L ' D?-A 1A¢ <-A' D1 1' D1' &-0 <#@10' &=' D1' 01'A' -1L ' ?-A 1A' &' 10B1 +1' D1 >' <-A' 0&' B&''+1'1' D1' 01'A' B& =' D1' -1L ' K1 ' &K< A' B& @&-A' ?- &' D1' -1L ' ?-A 1A¢ <-A' 0&' = &>1' ?-A 1A' &' ?-A 1A' '@@ D1 ' #1' # &?.D ' '- &' B& @&-A¢ '-' @'a1' ><5' <-A' =&? >1'<0' <# ? 1A' >1-' =& ' =1@&- ' #1' ?01A' &' #1' B&-+1 1A' = &>1' D1' 1 - K' '1' KD1 '-' D1 ' <# ? 1' ?- &' D1' C& ' &' D1 >' <00' .-1A' -A' =? D1 >& 1' D<' ' ' #1' & A1 '=1A' # ' D1' 01'A' <?^& ' '1' D<' =' A1=<?@ 1' #1' '-' D1' &-0 <#@10' &=' 1- ' ' 1' & &?.D' & ' ?-A 1A' '-' ><a -.' &=' AC1'01 BD1' <= 1 ' C1-' CB@<><B'&-' ><A1' '-' D'0 #1= <@+1¢ & ' '-' <- ' &-0 <#@10' '-' A1K1' B&-+1 <-B1' &=' D1' 01'A' B '0 &K< A' <-A' '- &' B& @&-A' D<' D1 ' <AA' 1, ' &=' D1 >' #1' -.' '-' 0?BD1' A1=<?@ 1' =& =1' 1' &' D1', '-.' LLW 0' <+ -.' &' D1' & A10' &=' = <?-BD1 0' <-A' &' 1, ' &=' D1 >' 0?BD1' '.D ' <-A' '-R1001' <0' D1 ' D<+1' '-' <- ' 0?BD1' .&A10' <-A' B< <@@10

3!- +@' .-' !*+!#' ' -' ;+!2

'

' &' C< 1' ?0 &>1' =& ' 1+1 ' #? ' &=' <@>101

&' D1', -.' &? ' &51 -9 & A';

; ' D1' &>1-0' '-' D'0' C01-' C< @' <>1-' <001>#@1A' D<' KD1 1' &=' 4 <1' D<' -&' > -A' '0¢ 1=' <+'1' D< @@ #1-' >< - 1-1A' C<00'-.' D1' 1' 10' &=' < &a 0' <-A' 0&' &' A'C0' C& '0' '-' D&01' C< '10' &' D1' ?-', 0<@@ '-B 1<B1' &=' &? ' 01'A' <+ 1' I D<?- =' <-A' >< -1 0¢ <-A' '-' 10C1B'<@@ # ' @<A -.' &=' <@>101 0' '-' D1' C& ' &=' <-A ' KD'BD' C 1 -1 D' &' D1' @& A0D'C' &=' 1-'B1¢ F D1 1' -&K1' D1' 1-'B'1-0' K' D'-' D'10' '' 1 1' @<0 ' C<0 ' D<+1' ><A1' < 0 < ? 1' <-A' & A'-<?-B1' =& ' D1-B 1<B1' &=' D1' 0<A' C A0D'C' &=' 1-'B1' <-A' >< - 1-<?-B1' &=' D1 >01@=' <-A' D1' ' <+ 1' I ' >< -1 ¢ D<' -&&-' &=' &? ' 01'A' <+ 1' -& ' >< -1 0' 0D?@A' @<A1' '-' D1' 01'A' C& 1' &=' <-A ' <- ' <@>101 0' &' #1' B&-+1 1A' '-/ &' D'0' &? 1' 1<@>1' &=' -.@&-A¢ K' D&?' D<' &? ' 01'A' >< BD<?- '0' C< 1' < -1K1' B?0 ?> h' 1 ' ? 1' &=' <@>101 ' 0&' @<A1-' '''' A&a< '0' &=' .&@A¢ KD@BD1' >& - 1 D' &' L+'' ' 0 1 @' -.' >&-1 ' &, ' <-A' <#&+1' <@@ & D 1' B?0 ?>10' <-A' BD< .10' <=& 1' D<' >1' ?01A¢ KD'BD' '0' . 1< 1' D? 1' &' &? 1' 01'A' #101BD1 0' K' D&? ' 0C1B@<@@ 1>1A ' D1' D<A' # ' &? ' -&#@1' <-A' 0C1B'<@@ . <B1' @1<01' ' ' C & ' &? ' >&0 1' D<#?-A<-' .0B1' # ' D<A+ B1' <-A' <001-' &=' D1' @& A'0' 0C?<@@ <''A' 1>C<@@ <-A' &=' D1' &>1-0' '-' D'0' &? ' C 01-' C< @' <>1-' <001>#@1A' <-A' # ' <? =& ' 1' &=' D1' 0<>1¢ &' 1-<==1' I ' 0 <#@'00D' = &>' D1-0=& D' D1' <@>101 0' D<' 0D<@#1' # &?.D ' '-' &' D'0' &? ' 1<@>1' &=' -.@&-A' # ' <- ' C0&-1' 0D<@#1' &=' =?@@ .<?.1' B&-1 - -.' + /W' <-A' + ' .<@&-0' <' D1' @10 ' '-' >1 ? 1' ¢ -A' '=' ' ' @<Ba1' &=' D1' 01'A' .<?.1¢ D<' D<-' D1' 1@@1 ' &' <#< 1' &>&BD1' &=' D1' C 'B1' <= 1 ' D1' < 1' &=' D1' 01'A' B&- 1- ' -A' D<' ' I D<- ' 0 <?-.1 ' # ' -.'-.' 0?BD1' <@>101 0' /'- &' D'0' 1<@>1' 0D<@@ C< ' &' &? ' . <B1' D1' B?0 ?>10' &=' L+'' ' 0 ' =& ' <' ? 1' &=' <@>101 ' &,' <-A' <#&+1' D1' B?0 ?>1' <=& 1' >1¢ &' &? ' . <B1' ?01A' &' #1' C<'1A¢ @' a1K'01' <0' D1 ' &=' 1-'B1' D<+1' 01 1' '-' <-A ' ?CC&-' &? 1' =& 01'A' ?#.'1 '0' -A' >& 1' &+0 0 @ D<' ' ' #1' '' <^1A' <-A' 0 <#@'00 1A' # ' D<? & ' 1' <=& 0<'A' = &>' D1-0=& D' D<' -&' #? 1' ' #? 10' &=' <@>101 0' '-' +1 01@@ & ' '-' +1001@0' D<' 0D<=&1' # &?.D ' '-' &' D'0' &? ' 01'A' 1<@>1' 0D<@@ #1' &@A' <#&+1' ''' ' = ' 0 1 @' -.

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3 6 A ʻ !ʻ .!-2ʻ&-ʻ &2ʻ<!-ʻ "+& 1!-ʻ 22!1;+!/ʻ ʻ 7 !"!ʻ&-ʻ !ʻ "+& 1!-ʻ .+/!-ʻ ʻV!2 1ʻ&-ʻ !ʻ %%ʻ@!"!ʻ. ʻ !ʻ "!&*-ʻ. ʻ@.0"ʻ-.;+!ʻ -#+!ʻ. ʻ;+!22&/ʻ1!1."@ʻM@-*ʻ !-"@ʻ !ʻ'H)'&ʻ7 2ʻ."/!@-!/ʻ;@ʻ 0^ ."& !ʻ. ʻ !ʻ2 1!ʻ "+& 1!-ʻ ʻ-..-ʻ . ʻ &2ʻ+&!*!2ʻ @!&2ʻ7 .1ʻ ʻ!%&*!-ʻ2 0+/ʻ;!ʻ 7 "/!/ʻ.ʻ" 0+ "&!ʻ -.0-#!/ʻ !ʻ 20 !ʻ. ʻ !ʻE&-*ʻ."ʻ !ʻ20 !ʻ. ʻ &!ʻ -ʻ -@ʻ@1!ʻ !-ʻ.ʻ #.1!ʻ&-ʻ !ʻ .0- &!ʻ. ʻ -# 2 ʻ2 0+/ʻ ." !& i ʻ -@ʻ. ʻ &2ʻ*..//&2ʻ." # ++!2ʻ+.-/&2ʻ.ʻ" #-2&ʻ-@ʻ. "!ʻ &"!ʻ;0ʻ.-!+@ʻ !ʻ*../!2." # !++!2ʻ+.-/&2ʻ -/ʻ! &2ʻ !ʻ7 &# !ʻ !ʻ 2.-!2ʻ2.ʻ.0+7!/ʻ.ʻ" !@ʻ @!-2ʻ7 .1ʻ20#M!ʻ !%&*!-ʻ2 0+ ';!ʻ 7 "/!/ʻ&-ʻ !ʻ2!&/ʻ !00/!ʻ . ʻ -# 2 ʻ !ʻ&-ʻ !ʻ2 1!ʻ .0-&!ʻ -/ʻ ;@ʻ"! 2.-ʻ. ʻ -@ʻ20# !ʻ.0+7"@ʻ !ʻ20 !ʻ. ʻ !ʻM&-*ʻ.ʻ" !ʻ20 !ʻ. ʻ -@ʻ. "!ʻ 2.-!ʻ -.0-#!/ʻ7& &-ʻ !ʻ2!&/ʻ .0-&!ʻ. ʻW< -# 2 ʻ2 0 /'-. ʻ;!ʻ ; ""!/ʻ-!ʻ /&2 ;+!/ʻ. ʻ -@ʻ 1 ʻ #/.-ʻ-!"ʻ .ʻ #+ @1!ʻ 0@ʻ 1 <'. ʻ !- !"& 0-#!ʻ. !ʻ. ʻ !ʻ2 1!ʻ .0-&!ʻ -!"ʻ /&2 ;+!/ʻ ʻ 0"2!V!ʻ!-@ʻ 1 ʻ ##&.-ʻ.0!ʻ. ʻ !ʻ2 1!ʻ .0-&!ʻ -. 7& 2 -/&-*ʻ 20# !

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C ʾ .ʾ &2ˈ&ʾ@.0ʷ2!&/ʾ6.& +ˢ 2.-!ˈ*.ˈ/! !ˈ 22!ˈ -/ʾ -ˈ /!ˈ0 .-ˈ@.0ʷ -/ʾ .0ʷ2!&/ʾ 0-#&!-ˈ!--!1@!2ℓ 7& ʾ@.0ʷ2!&/ʾ 1!!ˈ ".& +ˢ .ʾ -/ʾ&-ˈ !ˈ &!2ℓ.,ˈ -/ʾ ;!@.-/ʾ !ˈ !!ˈ.ʷ !ˈ # 02!2ℓ ."2!&/ʾ -/ʾ +2.ˈ&ʾ@.0"!ˈ2!&/ʾ -.;+!ˈ 2."&!ˈ.ʷ "1!!ˈ !"!ˈ2.ˈ #.-&-0!ˈ &ʷ@.0ʷ ""@ʾ +ˢ &&+ˢ !ˈ2!&/ʾ &!2ℓ;!@.-/ʾ !ˈ !!ˈ;@ˈ !ˈ2 #!ˈ.ʾ'&&ℍ -.-! !2ℓ !-ˈ-!%'.+.7&-*ˢℍ V !ˈ@.0ʷ2!&/ʾ .1!-2ℓ ;@ˈ !ˈ2!&/ʾ 22!-ʾ*" 0-!-ˈ -ˈ.ʾ@.0ʾ.0ʷ2!&/ʾ .'<S&*-ˈ ."/ʾ;@ˈ &2ˈ<!-ʾ1/!ˈ 0"!ˈ.ʷ !ˈ-!#!22 "&!ˈ/! !-#!ˈ ;.ʾ!2!&/ʾ..-ˈ . "!ˈ ..+!ˈ%[`ˈ-/ʾ%)`ˈ.')ˈ -/ʾ;!2&/!ˈ !ˈ2!&/ʾ .ˈ"!ˈ &!/ʾ E!-ˈ -/ʾ+!ʾ&!/ʾ.ʾ !ˈ1.!ˈ;+!ˈ*../!2ˈ # !++!2ℓ /ʾ. "!ˈ &-*!2ℓ020!++@ˈ.ʾ20# !ˈ%ʾ@!ˈ[(ˆ -/ʾ%)[`#.-"&;0 ."@!ˈ -/ʾ# "*! ;+!ˈ7&#+0-ˈ !ˈ &"!2ℓ &!!2ℓ40"* !2ˈ.7-!2ˈ -/ʾ . "!ˈ +#!2ˈ.ʾ &2ˈ@.0ʷ2!&/ʾ"! +1!ˈ&-ˈ 1 ʾ -/ʾ.0"1!ˈ ."!ˈ@1!02!/ⷪ %#! !ˈ !ˈ2.1!ˈ.ʾ'ℍ +&ʾ.ʾ !ˈ2!&/ʾ%'s`ˈ -/ʾ W`ˆ !".ʾ0++@ˈ.ʾ;!ˈ/!/0#+!ʾ &2ˈ.ʾ2!@ˈ.ʾ !ˈ2.1!ˈ ʾ !ˈ !&/ʾ%'[(ˆ -/ʾ%`)ˈ !@-! ʾ0-.ʾ&-ʾ"!+&!ʾ -/ʾ/&2# "*!ˈ.ʾ !ˈ ."!ˈ.7-!2ˈ &!!2ℓ -/ʾ40"* !2ˈ.ʾ &2ˈ@.0ʷ2!&/ʾ"! +1!ˈ7 2!/ʾ/!_.+ !ˈ.ʷ/!2".@!/ˈ.ʷ.$'*"! +@ˈ&1 .<@22 !/ʾS"]++&2ℓ ʾ20# !ˈ W`ˆ -/ʾ%`)ˈ.ʾ*"! +@ˈ# "*!/ⷪ !ˈ2 1!ˈ2.1!ˈ.ʾ'ℍ &ʾ &ʷ20# !ˈ" !ˈ2ℓ7 2ℓ "!ˈ &2ˈ@1!ˈ1 /!ˈ.ʾ!<@ʷ &"!ˈ0;!ˈ/&'&/!/ʾ&-ˈ 20# !ˈ -/ʾ .0"1!ˈ2ℓ&-ˈ -/ʾ0 .-ˈ !ˈ+2!ˈ*" 0-!ˈ0-.ʾ@.0ʷ &* -!2ℓ2ˈ.ʷ..-ˈ%'ˆ<-/ʾ%F)] 7 2ℓ /ˈ -/ʾ/&'&/!/ℓ %!ˈ ʾ +2.ʾ ʾ !ˈ+ &!ˈ !0++ˢ -/ʾ&- & 0- !2ˈ7(&-ˈ !ˈ &"!ˈ.ʾ !ˈ &&!ˈ.ʾ &-#.+-ˈ20;0";!2ˈ -/ʾ #&0<!ˈ !". -/ʾ !ˈ+ &!ˈ !0 ʾ -/ʾ&- & &1 !2ˈ 7& &-ˈ !ˈ .7-!ˈ.ʾb"!ˈ!ˈA!"-!10 ʾ&-ˈ !ˈ &"!ˈ.ʾ ." ʾ.ʷ!& !ʷ.ʾ !@1ˈ.ʷ !ˈ*.S/!2ˈ -/ʾ# !++!2ℓ -/ʾ. "!ˈ &-*!2ℓ.ʾ !&"2ℓ ;!@-*ˢ 7& &-ˈ !ˈ2!&/ʾ &"!ˈ.ʾ !ˈ2!&/ʾ &&!ˈ.ʾ &-#.+-ˈ !ˈ20;0";!2ˈ -/ʾ #&-<!ˈ !". ʾ.ʷ7& &-ˈ !ˈ2!&/ʾ .7-!ˈ .ʾb"!ˈ!ˈA!"-!10 ʾ -/ʾ #&- !ˈ !". ʾ .ʾ !ˈ @1!-ʾ.ʾ !ˈ2!&/ʾ &"/!ˈ%')ˆ -/L`%)`ˈ$ʾ!-@ʷ "<!ˈ !". ʾ1ʾ!-@ʷV&2!ˈ;!ˈ <!/

' b" -ˈ .ʾ !ˈ M&-*ˢ.ʾ 7.ʾ7 .+!ˈ B& !!- 2ℓ -/ʾ !-2ℓ.ʾ;!ˈ+!ˈ&!/ʾ .ʾ1.ʾ!;+!ˈb../2ℓ -/ʾ !+2ℓ.ʾ-/ʾ . !ʷ &-*ʾ020k ++@ˈ#.-"&;0."@ =

!/0 &.-ˈ.0ˈ.ʾ ! # ʾ B& !!- ʾ -/ʾ !- ʾ.ʾ !ˈ 01ˈ . ʾ g ʾ.ʾ;!ˈ /&'&/!/ʾ.ˈ! # ʾ &"!'&-ˈ20# ' --!ʷ 2ℓ.-ˈ !ˈ + 2ˈ b" - %!1 &.-ˈ.ʾ !ˈ - ;& -2ℓ.ʾ &-#.+-ˈ -/ʾ b"!ˈ A"1.0 'ℍ -/ʾ.ˈ !7ˈ 2 .ʷ!; 1

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-ˈ !ˈ 'ˈ!-ˈ.ʾ !ˈ M&-*ˢ 22&-*ˢ .'!ʷ -/ʾ 2 @&-*ˢ &* ʾ .ˈ-ˈ 2ℓ;!@.-/ʾ !ˈ' ! ʾ b" -ˈ.ʾ . "!ˈ 1.ʾ;+!ˈ*../!2ˈ -/ʾ .ʾ !ˈ &"!ˈ4 &-ˈ !ˈ2!&/ʾ 22!-ʾ*" 0-!ˈ-ˈ.ʾ@.0ʾ.0ʷ2!&/ʾ .1!-2ℓ ;@ˈ !ˈ2!&/ʾ 22!-ʾ*" 0-!-ˈ -ˈ.ʾ@.0ʾ.0ʷ2!&/ʾ .'<S&*-ˈ ."/ʾ;@ˈ &2ˈ<!-ʾ1/!ˈ 0"!ˈ.ʷ !ˈ-!#!22 "&!ˈ/! !-#!ˈ ;.ʾ!2!&/ʾ..-ˈ . "!ˈ ..+!ˈ%[`ˈ-/ʾ%)`ˈ.')ˈ -/ʾ;!2&/!ˈ !ˈ2!&/ʾ .ˈ"!ˈ &!/ʾ E!-ˈ -/ʾ+!ʾ&!/ʾ.ʾ !ˈ1.!ˈ;+!ˈ*../!2ˈ # !++!2ℓ /ʾ. "!ˈ &-*!2ℓ020!++@ˈ.ʾ20# !ˈ%ʾ@!ˈ[(ˆ -/ʾ%)[`#.-"&;0 ."@!ˈ -/ʾ# "*! ;+!ˈ7&#+0-ˈ !ˈ &"!2ℓ &!!2ℓ40"* !2ˈ.7-!2ˈ -/ʾ . "!ˈ +#!2ˈ.ʾ &2ˈ@.0ʷ2!&/ʾ"! +1!ˈ&-ˈ 1 ʾ -/ʾ.0"1!ˈ ."!ˈ@1!02!/ⷪ %#! !ˈ !ˈ2.1!ˈ.ʾ'ℍ +&ʾ.ʾ !ˈ2!&/ʾ%'s`ˈ -/ʾ W`ˆ !".ʾ0++@ˈ.ʾ;!ˈ/!/0#+!ʾ &2ˈ.ʾ2!@ˈ.ʾ !ˈ2.1!ˈ ʾ !ˈ !&/ʾ%'[(ˆ -/ʾ%`)ˈ !@-! ʾ0-.ʾ&-ʾ"!+&!ʾ -/ʾ/&2# "*!ˈ.ʾ !ˈ ."!ˈ.7-!2ˈ &!!2ℓ -/ʾ40"* !2ˈ.ʾ &2ˈ@.0ʷ2!&/ʾ"! +1!ˈ7 2!/ʾ/!_.+ !ˈ.ʷ/!2".@!/ˈ.ʷ.$'*"! +@ˈ&1 .<@22 !/ʾS"]++&2ℓ ʾ20# !ˈ W`ˆ -/ʾ%`)ˈ.ʾ*"! +@ˈ# "*!/ⷪ !ˈ2 1!ˈ2.1!ˈ.ʾ'ℍ &ʾ &ʷ20# !ˈ" !ˈ2ℓ7 2ℓ "!ˈ &2ˈ@1!ˈ1 /!ˈ.ʾ!<@ʷ &"!ˈ0;!ˈ/&'&/!/ʾ&-ˈ 20# !ˈ -/ʾ .0"1!ˈ2ℓ&-ˈ -/ʾ0 .-ˈ !ˈ+2!ˈ*" 0-!ˈ0-.ʾ@.0ʷ &* -!2ℓ2ˈ.ʷ..-ˈ%'ˆ<-/ʾ%F)] 7 2ℓ /ˈ -/ʾ/&'&/!/ℓ %!ˈ ʾ +2.ʾ ʾ !ˈ+ &!ˈ !0++ˢ -/ʾ&- & 0- !2ˈ7(&-ˈ !ˈ &"!ˈ.ʾ !ˈ &&!ˈ.ʾ &-#.+-ˈ20;0";!2ˈ -/ʾ #&0<!ˈ !". -/ʾ !ˈ+ &!ˈ !0 ʾ -/ʾ&- & &1 !2ˈ 7& &-ˈ !ˈ .7-!ˈ.ʾb"!ˈ!ˈA!"-!10 ʾ&-ˈ !ˈ &"!ˈ.ʾ ." ʾ.ʷ!& !ʷ.ʾ !@1ˈ.ʷ !ˈ*.S/!2ˈ -/ʾ# !++!2ℓ -/ʾ. "!ˈ &-*!2ℓ.ʾ !&"2ℓ ;!@-*ˢ 7& &-ˈ !ˈ2!&/ʾ &"!ˈ.ʾ !ˈ2!&/ʾ &&!ˈ.ʾ &-#.+-ˈ !ˈ20;0";!2ˈ -/ʾ #&-<!ˈ !". ʾ.ʷ7& &-ˈ !ˈ2!&/ʾ .7-!ˈ .ʾb"!ˈ!ˈA!"-!10 ʾ -/ʾ #&- !ˈ !". ʾ .ʾ !ˈ @1!-ʾ.ʾ !ˈ2!&/ʾ &"/!ˈ%')ˆ -/L`%)`ˈ$ʾ!-@ʷ "<!ˈ !". ʾ1ʾ!-@ʷV&2!ˈ;!ˈ <!/

V& ʾ !/0#&.-2ʾ -/ʾ %!1 &.-2ʾ -/ʾ 3". ʾ&2.ʾ 2ℓ;!.ʷ!

-!'ʷ#.1 !++!/' ;0 ' ' !@' -/'!,@' ' !@&'&- !' !0"1!' ;.'!2!&/' . ' &2' *" 0- !' -/'!,@ " !' !". ' ;!' 0 !"+@' SO& !' -/' /&2# "*!/'ℓ %#! !' +2.' ' !' + &#' ! 0++' -/'&- & 0- !2' 7& &-' !' 4."0* ' . ' !7!' ."! 1'&-' !' &"!' . ' 022!%ˢ - .7!' *"! +@' 7 2!/';@' !' !!' .' !' @1!-'. ' !'2!&/'+2'%!)[`</'%[)` "!-@ "!' !". '#.- -@-*ˢ !'1.' ;+!'*../!2 -/# !++!2.& . "!' &-*!'. ' !' + &!' ! 0+ˢ&- & 0- !2' 7& &-' !'2!&/'4."0* ' . ' !7!' ."! 1';!@-*' ;!."#!' . ' &2'*`0-!';!'-.' "!/'-!ʷ #.1 !++!/' ;0 ';!' !". '0 !"+@' SO& !' -/' /&2# "*!/$ +2.' ."2!!-' ' & ' 2!-!' *" 0- !' !% !-/!' -.' -!ʷ &-' !-@' 7&2!' ;!' ℍ0/&##& +ˢ .' !' &"!'4 &++&2' -/' .& +&!'-!ʷ !&ʷ 0##!22.0"2' . ' !' .7-'. ' 1;"&**!' 2' .' .ʷ .ʷ !-@' . "!'# "*!' .ʷ !-@' W)[` -/' %`)' 2' &2' ."2!&/';0 ' &ʷ !'" !' ' 7 2' 2! !';@' -L' /!'1 /!';@' 0/."& &!'. ' ' "+!1!-' .+/!-'&-' !' 0/' @!"!' . ' !"!&*-'. ' M&-*ˢ /'" "/' !' .0" ' &2' .'2!@'%% & .' !'*`0-!'. ' !'@' ..+!'%'``ˢ -/'%``ˢ;0 ' !@' .'!-@' . "!' *"! !'ʷ# "*!' -ˢ&-' !' 2!&/' &"/'%``ˇ -/'%``'#.-/&##&.-2' !%#! #&.-2' -/' /!/0###&.-2' ."2!&/' !"0 .-' "2!!-' /' -/'<2!"'!/' .';!' "!/'&-'1 ' -/' .0"1!' .+.7&-*ˢ ' &$.'2!@'&-' !' !2' . ' !@-' "<@-'&-' V@-!ʷ 7 &# !' < ++' ;!'&-' !' @!"!' . ' #0"!' ."/' b./' +%%%%&&H

&1!'.'3 @1!-

C ' .< &2' ;!'&' ."/!@-!/';@' 0 ."&!' . ' &2' 2!-'3 "+!1!-' '-.' 2.-'#.1!-';@'@.0ʷ &*)'#.1 0-/!1!-'.' &2'@.0ʷ <2!-' "+!1!-' .ʷ !-@' &"!' &&!L'4.."0* '3." !' . ' "!' + #!' . ' &2' @.0ʷ'"! +1!K' +!"E&2' -/' 1&2"!2'0 .-' !' 2 1!' !-/&-*' ;!'&-' !-@' 7&2!' 1 /!' .++!<.0ʷ ; ' !'2!&/'%``F' -/'%``ˇ .ʷ !-@' !' . ' !@1'.ʷ !-@' . ' !@1' ;0 '. '20# !'#.+!##&. ' ;!' 0 !"+@' SO& !' -/' /&2# "*!/' -/' -& 2.-!' ' 7 2' .++! &.0ʷ . ' !'+ 2'%``ˇ -/'%`ˇ-!%' ."!' &2'<2!-'3 "+!1!-' .' @.0ʷ &* -!2'*" 0- !/' ;!' 1 /!' .++! .0ʷ . ' !'-!% !'%'`ˇ -/'%`ˇ;@' &2' 2!-'&-/!-0"!'*" 0- !/' -.ʷ ;!' " !/'.ʷ #.1 !++!/' &-' ';! +' .'1 E!' !-@'#.++!##&.-'. ' !' 2 1!';0 '. ʷ !&ʷ +;.0ʷ ;@' !@1';!."!' @1!'/..-';!' . ' !' -!%' #.+!##& -' 0 !"+@' SO& !' -/' /&2# "*!/'ℓ 0 .-' !' 1 E&-*ˢ.' !&ʷ ##.1 !2'&-' @.0ʷ 2# !E!ʷ ;!' SO& !' -/' /&2# "*!/'&-' !' 2 1!' 2# 2E!ʷ .ʷ @1!-'. ' ++ˢ 1 ˢ !!2' -/"!7"/!2' ! !' .';!' 2E!/'#.-5-@-*ˢ !' 2 1!' ##.1 !2' -/' !<@' "!' !". 'J -/' +2.' ' !' c!&/' .+! &.0"2' -/' !,@' . ' !@1' '!' +&E!' ++.7 -#!' 0 .-' !&ʷ ##.1 !2' . ' !!2' 7 *!2' -/' "!7 "/!2' .ʷ !&ʷ #.++!##& -' . ' !'2!&/'%``))' -/'%`]'L -/'&-' 2' + "*!' 1 + ' -/' .0"1!' 2' !-@' .+&!^#.0ʷ .ʷ .++!/+.0"2' . '20# '%'s`)' -/'%``)' '!' /' '!-@ 2! 2.-'&-' @1!' 22!/

2 ˢ;! SO&'.'B!!2'&-' !' %#! !SO!"' -/' 2 ˢ '!'020 ˢ ' ++.7 -#!'.-' !&ʷ !#.1 2

!1;!"2'. ' 3 "+& 1!-' -/' . !"2' +#&-*ˢ .-!@' .ʷ !' .&- 1!-'. ' !' . !/."2'2 ˢ ;!'#.11& !/'.' V "/';@ !' -#!++."

'ˢ +2.'4!'&' ."/!@-!/';@' 0<&."&!' ."2!&/' '&'!-@'. ' !' M-&* &2'. '!-@'. ' !' &"!2'.ʷ !-@' &!j&-' .ʷ 40"*!&2' .1!-'. ' &2'<2!-'3 "+!1!-'.ʷ !-@'. "!' 2.-!' '@-*' 0 +."&!'. ' -1!'!-@' .++! .0"2' E!'!-@' .-!@'.ʷ . "!' "!7 "/' .ʷ 2 "&-*ˢ .ʷ .";!"@-*ˢ .' 1 E!' !-@' 2.-!'.ʷ 2.-!2' .++!; .0ʷ .ʷ .++!<+.0"2' .ʷ *!/!"&-*ˢ . ' !' 2!&/'%``.'-/'%``];@' &' ^!'*" 0-!/' ' !-' '20&4#&!-+@' '!/';!."!' !' 0-#!++!ʷ . ' -*+.-/' .ʷ !' @1!';!@-*ˢ ;@'!% 1&-#&.-' '!2' .ʷ 40"*!&2!2' -/'#<@' . "!' 2.-!' '@-*ˢ !' 0/+"&!'."2!&/' 2.'.0-/!'&-' '/! 0!'.'V "/!' !"!' .'"!1 @-' &ʷ !' /&2#"!#&.-' !'2!&/' 0-#!++!ʷ -/' 0-.' !' @1!';!' '!2 &2&!/' !" "+!'%' @1!2'2.'10#'.' &2'.ʷ !&ʷ "!#!&!2'.ʷ "!7 "/!2' -/' !" &ʷ .'/.';@' &2' /&2#"!#&.-'0-.' !' @1!' '!'1 /!' @-!' .' !'M@-*ˢ .ʷ !'#.-!1

M-&* 2' .ʷ !' &"!2' 2 +ˢ#<& @' -.' -#!"@' !' <1!2'.' !' . ! .'2

C ' +2.';!'&' ."/!@-!/';@' !'2!&/' 0/+."&!' ' !'2!&/' M-@* &2' .ʷ !'!"@' &"!'5&&!'&-.'@.0ʷ 0-<@' !'-1!2'.' ˢ # !' 2.-!2' 2' ;@' !@1'&-'!<@' &"!'2 +;!'/! 0!/'.';!' .++!/+.0"2' .' !'2!&/' &"2' ..+!'%'``ˇ -/'%`ˇ.-' &2'2&/!' !' !+ 2' .' !' !2'.'30"& &# #&.' .'.0ʷ /@'-7!'-!%'#.1@-*ˢ!ℍ -/' .ʷ !'. "!'&ℍ%'s`)' -/'%s`);' ;!'5&&!/'.-' &22&/!' !' . ' . ! .'2 !ʷ -!%' .+.7&-*

02&ℍ2'.' !' 3! #!'1@ ! ʷ -/' /! !"1&-!' .1L)' + &-2' * &-2' .++!# .'2' .ʷ -.' .7&-*' ". !ʷ /!/0# &.-2' -/' ; !1!-2

C ' .ʷ 210# !' 2L/&'!"2!' .++!<&.0"2' ."!' &2' @1!'&-'5!@-' &"!2' -/'. "!' + #!2' . ' +&&2'@.0ʷ 6! +1!' '!"! 02!/' -/' 7.+/' - '1 E!'/!/0##&.-' -/' ; !1!-' 2'&'7 2' 2!' !' /' -/'1 /!' ##."/&-*ˢ .' !' *" 0- !' !". ';0' !' ..+!'2.1!2 Z&'] hn' -/'%`ˇ 0 .-' /&<2' .7-!2' -/'4."0* 2'+@1@!/' -/' 2!' !' '!'&!/' -/' "!"!/' .' !' *"! !' *"0**!' -/' 0" !'.' ! &0 & 0- !2' . ' !'2!&/' .7-!2' -/'. "!' + #!2' -/' !' 2.1!2' . '20# !' /!/0##&.-' -/' ; !1!-';@' !@1'2.'+!'&!/' .' !&! "!(02!'&-'/&<2' + #!2'7".-* 0++@' '!' +&!/'ℍ ' &2' !".ʷ ;@' !'2!&/' /'@2!' -/' 22!-'."/!@-!/' '& ' -@'. ' !' .++!/.0"2' .ʷ !'+!'&!'. ' !'2!&/'%'``)' -/'%``)' -.7!'*" 0- !/'/! 0!/'"!02!' .' ++S7!'!-@'/!/0##&.-'.ʷ ; !1!-';!.'!'@1!' ++.7!/' -/'1 /!' -/'"! "# 1."!'2.1!' -'&-' & &!'.7!'.';!' "! "!/'&-'.ʷ 0 .-'!-@' .7-'.ʷ +#!' ' !-'!<@'. ' !' 02&ℍ2' .'ℓ !'3! 2' . ' !' &"!' .ʷ . "!' + #!' 7 !"!'20# !' 0" !'.ʷ 7".-*!'2 +ˢ !' .' ;!' /..-' ' !'#.1 +!@-' . ' !' .-2 ;+!' .ʷ . !ʷ &#!'ʷ . ' !'2!&/' .7-'.ʷ + #!'&-' !' - 1!' . ' -@' "&!' 2.' 0" !/'.ʷ 7".ℍ&*!/' '!' .7!ʷ .' !"!' -/' /!$1&-!' 20# !' #.1 +!@-' 27!+ˢ;@'!% 1&-#&.-' 2';@' ;&++!'.ʷ . !"7&2!' -/' !"&-' .' /..' 2';@' &1'2 +;!' .0* '#.-'!-&!-' -/' "!2.-;+!.ʷ !' 0-@2 !1!0'. ' ' !' 2 1!

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"ℓ !1&==<>1-&' 1.'0

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! 6 ʻ 2'&'&2'-."&.02+@'E-.7!-' .ℓ' !'M@-*ˢ .' &2'*"! !'#.2' -/'# "*!' '2!-'/&<2' 1; 22& !2' .' &2' 0-ℍ&7ℓ& !-!1@'."B" 0-#!' ' '!' /' ' & !' ! %' ;! 7&%' !@1'V !";@' !' "02 !/' .' '!'2! !' &2'"! +1!'&-' "-SO&+&!' -/' ! %7 &# !'7 2' "! 02!/' -/'0-/"!' '!@-!/" "! &!' '. !@-!/" !' 0# &!'. '4"& @-' -/'&- !-/!' ' !" !ʷ .' --.@!' . "!' "&!2' ';!'7& ' !'M@-*ˢ&-' +& 0-#!' -/'2.';@'+ -/' -/'7 !ʷ&-' &2' 1@-/' .'/&2".&!' &2'6! +1!' "02&-*ˢ;@'+.-*ˢ#.-&-0 -#!'.' V !""!' .'7 2!' -/'2.'!1 .'"&2' &2'+.-/' '&'2 +ˢ-. ;!'&-' .7!ʷ .'/! !-/' &1'ˢ V !" .ʷ .ʷ !'20!" &!' -/' /! !-#!'.' &2' &2'"! +1!' -/' 20;\<! &2'. ' !'2 1!' !' '/!" &-!/' &12!+'7& ' !'*" #!'.'b./' .' E!' &2'.& *!&-.' &2'"! +1!'.'B" 0-!' "02&-*ˢ&-'b./'2& !-' !'&2' 02'#.1 !++!/' .ʷ !'20!" &!'. ' &2' 2!&/' 6! +1!' .' "!/0#!' &2'"! +1!' .'B" 0-#!' .' &2' .22!22&.-' ##."/&-*ˢ .' &2'"&* ' -/' &+!ˢ A&' &2' &* -!2"!1!1;"! ' 'W<-' "&-#!' .0'/! '&2'/0!' .' !<@'#"! 0"!';.1'&-' &2' 7."+/' -/' !' @1!' !". '0-#!" !@-' -/' '!<@'*./!'/!/!' !"!'.ʷ&-' -. "!'V ."+/'2 +;!"!7 "/!/' -/' !<@'!'&++ˢ /!/!' .';!' 0-@22 !/' !-!-/& ' .' '@/!' -/' "/!@-' .0' && /! &2'1 @';!' &!/' &2'# &+/"!-'0- 'F-#!/' .';!' !""!/'/!/&2'.'# "& !' -/'1!1."& ++' .';!'/..-'.ʷ &1' .' !'+0/!' -/' .-.0ʷ.'b./' -/' .ʷ !' 7!++!' .' &2'2.0+!ˢ -/' .0' ;!'& ' ' &2'+7!' !'1 @ 0'&-' !. !1!-'.ʷ !' .0"1@-*ˢ.' &2'+2'V &++ˢ 27!++ˢ20/&!' .-.0"2'B<0 1'L'@& A0D'CƱ ><-&?Ƭ+.-/&2' !-!2' -/' . "!' &2' .22!22&.-2

6 ! - 2' -/' !"'&#!2' 2 +' ; !' @ ;+!' ' !' M&-*' 0%'&-\< &2' & ! ' 7& ' V "/2 ' ""& *!2' -/' 6!+&! 2'H -/' !'" &2' ! ' .' !' [B!. !!2 !' M&-*' 1 @' +!'@' ""! "2 +' &. -22H1 ++ ; !'&- &2' 1!

%) ' D<' ' '$ ' '7 87 7 E8' D1'0<A' <?= &' 1' '<' 5 '<1'A' =1&='#11' ") 8 8&=' D1 >' 5 7 &=' D1' 38) ' E8' "'&=' *8' D&'>#& ' '& A I D' ' >< -&' ' @<-A'0' 1 - 10' KD1 & ' D1 ' # ' D'0' & 2 ' ''-=1&==1A2' & ' # ' A?0' & 3 4 ' '0' '-' A'1 >' D<' # ' D'0' i<>1'< 1' 1 - =1 = 1 > 1 - ' D1' <<'C<1' 1 - '0' <-A' +'B1 i' -& ' D1'< 1 <. 10' &=' D1 >' #1' -& ' 1L '- @1A' -& ' C? ' '-' 0?0C1 - B1' #? ' < ' <@' >10' C<@<#@1' <-A' @1+<#@1' &' D1' , C . ' A? ' - .' D'0' =' &&AA"<@ ' > < i ' &.< U 0' &=' F < A10' > < '< ' <-A' 1@'1=0' <-A' <@@' & D 1' &.< D 10' <-A' > > 1 - B10' &' D1' 0< > 1' #1@&- . '- .' @' a1' > <K' <-A' =&? > 1' <0' '=' D1' 01'A' <A1' D<A' -& ' #1' > <A1' - 1' D<AA1 0 -A' <= 1 ' D1' , - . '0' A1B1001@ D1' 0< > 1' 1 - 10 <-A' R+'B10' &' #1' C<'<#@1' <-A' @1+<#@1' #' D1' 01'A' =1&==110' & ' &' D&01' C0&-10' D< ' 0D<@@ D<+1' '- 1001' D1 ' -' # ' 1<0&-' &=' D1' 01'A' @<0 ' F 1' -A' D< ' ' ' #1' @< =' A ' $' , ' - . ' &' @1' 1' <@@ > < ' < 1 <. D ' &' D ' > ' #1@&- . ' - . ' A ' #1 - . ' A ? 1' # ' 1<0&-' &=' 1 - ' &=' >'0011' '-' @' a1' > <-1 ' <-A' =&? > 1' <0' '=' D1' 11'A' <A1' D<A' -& ' #11-' D<AA1' -1' > <A1 0 -A' D< ' <@@' <BB'&-0' 0? 10' <-A' A1 > <? - A10' =&' #1' < <' -1A' <=I &1A@ <-A' 0?1A' &=' <-A' =& ' & ' ; @' "! 2 . -' . ' !-@' &=' D1' C > '0010' ; !' < <' -1A' <a1-' D<A' <-A' 0?1A' '-' D1' M&-*' .0'" . , !&*-' & A'0' -<k" i' A? ' - .' D'< @ =@' <-A' +' 1-<? - 10' <-A' A1=1-A<? - 10' '-' D1' 0<>1' <BB'&-0' 0? 10' <-A' A1 > <? - A10' #1' B& > C1@@1A' &' <? - 0 +1 1' '-' D1' 0<>1' <0' D1 ' 1 1' <-A' ?@A' D<+1' #11-' #1=& 1'8 D1' > <a' - .' &=' D'0' C01 - ' <=#1' ' <-A' 1C ' 1B& ' 0& ' D<A' ; !' <0' .&A1' <-A' 1 =1A?1@' <0'& ' D1' , ' - .' K1 1' 01'01A' &=' D1' C 1 > '0010' '-' D'0' A1 > 10 - 1' <0' (=' =11

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1 . ' - <

^K@' !"Z ! !"Z !- Z . ' !' 6&-*' #.- &-&-*' b" - Z' .' !' 90!!-' #.- &"1!/

6 ' !' M&-*' .0'" .3!&*-' ."/' ;@' 2' "!Z' !- !Z' 0-/!'" 2' *"! !' 2! +.' ;<&-*' / !' ' V !2 1@-2 !'" !' %%'H / @ . ' ' !#! 1 ;'" !' &"/'@!"!' . ' &Z' "!&*-' *" 0- !/' .' .0'" .3!&*-' /@' !' 90!-!' ;@' !' - 1!' . ' +&j ;! ' 90!-!' . ' -*+.-/H !1. *' . "!' ' &H' &' %'2' 'H / ' .' ;!' #1&'!/' -/' E!-' . ' &Z' !"1!' . ' !' .7-' . '4"&2 7!' 7& ' !' 20; ";!Z' -/' !' !- 0-.!Z' . ' !' 2 1!' -/' / _Z . /&"!' --0& &!2' !! !--!Z' ! 2 !++!Z' .---.0"2' +."/2 & !Z' 1 -!"Z' + -/&Z' !- !Z' "!- !Z' .22!22&.-Z -/' !"!/& 1!- !Z' 7& ' !&'" 0" !- 0-#!2' 2' &-' !' 2 1!' "!Z' !- !Z' 1."!' +!@-+@' &' /. ' !"!'H -/' 7 !"!' !' M@-*' .0'" .3!&*-' ."/' ;@' &Z' &"!2' !- !Z' ;!"@-*' / !' ' [V !2 1@-2 !'" !' %%'H / @' . ' !#! 1 ;!'" +&!' @@))~@!"!' . ' &Z' "!&*-' 0-/&'" !' 2!2E' . ' &Z' 0# &!' Z -# 2 '" ' *" 0- !/' 0-.' .0'"2!&/' .3!&*-' /@' !' 90!-!' !1. -*!' . "!' !' +.'/2 & !Z' -/' 1 -!"Z'. ' V + 0 ' 1 *-' 4 ".7!' 22 !;0"@' 0-1.7!' &!* !Z' -/' 1 1' 7& ' ++' !&'" 0" !- 0-#!2'&-' !' .0-&!' . ' 22!%' 7& '. "!' & !_' .22!22&.-Z -/' !"!/& 1!- !2' 2' &-' !' 2 1!' &"!2' !- !Z' 1."!' +!@-+@' &' /. ' !"!'U +2.' !' M&-*' .0'" .3!&*-' ."/';@' &Z' !!2' !- !j' ;!"&-*' / !' ' V !2 1@-2 !'" !' &"2' / @' . ' @' !' &))~@!"!' . ' &Z' "!&*-' *" 0- !/' 0-.' .0'" 2!&/' .' !&*-' .,!&*-' /@' !' 90!-!' .' !' !' ." !& 0"!Z' . ' /&,Z' -/' 1 -@' . !-#!Z' . ' !@1' ' ;!' &- 0- !Z' 7& &-' !' # 2 !++!Z' .---.0"Z'+."/2 & !Z' 1 !"Z' + -/!Z' -/' !- !Z' 7& '. "!' /&,Z' " 0-# &2!Z' -/' +&; &!2' 2' &-' !' 2 1!'&"!Z' !- !Z' +!@-+@' &Z' !%<22!/' -/' 1 ."., ' !' M&-*' ' .,!&*-' ."/' ;@' &Z' "!Z' !- !Z' 7 &# !' / !' &Z' ' V !2 &@-2 !'" !' %%&' / @' . 'B!,!"!' !'&H)<@!"!' . ' &Z' "!&*-!' .'" /&$Z' #.-</!" #&.-2' ; -' 1.!'& *' 2' &-' !'2!&/' !!Z' !- !Z' . ."!' +!+-+@' &' /./&' !"!' *" 0- !/) . ' .0'" 2!&/' .,!&*-' /@' /&!'9 !-!' !' 1 -!'". '3@ - #"-!' 7& ' !' 0" !- 0-#!2' -/' . "!' # 2 !++!Z' .-."Z' +."/2 & !Z' 1 -!"Z' + -/!Z' -/' !- !Z' 2' &-' !' 2!&/' &"!Z' ' !- !Z' 1."!'#+!"!+@' &Z' !% "!22!/-' !' M&-*' .0'" 2 &/' .,!&*-' ."/' ;@' !' /'@2!' -/' 22!-'. ' !' ."/!Z' 2 0 ++' -/' !1 ++' -/' !' .1!-2' &-' &Z' < - ' "+!1!-' 22!1;+!/' -/';@' 0/."E!'. ' !' 2 1!' " & &! '#.- !"1! ' -/' ".'! ' !' 2!&/' "!Z' !- !Z' -/' é!,@ @-*'#.1 "&2!/' 7&/+& ' !@1' -/'!,@. ' !@1' -/'7. ' ' !' 2!&/' +&j ;! ' 90!-!' . ' -*+.-/' '!' .22!/!' -/'!-H.@!' ++ < .'&=' '.D 0 -/'!,@ &-*'#.1 "&2!/'&-' !' 2!&/'&"!Z' !- !Z' -/'!,@'. ' !@1' ##."/&-*' .' ! ! !' -/' !-.0'" . ' !' 2 1!' '&-*' .'!,@ 2.-!' . "!' /& -' !' M@-*' .0'" 2!&/' .,!&*-' ."/' -/' &Z' !&"!2' -/' -@' . "!' '#+ @1! ' ;@' @1' .'" ;@' -@' . "!' M@-*' . ' &Z' +.-/!' . ' ;*+.-/' ' 0# !' "&* ' EB!' &-3!2' 2' !@' .'" !-@' . ' !@1' /' ."1@* ' '!' //!' ;! ."!' !' 1 E&-*' . ' &Z' ' -/' 2 . ' &Z' +!' /' -. ' ;!-' 1 /!

3 6 ' W

c ' c ' &' '- <a1' D1' 0&>1' &=' = +1' > < a=' C< <#@1' # ' D1' ##<0' 5@' &+1 - ' &=' < a' - .1@' &' #1' CB1@@' &=' D1' <--1 &=' <+1 '-.

' 7 !"!' ."!' &Z' @1!' !' ;; 2' -/' .-'!-' . ' 4!"E&-*' 7!"!' ;.0-/!' ." "! &"!' ' %'&H' !"# !2' !$@' !"# !' . ' %'&&H' . !' ' !' +!' . ' !' "E!' . ' '!"@-*' &-' !' .0& &!' . ' 22!%' 7 &# ' "E!' &Z' "#!+d' . ' !' -!'" . ' !"@-*' .'"]!&/' 0-.' !' &"2' / @' . ' !' 1 . -! ' . ' &+' !' &))~@!"!' . ' !' "!&*-!' . ' M&-*' 6&# "/' !' 2!#. -/!' ' 7 &# !' @1!' ." /&,Z'#. -2&/!" #&;&K2'R !'2!&/' M&-*' 1 . '&-*' . ' &2' 2 !#& +d' *" #!' -/' ." &' !' 1 "E!' @!"!+@' .' ;!' +!/';@' !' 2!&/' ;; 2' -/' 1&'!-' . ' &!"E&-*' -/' !'" 20##<22.0"Z' .' !' 4 &++@' !"1.0'" ."!#!&'.0'" 7 &# !' 2 0+/!' ;!' ." !' @1!' . ' !' 2!&/' M@-*' ." . ' &Z' !&"!$. ' &Z' -!'" ."2!&/'H . ' !' 7 &# !' '' 1 "E!' !' 2!&/' M@-*' 7.+/' 210# !' !". ' 2' 2 0+/' ;!' 2 !-' ;.0 ' !' "! " #&.-' -/' 2-!-/!1!-' . ' +!' -/'#+.20"!' ."2!&/' @!"!+@' 2' 2 0+/' ;!' #. 1 ! !-' ." -!/! 0 .' !' 2!&/' "! " #&.-' -/' 1!-/!&-!-' 2.' '& ' !-@' &-*' . ' !' 2!&/' ' 1 "E!' .,' -/' ;.'!' !' "!2.-;+!' !% !-2!Z' .' ;!' /..-' ;.0 !' !' "! &"&-*' -/' 1!-/&-*' ."2!&/' ." '"!1 &*-!' !' ; &+&!Z' !"1.0"Z' -/' "!#!&'.0"Z' .' &1' -/' &Z' !&"!Z' !". ' ' !' 2# !E!'" . ' !' 2!&/' M&-*' -/' . ' &Z' !&"!Z' @!"<@' 0-27!"!' "!1&2!/' -/' "!+! __!/' .' !' 2!&/' ;; 2' -/' .-'!-' -/' !&'" 20##!22.0"Z' !'# "*!' -/' #02 0 1 !' . ' !' "! #&.&& -/' 2O2 !- #&.-' . ' !' 2!&/' !' ." #+.20"!' . ' ' %'&H' !"# !2' ."2!&/' 2' &-' !' !!Z' !- !2' . ' !' 2!&/' M&-*' 6&# "/' ;!"&-*' / !' ' V !2 && !' &"2' / @' . ' !' 1 . -! ' . ' @' !' &"/!' @!"!' . ' &Z' "!&*-!' +!@-+@' &' !"& ' -/' ." 210# !' Z &' &Z' ' /. ; !' 7 !/&'" !' 2!&/' "' 1 "#' ;!' "#!++' . ' !' -!'" . ' '!"@-*' ." ' 2. 1!' ;@' !' 2!+' -/' -.' "#!++' . ' !' 2!&/' -!"' &-' !' 3 "#!' . ' !' H -." . ' !"&-* '.0&-*' . ' 7 &# !' /. ; !' - ' .' ! !' &' -' '#!" !1 !' ." !$' !' M&-*' .0'" .,!&*-' ."/' ;@' 22!-' . ' !' ."/&Z' 2 0 ++' -/' !1 ++' -/' !' .1!-2' &-' &Z' <2!-' "+!1!-' 22!1;+!/' -/';@' 0<."& !' . ' !' 2 1!' ' H0*!/' -/' /!$1&-!/' -/' 7&+' !' 2!&/' ' 1 "#@!"!+@' .' ;!' "#!++' . ' !' 2!&/' + -!'" . ' '!"@-*' ."2!&/

']

' &-'' 1' ?

' !' 38) ' .0'' @ 8j .''/'>

6!#& ' .' ' ++' 7 !"!;@' . -' + !' 0E!' .' ." .+E' -f' .1 2' ''+' .' 0''''!@' 7!''!' &- <. +&V 2. -' R7& '. !''/ 8 Y/ f N$/' * (9 '8 6 00 :

' !' 1 .2 !' 01 ;+!' u &2!' ;!2!# & '@ .0'' & -!2' @ .0'' "0!' /' 01 ;+!' 0;H!' .1 2' "&!' . ' 0''''!@ ' ' 7 !''!' -' !' @+! 1 !- ' .+/ ! -' 'V !2 &- ' !' 'H))U / @' . ' .' ! 1 ;'' &- ' !' "2 ' @!''!' . '@ .0''!' 1 .. 2 ' - .;+!' "!&*-! ' & ' 7 2' !- # !/' .''/!@-!/' /! 1 !/' -/' /!#+ ''!/' 1 .-*!' . ! ' . -' 0E!' . ' ." ' /''!' .' !' 2!&/' .1 2' 7 .2!' !&''!' !' &2 ' ;@' !' - 1!' . ' . -' + !' 7 !' . ' ." ' -/' @ .0'' 2!&/' 20;*&! ' ;@' !' - 1!' . ' .1 2' "&!' . ' 0''''!@ ' 1 .-*!' . "!' .'' $!@-' #. -2&/!" ##&. -2' &-' !' 2 1!' && !' #Z$- !@-!/' 2 0+/' 2 .-/' -/' !' #. -'&## !/' &/' !@- !/' . ' &* ' "! 2. -' -/' /&2 ;+!/' -/' ."H0*!/' . ' +' .-. 0'' !2 !' /&*-& !' -/' <<&-!-#!' /' !'] ".!2' . ' !' 2 1!: -/' ." !& !' .'@ .0' .<!&*-' .''/' +' # 2 !++!2' 1 -!''2' +. ''/2 & !2' 0-/''!/!2' '' 0-# &2!2' +&; &!' "&' !+ *&!2' /' .02. -2' -.+ ##&. -2' 2!- ##H. -2' +. -/!2' !- !2' ''!- &2', '&#!2' ''!<#&. -2' ."##&. -2' ' 0- *&!2' !-#&. -2' "&* !2' !''!/& !- ' *../!2 # ++!2' -/' /! !2' 7 !". ' !@' .'' -@' . ' !@ 1' .'' !-@' . ''!' .' !&'' 02!' .'' .' M02!' . ' -@' . ' !@ 1' 7 !''!' 2!&2!/' . ' .22!22!/' !' %%H / @' . ' 0*02' &-' !' 0''2' @!''!' . '@ 0'' 1..2' -.;+!' "!&*-' .'' -@' @ 1 !' &" ' 7 & &-' &2' @ .0'' "! +1 !' . ' -*+.-/' "!+.-/' V +!2' .'' +!2' .'' &-' !' 1 # !2' !". '&-' !!' 2&1 +!' !!' &+!' .'' .'' $ 1 !' . '+@ !' .'' +&' !2' 2' 1 ."!' ' + ''*!' &-' !' 2 1!' &<!' 1 @' !''!' ' '&' 7. ' +! 2!' @ .0'' &* -!2' . ' @ .0'' !2 !#& ' *'' #!' -/' ;+!22!/' /&<. 2&#&. -' ;@' !' /' @#!' -/' 22!-' . ' @ .0'' ."/!2 2 0!++' -/' !1 . !++' -/' !' . 1!-2' &:' &2' "!2!-' "+!1!-' 22!1 ;+!/' -/' ;@' 0/. "& !' . ' !' 2 1!' . ' ."/!@-' !2 ;+&2;' -/' !- ;+!' ' !' 2!&/' -/' ++' <!2' . ' !@-/''!' -/' ." !& 0''!' //!' .'' 1 /!' &-' !' 2!&/' "+!1!-' .+/!-' 'V !2 1' ' 2!&/' ."2' @!''!' . ' @ .0'' 1..2' -.;+!' "!&*-!' @!-2' !' 2!&/'+< !' 0E!' -/' @!-2' @ .0'' 2!&/' 20;*&!' -/' !<@' . ' !@ 1' ;@' 7 ' - 1!' .'' - 1!2' 2.!,' !@' .'' -@' . ' !@ 1' ;!' - 1!/' &-' !' 2 1!' /!' .'' <<!2' . ' !@-/''!' ;!' 27!++' @!-2' !' 2!&/'+ !' 0E!' 2' @!-2' @ .0''!' 2!&/' 20;*&!' ' 2' 7!++' .'' &2' .7-' !- !''& 0-#!' &* !2' -/' .22!22&. -2' 2' .'' # !- !''& 0-#!' "&* !2' -/' .22!22&. -2' .' !' 2!&/' + !' 0E!' &2' /''!' 7 .2!' !&''!' !' &2 ' ;!' ''!2 ." !/' .' ++' ''&* !2' .-.0"2' # 2 !++!2' +. ''/2 & !2' .7-2 & !2' 1 -!''2' +. -/!2' !- !2' ''!- !2' ''!3!&. -2' 3''&#!2' .22!22&. -2' -/' ++' . !'' !''!/& + 1!- 1 2' 7 &# !'+ !' 7!''!' !' 2!&/'+ !' 0E!' ." -@' . ''!' 2. -!' .' &2' 02!' 7 !''0-. '@ .0'' 2!&/' 20;*&!' '&2' ." ' -@' @ 1 !' 2& ' !' /!#!22!' . ' !' 2!&/' + !' 0E!' < 2' ." 2 0+/' ' !' ;@-' !- !''!&/' ." !- !''& ;+!' &' !' 2 1!' <&!;'' && !2' . ' !@-/''!' //!' -!')' ;!' /' -!'' 1 /!' -/' .' ++' . ''!''&* !2' # 2 !++!2' .-.0"2' +. ''/2 & !2' .7-2 & !2' 1 -!''2' +. -/!2' !- !2' ''!- !2' ''!<#&. -2' <'&#!2' .22!22&. -2' -/' ++' . ''!' !- !''& 1!- !2' 7 &# !' !' 2!&/' + !' 0E!' -/' @ .0'' 2!&/' 20;*&!' -/' !<@' . ' !@ 1' ;@' ''! 2. -' . ' !' 2!&/' ^ !' .'' ^ !2' . ' !@-/''!' ." !& !/' !' 2!&/' ^+!' .'' <&!2' . ' !@-/''!' 1 /!' -. 7& 2 -/&-*' J -/' ' !' 2!&/ /&!' .'' <!2' . ' !@-/''!' ;!' -. '&-' -@' 7&2!' 0'' ! 0+' .'' HO/&##& ++' .' !' 2!&/' + !' 0E!' -!' .' &2' !&''!2' -!' .' @ .0'' 2!&/' 0;*&! -!' .' &2' !&''!2' -!'' .' -@' 2. -!' .'' 2. -!2' ' -@' @ 1 !' !. !!' .'' !. !!2' .' !&'' 02!' .'' .' 02!' . ' -@' . ' !@ 1 ' ;0 ' ;!' @!-2' !@ 1' -/0 . ' !1' 0 !''+@' .&/!' -/' . ' -.' ."#!' 2 ''!-* ' -!' ! !&<&!' ' -/' ' @ .0'' 2!&/' 20;*&!' -/' &2' !&''!2' -/' ++' !. !! .'' !. !!2' .' &2' 02!' .'' .' 02!' . ' !' 2!&/' + !' 0E!' 1 @' '!' 20# !' ' 0- *!' &-' !<@' &-*'< -/<;!' &-' 2' *. /!' #. -/&#&. -' &-' !' + 7!' 21/' .' !0 '' ' !' -/' !-H. @!' !' <1&22!2' -/' !<@' " !' !''. ' 2' &' !' 2!&/' ^+!' .'' !2' . ' !@-/''!' //!' -!<' ;!' //!' -!' 1 /!' -/' * ' @ .0'' 2!&/' 20;*&!' -/' &2' !&''!2' 1 @' + 0 0++@' !- ''!' &- .' ++' !' 1&22!2' -/' .' !<@' "#!++' . ' !@ 1' 27!++' 0 .-@ .0' .<S@-' .''/' 2' 0 .-' !<@' . ''!' 2. -!' -@' /&2#!-' .'' -@' . ''!' # 02!' !-!/' .'' ++!-' 2& ' !' 2!&/' ^ !' .'' ^;#2' . ' !@-/''! 1 /!' .'' -@' # 02!' . ''!' ;@ &2' .7-' /!/!' -. 7 2 -/&-*' -/' ' !-''!' 2! 2. -' -/' .22!22&. -' . ' @ .0'' 2!&/' 0;*&!' -/' . ' !&''!2' &-' .' ++' !' &22!2' -/' !, @' ''!' . ' !@ 1' ;@' &2' ^+!' //!' .'' .' &1' ''!2 ."!/' ;!' *./!' -/' + 0 0 ' .' @ .0'' 2!&/' 0;*&!' -/' &2' !&''!2' 7& .0' -@' 1 +' 20 !' .'' !' 2 1!' .'' .'' -@' "#!++' !''. ' .' ;!' 1 /!' .0 !' . ' @ .0'' -/!2' ;@' ! &#&. -' +@' !' .''. ''!' 7&2!' &'' !'#. 0''2!' . ' @ .0'' + 7!2' -/' ;!' . ' 2' *./!' 2 ''!-* ' -/' ! & !# !' &-' !' + 7!' 2' &' @ .0'' 2!&/' 20;*&!' ' //!' !' 2 1!' # 2 !++!2' +. ''/2 & !2' 1 -!''2' +. -/!2' !- !2' -/' . ''!' <1&22!2' &-' /0!' .0''1!' 20!/' ;@' ! &#&. -' .'' ;@' /0!' -/' + 0 0 ' +@. !' .'' .H<7&2!' .0 !' . ' @ .0'' -/!2' ##. ''/&-*' .' @ .0'' + 7!2' -/' 2' &' !' 2 1!' ^+!' .'' # !2' . ' !@-/''!' //!' -!3' ;!' /' -!' 1 /!' ;' .0' ;!' &' !' 2 1!' # 2 !++$' +. ''/2 & !2' 1 -!''2' +. -/!2' !- !2' -/' . ''!' <1&22!2' .'' -@' "#!++' !''. ' 7!''!' .'' ;!' .+/!-' . ' @ .0' .'' . ' -@ . ' @ .0'' -.;+!' *!-& .0''2' M&-*&2' . ' -*+. -/' &-' # &!' .'' . ''!7 &2!2' -/' ' &' @ .0' .<!@-' ."/' .'' -@' . ''!' 2.-!' !' 7 &# !' ."!' !' 0''2' / @' . ' &2' <2!-' ''+!' 1!--' R ' E!-' -@' &220!2' .'' & !2' . ' -@' # 2 !++!2' 1 -!''2' +. -/!2' !- !2' -/' . ''!' <1&22!2' .'' -@' "#!++' !''. ' 7 !''0-. ' @ .0'' 2!&/' 0;*&!' ' &-' !''1!/+!/' 7& ' !@ 1' .'' 7& ' -@' ''!!++' . ' & !@ 1' .'' ' E!-' -@' *../!2' .'' # ++!2' . ' !' 2!&/' + !' 0E!' .'' . ' @ .0'' 2!&/' 0;*&!' ." !' %+&H / @' . ' -0 "@' !' &OHU))@!&!' . ' @ .0'' 1..2' -.;+!' "!&*-' .'' &' -@' 20# !' &220!2' -/' & !2' *../&2' .'' # ++!2' '!' #. 1!' .' !' -/!2' . ' @ .0' .<!@-' ."/!' .'' -@' . ''!' 2.-!' .'' 2.-!2' ' @ .0' '&-' -@' 7&2!' # "*!/' -!' # "*! ;+!' 2&+!/' '!%!/' ".0;+!/' .'' !' 2 1!' ;0 ';!' 0 !''+@' !''. 'SO& !' -/' /&2# "*!/' .'' !')' '@-*' .' !3@' . ' !' M@-*&2' +&!*!' !. +!' 20# !' "&* ' &+!' &-<!22!' -/' .22!22&. -' 2' !@' .'' -@' . ' !@ 1' ' &-' -@' . ' !' 1 -!''2' +. -/!2' !- !2' -/' . ''!' !''!/& 1!- !2' . ''!''!/ #. -&"1!/'

J' '&' ;!' ."/!@-!/' ;@' !' 2!&/' 0^ ."& !' ' !3@' 2. -!' . ' 2 -!2' '@-*' .'' .##0 &!-*' -@' "#!++' . ' !' .''2!&/' -< -!''2 3 !-' < ' &-*' #. -&"1!/' +. -/!2' !- !2' -/' &22!2' . ''!' '@-*' -@' --0@ &!2' .''!- !2' .0 !' . ' !' 2 1!' .'' .0 !' . ' -@' "#!++' !''. ' ;@' , 0!' .'' ;@ &!-!' . '@ .0'' "!2' !- !2' 2 ++' '!' -/' !-H. @!' !' 2 1!' 1 -!''2' +. -/!2' !- !2' "!- !2' -/' . "!' 1&22!2' 2 !#& &!/' &-' !' 2!&/' &''!2' !- !2 ##."/@-*' .' !' !- 0'' . ' !' 2 1!' &2' *! ++' ^0!' . ''!2 & 0/. -' -. 7& 2 -/&-*

'- !' 2 &/' "+' 2 +' '!' +' 6!'!''2&. -2' -/' !''&#!2' C#' "!2!''!/' ;@' 20# ' ! !''2' 3 !-' J -/ &1@/&2 " &-' ." 6!- 2

-' '&';!' ."/!@-!/' ;@' !' 2 1!' 0 +. "& !' ' @ .0'' 2!&/' 20;*&!' ". 1' !' !2' . ' !@-' &# !++' "# -*!++' + 2' 2' '!' .' &1' -/' .' &2' !&''!2' ++' "!<# . -2' -/' 2!''&#!2' . ' ++' 1 -!''2' 1/!2' !- !2' ''!- !2' .'' . "!' !''!/& 1!- !2' "!2!''!/' ;@' .'' 0 .-' !' 2 1!' &''!2' !- !2' -/' ++' "!' &. -<' -/' <'&. !2' . ' !' 2 1!' 1 -!''2' +. -/!2' !- !2' ''!- !2' .'' . "!' !''!/& 1!- !2' 7 &# !' -. 7' ;!' &-' !' M&-*' ;@' "! 2. -' . ' !' 2 1!' "!2' !- !2' .'' . "!7 &2!' -/' ++' ''!- !2' -/' , '&#!2' "!2!''!/' ;@' .'' 0 .-' !' 2 1!' &''!2' !- !2' ;!@-*' &-' @ .0' .<!@-' ."/' -/' ' &' ;!' + 0 0' @ .0'' 2!&/' 0;*&!' -/' .' +0' !&''!2' .' /&2 "!@-' .' &2' .7-' 02!' .'' !' 1!' "!- !2' ''!2!''!/' ;@' .'' 0 .-' -@' 20# !' &''!2' !- !2' .'' -.-!' @ 1!- ' .' !' 2 1!' ''!- ' !' / @!2' +&1 &!/' &-' !' 2!&/' &''!2')_-!

!'' % &" &. -' . ' - !''!2 2'*" - !/' .'' 0 .-' 30''# 2!' !''!. ' !' 2 &/' "+' 1 @!- !'' 2' ;!. ''!

-' &''/&!''1 .''!' ;!' &' ./!@-!/' ;@' !' 2!&/' 0<. "& !' ' &' !' 2 !' .'' &-<!22!' . ' -@' 2.-!' .'' 2.-!2' '@-*' -@' "#!++' . ' !' +. -/!2' -/' !- !2' ''!- !2' ''!- !2' .'' 0 .-' !' 2!&/' !2 !2' .'' "2!&/' &2' .'' 2 +; !' /!$1@-!/' #!22&/' !% &''!/' .&/!' .'' '. &/!/'H' '' & ' -@' 2.-!' .'' 2.-!2' '@-*' -@' 2 !' . ''!- !''& 0-#!' ''!. 'V' .'' &-$!22!' ;@' @ .0'' &''!2' 2' &2' ."2!&/' &-' -@' "#!++' . ' !' 2 1!' 1 -!''2' +. -/!2' !- !2' ''!- !2' .'' . !'' 1&22!2' 1 E!' !2 !' ; ''*!@-' 2 +!' .'' *@ !' .' @ .0'' 2!&/' 20;*&!' .'' .' &2' !&''!2' &-' !!' 2&1 +!' .'' . ''!7&2!' . ' -@' +. -/!2' !- !2' ''!- !2' .'' &-*!2' #. 1 ''&2!/' &-' -@' . ' !' 2!&/' ''!2' !- !2' ' &1 1!/& +@' &'' !' /!$1&- #&. -' #!22&-*' !% &''&-*' .'' '. &/ 0-#!' . ' !' 2!&/' !2 !2' .'' &-$!22!' .'' &'' !' 2!&/' !2 !' ; ''*!@-' 2 +!' '' *& !' 2.' 1 /!' !' 2!&/' ''!2' !- !2' !''. ' ''.' @ 1!' ;!' 0 !''+@' '.&/!L

4 Q

& 1 BB''1]C'' <- ?< 0

.' !'M@-*' #0"!' .'<!&*-' ."/

' !'1.2 !' 01;+!' 7&2!';!2!# & '@.0'' &* -!2' V&++& 1' 3"&.0'' . ' "&2 # 0"# !' . ' 0" !";0"@' . '@.0'' -. #!' 0-/ #&.+&' ' b" -';@' ! !"2' 3 !-'J' !# 7 !"!'+ !'M@-*' /7 "/' !' .0" 2' ;@' &2' &"!2' !- !2' ;!"@-*' / !' 'V!2 1' !' ' ' / @' . ' !#!1;'' !' &"2'@!"!' . ' &2' ' /''' ' . ' !' "!&*-!'*" 0-!/' !' ."/2 & ' -/' -!'' . '30-!+/'7)' 0" !-`-#!2' !'7 &# !'7 2' '3"&.0'' +&!-!';@' !'- 1!' ' !' -!'' -.'' . '30-!+/' . "!7&2!'# ++&/' !'3"&."@' . '30-!+/'7& ' &' +.-/!2' !-!2' 1!./.7!2' 20"!2'7 /!2'"!-!2' -/'<'&#!2' .' !' 1!' -.'' b"&2!+/' -.' 1 -!'' !@-@-*' &-' !' .0-&!' . ' 22!%' -/' !' &&!' . ' .-/.-' .' b"&2!+/' !'7 &# !'7 2' 7@!' . ' . -' @-/.' !+/!'' SO&!'' .' '!' -/' .+/' .' +'' -/' .' &'' !&"!2' -/' 22&*-!!2' . ' !'2 1!'+ !'M@-*' -/' &2' !&"!2' .'' !'<1."!';@' !' '&#!' . ' '"!//!' ".2!' @!"!+@' ' !' !2' . ' !'- &'&!' . ' !@ ' . -' !'4 &2' .' !'2 1!'+ !'M@-*' -/' &20 !&"!2' .'' ++' 1 \ '<'&S!2' .';!' @.+/!-' 2' &-' !'2 1!' &"!2' !- !2' 1."!' +!@-+@' !"& 'K;@' 0!' . ' !' 7&# !' &"!2' !- !2' !'2 1 ' b"&2!+/' 7 2' !' . ' 2!&2!/'&-' &'' /!1!2-!' 2' . ' !!'H !'7 &# !' b"&2!+/' 2.' ;!@-*' !". ' 2!&2!/' ; "*!@-!/' -/' 2.+/' !'2 1!'1 -!'' . "!7&2!' ++&/' !'3"<. @' . ' +!' !"!. ';@' 3 0-!+/' .' !'1.2!'6!$!-/' /"!' &-' b./' .1 2' + !' "/@-++' -/' "# !;&22 . ' . ' 0-!";0"@' .'' ' *"! !'2.1!'. ' .-@' ;@' &1' .' &'' &!/'H -/' !"0 .-' !'2 1!'9"&2!+/' ' <' -.& #&.-' -/'/!2&"!' . ' !'2 1!'+ !' "/@-++' !". '!-!. !/' 0"!-#!' + !'4&22 . ' . ' 0" 1' .1 2' -.7!' "# !;&22 . ' . ' A."E!' . -' V@-* !+/' M-@* ' .1 2' V@-!";.0"-!' +!"E<' . -' +!"E!' + !'..-' . ' !'4 ".-2' . ' !' 2# !E!'' . ' !'2!&/'+ !'M&-*' /7 "/' !'&&H))' . -'4"0-2 -' S @!'' +!% -/!'' V./!' -/' V&++& 1' 0" 0-' .' '!' .' !@1' -/' .' !&'' !&"!2'&H !!' .' 02!' . ' !'2 1!' !' @/@-++' -/' . ' &2' !&"!2' &&!'7 &# !'+ !' "/@-++' #.-2&/!"@-*' ' !'2!&/' -!'' -/' ."/2 & ' . '.+/!' @-!'7 2' '3"&.0'' +&!-!' -/' @'!+ZK/!' . ' # 0"# !' 7&++!/' -/' ."/!@-!/' !'2!&/' -!'' 7& ' 0" ! -#!2' .';!' @ '!-';@' !'2!&/'+ !'4&22 .\:' . ' 0" 1' -/' &2' 2! /' . !. !! ' .' !'2!&/' 3"&.' . ' "&2 # 0"# !'C' .' &2' 20##!22.0"2' &-' !!' .'' !,1."!' .' E! !' '/@+@' 1 22!' -/' @!"!+@' -' ;& !' -/' .'/.-'5 !@-' 1!2' -/' . "!' .;2!"' 0-#!2' -/' " @!"2' &- !'2!&/'3"&."@' .'' &1' -/' &2' 2.0+!' -/' ++' #"&2 !-'2.0+!2' .'' !<1."!' 2' &-' !'2 1!'. /&- 0-#!' . ' !' 2!&/'+ !' "/@-++' 1."!' +!@-+@' !"& 'H -/' 2.' !'2!&/'+ !'4&22 . ' . ' 0" 1' -/' 4&2' 2!&/'#. !. !!2' . ' !'2!&/' -!'' 7& ' 0" !- 0-#!2' ;@' !'+&#!-#!' . ' !'2!&/'+ !'M@ *' /7 "/' &- !. !/' !'2!&/' 3"&.0'' .' '!' .' &1' -/' .' &2' 20##!22.0"2' ##."/&-*' .' !'2 1!'."/&- 0- !';@' <0!' 7]". ' !'2 1!'3"&.0'' 7 2' !". '$!&2!/'&-' &2' /!1!2-!' 2' . '!!'&-' !'"&* ' . ' !' 2!&/' 0"# !'H 40' .'' 2 -0# ' 2' !''!' 7 2' -' &<!. ' '!201 #&.-'&-' !'3 "+!1!-'. ' !'2!&/' /7 "/'+ !'M@-*' .+/!-' 'V!2 1' !''H / @' . ' /+.;'' !'%&K))'@!"!' . ' &2' "!&*-!' &' .' E!' ! !' ".1' !' !2' . ' !@-' .1 2' .2&++'&-' !'@!"!' . '.0'' ."/' b./' '%%&&H' !'7 &# !'7 2' !'%&&H<'@!"!' . ' !''!&*-!' . ' !'2!&/'+ !'M&-*' /7 "/' ' !'7 &# !' !''!'7 2' 1 /!' '*! ++' ".'&2.' .'' ++' 6!+&*&.02' .02!2' -/' !'2!&/' !. !1! ' 1 /!' .'@.0'' 2!&/' 0 +& -' 7 2' 1!' -!';! 7!-!' !'2!&/''H / @' . ' ^ .;'' -/' !'2!&/' !2' . ' !@-' .1 2' .2&++' 7 &# !' !'2!&/'+ !' "/@-++' -/'@.0'' 2!&/' 0 +& 0-' "02 !/'2 0+/' '!';!-'*./!' -/' 20 &##!-' 7 !''!' &2' -. ';&# 02!' !'2!&/'3". '&2.' '"!+ #&.-' ' !'2!&/'H / @' . ' ^ !.;'' !'7 &# !'7 2' ;! ."!' !'2 1!' !. !1!-' -/' !" .'' ;@' ' ^ !' . '"!201 #&.-'&2' !''!' #!22!' 1 /!' &-' @.0' 2# !E!'' @!-2' &1' .' 0-27!' !' & !2' . ' !'2!&/' 1 -!'' .'@.0'' &* -!2' -/' 2.' !";@'2 0+/' !'2!&/' /!'.0!' ."/&- 0-#!' . ' !'2!&/' "/@-++' ;!'0 !"+@' '.&/!' -/' /-0++!/' .-+!22!'@' +! 2!' @.0"!' &* -!2' .' '!' 2 !#@++' !-# "-!22!& -/' #.-2&/!" #&.-' !"0-. ' '& ' 1 @' +! 2!' @.0'' &* -!2' ;@' /'@2#' -/' 22!-' . ' !' . /!2' 2 0!+%' -/' !1 ."!+%' -/' .1@-2' &-' &2' "+!1!-' 22!1;+!/' -/' ;@' 0 ."&!' . ' !'2 1!' .' !- /+!' "/!&*-!' -/'2 ;+&2<' ' !'2!&/'&"!2' !- !2' . ' !' .&2!&/'+ !'M&-*' /7 "/' ;!' "." !' @1!' . ' !'1 E@-*' . ' !@1' 2' *./!' -/'! !^&0!&'&-' !' 7!' -/' .'+&E!' ."#!' -/' ! !/+!' 2' & '-.-!' ^ !' . '"!201 #&.-'*! ++'-!' 2 !#& ++' -!' .!&< ^+!' . ' "+!1!-' /';!-'1 /!' -!' /'&-' !' @1!' . ' !''!&*-!' . ' !'2!&/' /7 "/'+ !'M@-*'-!' -@' @1!' &'' .' !' 0" !' .'' /-0++ #&.-' . ' $` 2 1!' &"!2' !- !2' -/' ' !' !&/' 3"&.0'' @.0'' &<0 +& 0-' 1 @' '!' -/' !-H.@!' .' &1' -/' &2' 20##!22.0"2' !'2!&/' -!'' -/'+."/2 & ' . !"7&2!' # ++&/' !' 3"&."@' . ' 3 0-!+/'H -/' !'2!&/' 3"&.0'' -/' &2' 20##! 2.0"2' .';.' SO& !' -/' /&2# "*!/' @!-2' @.0' . !&*-' L."/' -/' @.0'' !&"!2' -/' 20##!22.0"2' . ' -/' .'' &2220!2' -/' &!2' ."!' &2' @1!' "!#!&'!/' .'' !" &'' .';!'"!#!&'!/' . ' !' 2!&/' 1 -!'' &"7&2!' # ++&/' "&&!' 3"&."@' '3 0-!+/'7& .0' ##.1 !' .'' -@' . "!' &-*' .' @.0'' &* -!2' .'' @.0'' !&"!2' .'' 20##!22."2' !" .'' @!-2' .' !'2!&/' 1 -!'' &"7&2!' # ++&/' "&&!' 3"&."@' '3 0-!+/'7& .0' ##.1 !' .'' -@' . "!' &-*' .' @.0'' &* -!2' .'' @.0'' !&"!2' .'' 20##!22."2' . ' -/' .'' &'' ^!'-!3' /';!'1 /! &-' !' 2!&/' -!'' -/' ."/2 & ' 7& ' /"!-0-#!2' 2' !'1@* ' .'' 2 0+/' '!' /'& ' &2' ^!'-!3' /';!'1 /!

4

3' .1 ' .'!++' &+&!

C 6 ';@' -' !' . ' +!1!-'1 /!' &-' !'3 "+!1!-' . ' 7 "/' !'&&&H()&+ !'M@-*'S ' "*+."&/' .+/!-' 'V!2 1' !'&&&H<' /@' . ' .'!1;'' &-' !' &"2' @!"!' . ' &2' "!&*-!' &' 7 2' ."/!@-!/' !2 ;+22 !/@' ' .1 2'+ !' ."/'6./2' 7 &# !'.0*' &2' !& 0++' ++&!*! 0-#!' -/' "0!'<'&#!' .' !'1.2!';+!22&/' -/'1.2!'-.;+!' #"&2!-'3"&-#!'M&-*' !" @' !'H)`2H;O&/';!';@' !' - 1!' . ' .1 2' ;"/' 6..2'0- ;+!/' .'' !.,)"."1' !-2 ;" ' !' @!' +/!'!-!"&!' .'' !-H.@!' -@' -1!' .'3&*-& !' !2 !'.'' *' M '!%' ' 6$4 <!1&-!-#!' 7& &-' -*+.-/' V +!2' " +!&2' " &-' !' "# !2' !".' -/' ' !' !&/' 3"&.0'' @.0'' &<0 +& 0-' 1 @' ' !' !&/' -!'' -/' .' &2' !&"!2' ++' # 2!++ ' 1 -!"2' 1"/2 & !2' +.-/!2' !-!2' "!-&2' '&#!2' !!2' /'.02.-2' !"!/& 1!-12' -/' .22!22&.-2'7& ' !&'' 0"!-0-#!2'7 &# !' !'.'' -@' 2.-!'.'' 2."!2' .' &2'02!' .'' ;! .'!' /' !' &&&H<' / @' . ' "# ' !'2!&/' 0"2'@!"!' .'' .' !'7 &# !' /&!'2!&/' .&-2' .'' -@' . !'' 2.-!'.'' 2.-!2'!. !2' .' &2'0C!' /' !' 2 1!' / @'+00 '# 02!' . '!-"!'7& &-' -*+.-/' V +!2' .'' +!&2' .'' !'1 "# !2' !" '.0!' . ' !'+& !&!' . ' !'4&22 . ' . ' 0"! 1' 2' &-' !' !'1."!' +!@-+@'&' &2' #.- !@-!/>' -/'-+2.'7 !"!';@' -'. "!' !' . '3 "+!1!-'1 /!'&-' /&!'3 "+!1!-'. ' !' M&-*' .0'' .<!&*-!' ."/' '-.7!'&2' .+/!-' 'V!2 1' !''H))<' /@' . ' .'!1;'' &-' !' &"2'@!"!' . ' &2' "!&*-!'&' 7 _'./!@-!/' &H/' !* ;+&22 !/' ' !' 2!&/' !' -/' ++' .+&"!' !2' . ' @-!'' -/' ."!&0"!'1 /!'.'' /'&-' !' @& !' . ' !'2&/' /7 "/'+ !'M&-*' *!@-2' !'2!&/' .1 2'+ !' ."/'6..2'.'' &2' !&"!2'.'' .' !' 0" !'.'' +.22!' ' &1' .'' ' &2' !&"!2' '' -@' !. !!' .'' !. !!2' .< ;' C 'N$ ' ' *' '4CC ' " 02!' 2 0+/';!' *!@-2' !' 2 1!' .1 2' -/' &2' !&"!2' -/' ++' . "!' 2#1!2' !. !!2' .' &2'02!' . ' &1' .'' ' &2' !&"!2' ' !' 1 E@-*' . ' !' 2 1!' .'' -@' @1!' 2& ' 0 !"+@' '.&/!' /-&+&!/' -/' . '-.-' ."#!' -!' ! !'< -/' ' /1.-/' .-' -/' !&"!' . ' !' 2!&/

D&><0' ⁄< ' & A' &&0'<-A' #'0 D1' 10' 0D?'A'#&' 10 & 1A'1-D<#⁄1A'< A' D<+1'<⁄ 0?BD1'-<>1'A'.-' 1' 10 < 1 =⁄1>'-1-B1⁄<-A''-D1 ''D<+1' D&⁄A1' &BB?=''1'<-A'1- & 1' <⁄ < 1⁄⁄10' >< -1 0' ⁄& A0D'CC10' ⁄&-A10' 1- 10' 1- '0' 1+0B'&-0' 01 +'B10' <A+&?0&-0'<-A' & D 1' C&00100'&-0'<-A' D1 1A'<>1- 10' <0K1⁄⁄ =& =<' 1A'# ' D1'01'A'<= 1' & '<= 10' A '<- '&=' D1 >'<0'<⁄ & D 1'KD< '0& D1 '#1''-' 0?BD1'><-1 '<-A'=&? >1' <-A''-'<0' ⁄< .1'<-A'<+<'⁄<#⁄1'K'01'<0' D1'01'A' A>& =A'0D-⁄A'& ' > .D 'D<+1'D<A'& 'A&&-' '=' D1'01'A'<= 1' & ' <= 10' &=' < 1 -1 ' & '<- ' &=' D1 >' D<A'-1,'#1'D<A'-1 ' ><A1⁄ <-A' D< ' &=' D1'0<>1'<= 1' -1'<= 10' -1' <- ' &=' D1 >'-1'<- ' 10'C< 1- 10' ><A1' # ' 1<0&-' & ' &BB<0'&-' D&' 0<>1⁄ 0D?⁄A' #1''-' <- 'K'01'D? 1=?⁄⁄ & ' ?A'B'< ' &' D1'01'A' A>&-A'-1' &'D'0'D1' 10' & '<00'.-110' -1' &'<- '=1&='11' &'D'0'?01' &?BD -.' D1' >'00=10' -1'<- ' C< B1⁄⁄ D1 &=⁄ #?' 0D?⁄A' #1' < 1-0' D1 >'<-A' 1, '&=' D1 >'? 1 ⁄ '+&'A1'' -A' D<' D1' 0<>1' A> -A'<-A' D'0'D1' 10' <-A'<⁄⁄ =1&==110' &' D'0' ?01' 0D?⁄A' D<+1' 0?BD1'<+<?-<.1''-'1 ' D'-.'<-A' 0D?⁄A' #1''-'<0'.&A1'B<01'<0' '=' D1'01'A'<= 1' & '<= 10' -1'<- '&=' D1 >' D<A' -1 ' #1'><A1' -A' KD1 1' # ' D1'0<>1'<?= & ' 1' '' K<0''-' D1' 0<>1' < ⁄1>1-' &=' D1' , -.'&?' i & ,1'.-1' & A' D<' -&K1'0⁄ & A1 -1A'<-A'1-<= 1A' D<' D1'0<>1', '-.' &?' & 1'.-' & A' 0D?⁄A' D<+1'CB1'+1'<-A'1-& 1'<⁄⁄ D'00?10' I-A'CD 10' &=' <⁄⁄ 0?BD1'⁄& A0D'CC10' ><-& 0' ⁄&-A10'<-A' 1- 10' <-A' & D 1' D1 1A'<>1-=' &' D1'01'A' A>&-A' # ' D1'01'A'<= 1' 10 & 1A'= &>' D&'01'A' 'L' A<' &=' = &D ' A? '-.'D'0'C⁄1<0' 1⁄ TD1'0<>1'<= 1' &=' 10 ' ?B'&-''-'<- ' K'01' -& K' D0<-A'-.'<0' >& 1'C⁄1 -⁄ '0' B&- 1 -1A''-' D1'0<>1'<= 1,' D1', '-.' &? ' & 1'.-' & A' D<' -&K' 0⁄ =& ' 0&' >?BD1' D<' D1'01'A' T >&-A' '0' -& ' &=' 0?==‘B'1-' A'0B 1B'&-' &'. A1'D'>01⁄=' <-A'D'0'⁄ +1⁄⁄&A1⁄ -& '<#⁄1' &' +1'D'0' '.D-10' <= ' ' D'0' A?1 '1' <-A' =& ' A' 01' & D 1'. 1<'B&-0'A1<B'&-0'<-A' B<?010' 10 ?<#⁄1⁄ F '⁄⁄1 D'<-A'# ' D<?= & ' 1' &=' D'0' 01-'C< ⁄1>1-'1-<= 1 D'& A1 -1 D'<-A'10 <#⁄'00D1 D' D<' D&><0' &+1⁄⁄ , - .D ' D<+1' D1'.? A -.'<-A'.& -<?=‘B1'&=' D1'01'A' A>&-A' = &>' D1' =10 '&=' 1 - ' &D-' <C '0 ' '-' D1'01B&-A' 1 1'&=' D1' 1'.-1'&=' &? ' 01'A' &+1'. '&' & A' <0K1⁄⁄&=' D1'01'A' A>&-A' <0' &=' <⁄⁄ D&' 01'A' B<0 1⁄⁄10' ⁄& A0D'CC10' ⁄&-A10' 1- 10' 1- 10' 01 +'B10' =110' <A+&?0&-0' D1 1A'<>1- 10'<-A' C&00100'&-0' K' D' D1' '<CC? 1->'B10' &' D1'01'A' A>&-A' <0' 0' <=& 1' 1D1 B'A' 10 & 1A' <-A' &=' <⁄⁄ &=# 1' B<0 1⁄⁄10' ><-1 0' ⁄& A0D'CC10' ⁄&-A10' 1 10' 1- '0' 1 B'&-0' 01 +'B10' =110' <A+&?0&-0' D1 1A'<>1- 10' <-A' C&00100'&-0' '-' ⁄<K1' & ' '⁄' B&-0B'1-0' A10B1-A'A' &' D1'01'A' A>&-A' -A' D<' 01'A' D&><0' &+1⁄⁄ > >1A'< ⁄ ' <= ' ' D1' A1B1001'&=' D1'01'A' A>&-A' 0D<⁄⁄ >&K1'1-1' '-&' <⁄⁄ D1'01'A' <0 1⁄⁄10' < 1 0' & A0D'CC10' &-A10' 1- 10' 1- 10' 1 B⁄&-0' 01 +'B10' <A+&?0&-0' D1 1A'<>1- 10' <-A' C&00100'&-0' K' D' D1' '<CC? 1- B10⁄' <-A' D1' 0<>1' D<+1' D&⁄A1' <-A' 1-& 1' K' D' <'⁄' '00?10' <-A' C=' 10' &=' D1' 0<>1' &' D'0' &K-1' ?01' A? '-.' D1' ⁄ =1' &=' D1'01'A' D&><0' &+1⁄⁄ KD1 D1' <-' '-H?'0'B'&-0' #1' D1 &=' & ' &=' <-' C< B1⁄⁄ D1 1&=' D<A' <a1?' <-A' 1 &? -1A' & '-&' D<A' <a1-'-1' 1 ? -1A'K' D&? ' <+1 0'C1 'B'&-' & ' & D 1'0? 1' '-'<-' K'01' &' #1' D<A' & ' ><A1⁄ 1⁄A'-.' 1 1⁄ ' D1 =& ' &? ' &=' D1'0<>1' &' &? ' 01'A' &+ 1'.-1' & A'<-A' &' D'0' D1' 10' = &>' D1' 01'A' =10 ' &=' 1 - ' &D-' D1' <C '0 1' A? '-.' D1' =1' &=' D1'01'A' D&><0⁄ 1+1-'D?-A 1A' ><B'<' D1'=10 10' &=' '0 >10' <-A' <'+' 1' &=' 1 - ' &D-' <C '0 1' # ' 1+1-' C& B'&-0⁄ K' D&? '<-''<BB&>C 1' 1L<BB'&-'A1><?-A1' & ' <-'& D 1' D'-.' &' #1' D<A' & ' &⁄A1-' &' D1', '-.'& 'D'0' D1 10' &=' # ' & ' < 1-0' D1'01'A' D&><0' &+1⁄⁄ <-A' D'0' D1 10' 1L1B? & 0' & ' <A>'-# < &? 0' # ' 1<0&-'& ' B<?01' &=' <-' &=' D1' C>'0010' & D' ' D<-' D1' 01'A'+'' D?-A 1A' >< B' &-⁄ '0 D1'01'A' <= 1' &=' 10 ' ?B'&-' & ' D1'01'A'<= 1' D<' D1', -.'&? &+/1'.-' & A' D<' -&K1' '0' 0D?⁄⁄ D<+1' CB1 +1' <-A' 1- & 1' <⁄⁄ D'00?10' <-A' C=' 10' &=' <⁄⁄ 0?BD1' <0 1⁄⁄10' <-1 0' & A0D'CC10' ⁄&-A=' 1- ' 1- '0' +'B10' =110' 1,B'&-0' <A+&?0&-0' D1 1A'<>1- 10' <-A' C&00100'&-0' K' D' D1' '<CC? 1-<?-B10' &' D1'01'A' A>&-A'# ' D1'0<>1'<= 1'&=' 10 ' ?B'&-' 10 & 1A' A? -.' D'0' C⁄1<0' 1' & '<- ' & D 1'<= 1' '-' D1'01'A' < ⁄'<>1-' D&⁄A1-'< F 10 >' D1'01'A'+'' A<' &=' &+1>=1' & ' <- ' >1'<=& 1'-& K' D0<-A -.

C ' ' '#1'& A1 -1A'# ' D1'01'A'<?= & ' 1' D<' '=' D1' 01'A' D&><0' &+1⁄⁄ A 1' ⁄ +'-.'&? ' 01'A' & 1'.-' & A⁄' D<' D1-'<= ' ' D1' A1B1001'&=' D1' 01'A' D&><0' L +1 ⁄ &? '01'A' & 1'.-' & A' 0D<⁄⁄ D<+1' CB1'+1'<-A'1-& 1' &' D'0' &K-1' ?01' <⁄⁄ D'00?10'<-A'C=' 10' &=' <⁄⁄ D1'01'A' <0 1⁄⁄10' <-1 0' & A0D'CC10' ⁄&-A10' 1- 10' <-A' & D' ' D1 1A'<>1- 10' K' D' D1' '<CC? 1-<?-B10' A? '-.'D'0' C⁄1<0? 1' '-' ⁄'a1' >< '<-A'=&? >1'<0' ' ' K<0' & A1 -1A'?C&-' D1'<= 1' &=' 10 ' ?B'&-' <=& 01'A

$ ' '& D 1'C0&-1'0?BD1' '.D ' ⁄1' <-A' '- 1001' &=' '-' & ' &' D1' '' 2010'<-A'1, 'C< 1' D1 &=' <0' D1 ' & ' <- '&=' D1 >' -&K1 0D?⁄A1' & ' &?.D ' &' D<+1' D<A' '=' D'0'<= 1' D<A'-& ' #1-' D<A' -1' ><A1

&+'# "' <⁄K1 ' D<' D'0' 01-' <= 1' 0D<⁄⁄ 1L 1-A' &-⁄ ' &' <⁄⁄ 0?BD1' <0 1⁄⁄10' <-1 0' ⁄&-A10' 1- 10' 1- '0' 1 B'&-0' <-A'&⁄?1' D1 1A'<>1- 10' KD'BD1' K1 1' 10 & 1A' & 'B&>C '01A⁄' & ' D<' D1' 01'A' <= 1' &=' 10 ' ?B'&-' '-'<- ' K'01' > .D ' 1L 1-A' &' < ' >1' &=' ><a -.'&=' D1'0<>1⁄ <-A'-&' &' <- ' & D 1' <0 1⁄⁄10' <-1 0' ⁄&-A10' 1- 10' 1- 10' 1 B'&-0⁄ -& ' &' & D 1' D1 1A'<>1- 10' D1 <= 1' & A'0B1-A' 1+1 ' 1><-' & ' &' B&>1''-' <- 'K'01

'' =1 D1 >& 1' ' '0' 1-<= 1A' & A1 -1A'<-A' 10 <#⁄⁄00D1A' # ' D1' 01'A' <?= & ' 1' D<' 'BD< A' &&0' H?'1' 0D<⁄⁄ = -⁄ D1-0=& ⁄" C1<0'#⁄ ' D<+1' C&001A1' CB1'+1' <-A' 1- & 1' &' D'>' <-A' D'0' <00'.-110' =& ' R>1' &=' D'0' ⁄ =1⁄ <' 1 1⁄ ' 1- '&=' L⁄'' ' .& -.'&? 1' &=' D1' <-1 0' &=' &⁄ ' <-A' ⁄1 ' <a=& A' F ' DK1⁄⁄ ' &?.D &-' F< &-' <-A' F&A1D&?0' K' D'-' D1' &?- '1' &=' & ==' D1' <-1 '&=' 1-# <A=1⁄A' '-' D1' &?- '1' &=' ?==⁄ D1' KD'BD1' <-1 0' #1 D' &=' D1' '-D1 ' <?-B1' &=' A>&-A' & A' &&0' &' #1' C< 1A' 1 1⁄ ' &' D1' 0<>1' 'BD< A' <-A' D'0' <00'.-110' >1' &=' ⁄ =1' &=' D1' 0<>1' 'BD< A⁄' < ' D1' =10 '0' &=' D1' < '+' 1⁄&=' 1 - ' &D-' D1' <C '0 1⁄' <-A' D1' < '+' 1' TR² &? ' & A' E&A' # ' 1+1-' & B'&-0' ' -A' '=' I ' <0' &= 1-' <0' ' ' 0D<⁄⁄ D<CC1-' D1' 01'A' <--?<⁄⁄ 1-' & ' <- ' C< B1⁄⁄ D1 &=' 1-' >1' A? '-.' D1' 01'A' >1' &' #1' #1D -A' <-A' ?-C< A' '-' C< ' & ' '-' <⁄⁄ < ' <- ' &=' D1' 01'A' =10 '0⁄ D<' D1-' <-A' 0&' &= 1-' ' ' 0D<⁄#1' ⁄<?-?⁄⁄ &' D1' 01'A' 'BD< A' <-A' D'0' <00'.-110' &' 1- 1' '- &' D1' 01'A' < 0' &=' &⁄ ' ⁄1 ' <B=& A' F ' DK1⁄⁄ &?.D &-' F< &-' <-A' F&A1D&?0' '-' D1' 01'A' &?- '1' &=' &===' <-A' '-' D1' <-1 '&=' 1-# <A=1⁄A' '-' D1' &?- 1' &=' ?==' <-A' 1 ' C< B1⁄⁄ &=' D1 >' <-A' D1 1' &' A' I 1 -' <-A' D1' A'0 10' 0& <a1-' &' A +1' ⁄1A1' BD<B1' <-A' D1 1' <K1 ' '>C< a1' <-A' 1 1'.-1' ?- &' D1' >1' D<' D1' 0<>1' 'BD< A' & ' D#' <00'.-110' &=' D1'01'A' 1 1⁄ ' 1-' <-A' 1 ' C< 1⁄⁄ D1 &=' K' D' <⁄⁄ D< 1 <.'10' &=' D1' 0<>1⁄ #1' =?⁄⁄ '0< '0='1A' B& - 1-' <-A' C< 1A' -A' '=' <-A' <0' &= 1-' <0' ' ' 0D<⁄⁄ D<CC1-' D1'01' A' 1 1⁄ ' 1-' & ' 1-' C< B1⁄⁄ D1 &=' 1-' >1' A? -.' D1' 01'A' >1' &' #1D -A' <-A' ?-C<'1A' <' <-' &=' D10' =10 '0' <#&+101'A' <-A' # ' 0C<B1' &=' <' >&-1 D' -1L ' 1-0? -.' 1-' &=' D1' 0<>1' =10 '0⁄ D<' ⁄'1-' <-A' 0&' &= 1-' D1' 01'A' 'BD< A' < 'D'0' <00'.-110' 0D ' D<+1' +'' ' ' '-' A'1' -<>1' &=' <'C< -2⁄ -A' D<' '=' <-A' <0' &= 1-' <0' ' ' 0D<⁄⁄ =& ?-1' D1' 01'A' 1 1⁄ ' 1-' & ' 1-' C< B1⁄⁄ D1 &=' <' 1-' >1' A? -.' DU' 01'A' R>1' =&' #1' #1D -A' <-A' ?-C< A' <' <-' &=' D1' 01'A' =10 '0' # ' D1' 0C<B1' &=' '>&-1 D10 -1L '1-0? -.' <-' &=' D1' 01'A' =10 '0⁄ D<' D1-' <-A' 0&' &= 1-' D1'=& 01'A' 'BD< A' <-A' D'0' <00'.-110' 0D<⁄⁄ D<+1' & D 1'+'' '-' -<>1' &=' <'C< -1' & ' <-A' #1i'A1' D1'=& 01'A' =' 0 'C< -' &=' +'' ' ' -A' D<' ' ' 0D<⁄#1' ⁄<?=?⁄⁄ &' D1' 01'A' 'BD< A' <-A' D'0' <00'.-110' <0' &= 1-' <0' ' ' 0D<⁄⁄ =& ?-1' D1' 01'A' C< -10' & ' <-' &=' D1 >' '-' =&? >1' <=& 01'A' &' #1' A?1⁄ &' 1-1' '-' &' <⁄⁄ D1' 01'A' <-1 0' <-A' 1 ' C< B1⁄⁄' &=' D1 >' <-A' D1 1' &' A'0 1 -' <0K1⁄⁄ =& ' D1' 01'A' C< >1- 10' <0' =& ' D1' 01'A' < 1 <.'10' &=' D1' 01'A' 1- ⁄' <-A' D1' A'0 10' 0& <a1-' &' A +1' ⁄1A1' <-A/BD<B1' D1 1' <K1 ' '>C< a' <-A' K'=‘#D&⁄A1' ?-&' D1' >1' D<' D1' 01'A' 'BD< A' <-A' D'0' <00'.-110' <0' K1⁄⁄ &=' D1' 0<>1' C< -10' <-A' 1 ' C< B1⁄⁄ D1 &=' <0' &='<⁄⁄ D< 1 <.'10' &=' D1' 01'A' 1-' #1' =?⁄⁄ ' 0< '0='1A' B&- 1-' <-A' C< 1A

' '<⁄0&' #1' ' '1-<= 1A' # ' D<?= & ' 1' <#&+101'A' D<' ⁄' ;<#1 D' "?BD10' &=' & ==' <-A' D1 ' <00'.-10' = &>' D1-0=& D' 0D<⁄⁄ C1<0'#⁄ ' D<+1' C&001A1' CB1'+1' <-A' 1- & 1' &' D1>' <-A' D1'' <00'.-110' <-' <--?1⁄⁄ 1-' & ='L⁄' ' '.& -.'&? 1' &=' <⁄⁄ D1' 01'A' <-1 0' K' D' D1' <CC? 1-<?-B10' &' #10 C< A' 1 1⁄ ' &' D1' 01'A' "?BD10' <-A' D1 ' 00'.-110' <-A' L1B? &? 0' &=' D1' 01'A' "?BD10' <' D1' =10 '0⁄' &=' D1' <⁄'+a1' &=' 1 - ' &D-' D1' <C '0 1' <-A' D1' < '+' 1' &=' &? ' & A' E&A' # ' 1+1-' C& B'&-0' ? -' &' D1' >1' D<' D1' 0<>1' "?BD10' & ' D1

<00'.-110'& ' D1L1B? &? 0' &=' D1' 0<>1' " ?BD10' #1' =?▯▯ ' C<'1A' <-A' D<+1' 1B1'+1A' &=' D1' 0<>1' <--?1▯▯ 1- ' " ' ' < B' =& ' <-A' &' D?01' &=' D1' ><-<.1' &=' < ' <-A' ▯'\<#1 D' A&?.DR' &' D1' =& 01'A' 'BD< A' &&0' <-A' &=' D1' ▯&-.10 ' ▯ R0' &=' D1>▯' -A' '-' D1' 0<>1' " ' ' < B' &' #1' < 1A' <-A' <CC& B'&-1A' #1 K'L' D1' 01'A' < ' <-A' ▯'\<#1 D' # ' D1' A'0B 1B'&-' &=' D1'01'A' " ?BD10' <-A' D1 ' L1B? &? 0 ' -A' '=' <-A' <0' &= 1-' <0' ' ' 0D<▯▯ D<CC1-' D1' 0<>1' <--?<▯▯ 1- ' A ' <- ' C< B1▯▯ D1 &=' < ' <- ' >1' &' #1' #1D -A' <-A' ?-C< A' &' D1' 01'A' " ?BD10' D1 ' 1L1B? &? 0' & ' <00'.-110' '-' C< 1' & ' '-' <▯▯ <' <- ' &=' D1' 01'A' =10 '0▯ D<' D1-' <-A' 0&' &= 1-' ' ' 0D<▯#1' ▯<?=? ' &' D1' 0<>1' " ?BD10' D1 ' <00'.-110' <-A' 1L1B? &? 0' &=' D1' 01'A' " ?BD10' &' 1- 1 ' '- &' <▯▯ D1' 01'A' <-1 0' K' D' D1' ' <CC? 1-<?-B10' <-A' 1R ' C<=B1▯▯ &=' D1>' <-A' D1 1' &' A'0 1 -' <-A' D1' A'0 10' 0&' <a1' &' ▯1A1' A +1' 1-BD<B1' <-A' #i 1' <K1 ' '>C< a1' <-A' 1 1'.-1' ?- &' D1' >1' D<' D1' 0<>1' " ?BD10' D1 ' <00'.-110' <-A' L1B? &? 0' &=' ▯' D1' 01'A' " ?BD10' &=' D1' 01'A' 1 1▯ ' 1- ' '-' =&? >1' <=& 01'A' &' D1>' . <- 1A' <-A' 1R ' C< B1▯▯ D1 &=' <-A' K' D' <▯▯ < 1 <.'10' C=' D1' 0<>1▯' #1' =?▯▯ ' 0< '0='1A' B&- 1- ' <-A' C< 1A' ' -A' '=' <-A' <0' &= 1-' <0' ' ' 0D<▯▯ D<CC1-' ▯'1' 01'A' <--?<▯▯ 1- ' &' D1' 01'A' " ?BD10' '-' =&? >1' <=& 01'A' . <?- 1A' & ' <- ' C< B1▯▯ D1 &=' <- ' >1' &' #1' #1D -A1' <-A' ?-C< A1' < ' <- ' &=' D1' 1'A'=10 '0' <-A' # ' D1' 0C<B1' &=' <' >&-1 D' -1L ' 1-0? -.' <- ' &=' D1' 0<>1'=10 '0▯ D<' D1-' <-A' 0&' &= 1-' D1' 01'A' " ?BD10' D1 ' <00'.-110' & ' 1L1B? &? 0' &=' D1' 0<>1' " ?BD10' 0D<▯▯ D<+1' & D' ' +' ' ' '-' D1' -<>1' &=' <-' & D 1' C1 -1▯ -A' D<' ' ' 0D<▯#1' ▯<?=?▯▯ &' D1' 01'A' " ?BD10' D1' <00'.-110' & ' 1L1B? C? 0' &=' 0<>1' " ?BD10' <0' &= 1-' <0' ' ' 0D<▯▯ =& ?-1' D1' 0<>1' 1 -0 ' 1- ' & ' <- ' C< B1▯▯ D1 &=' <- ' >1' &' #1' #1D -A' <-A' ?-C< 1A' < ' 1- ' &=' 01'A' =10 '0▯ <-A' # ' D1' 0C<B1' &=' ' ' >&-1 D10' -1L ' 1-0? -.' <- ' &=' D1' 01'A' =10 '0▯ D<' D1-' 0&' &= 1-' D1' =& 0KA' " ?BD10' D1 ' <00'.-110' <-A' 1L1B? &? 0' &=' 0' 0<>1' " ?BD10' 0D<▯▯ D<+1' & D' ' +' ' ' '-' D1' -<>1' &=' <-' & D 1' C1 -1▯ -A' D<' ' ' 0D<▯#1' ▯<?=?▯▯ &' D1' 01'A' " ?BD10' D1' <00'.-110' & ' 1L1B? C? 0' &=' 0<>1' " ?BD10' <0' &= 1-' <0' ' ' 0D<▯▯ =& ?-1' D1' 0<>1' C1 -10' & ' <- ' &=' D1 >' '-' =&? >1' <=& 01'A' &' #1' A?1' &' 1- 1 ' '-' <▯▯ D1' 01'A' <-1 0' <-A' 1R ' C< B1▯▯ D1 &=' <-A' D1 1' &' A'0 1 -' <0K1▯▯ =& ' D1' 0<>1' C< -10' <0' =& ' D1' 01'A' <--?<▯▯ 1- ' <-A' < C1 -.'10' &=' D1' 0<>1▯' <-A' D1' 0<>1' A'0 1001' 0&' <a1-' &' A '+1' ▯1A1' 1-BD<B1' D1 1' <K1 ' '>C< a1' <-A' 1 1'.-1' ?- &' D1' >1' D<' D1' 0<>1' " ?BD10' <-A' D1' <00'.-110' & ' 1L1B? &? 0' &=' D1' 01'A' " ?BD10-1' <0K1▯▯ &=' D1' 01'A' <--D1▯▯ 1- '0' <0' &=' D1' C1 -10' <-A' 1R ' C< B1▯▯ D1 &=' #1' =?▯▯ ' 0< '0='1A' B&- 1- ' <-A' C< 1A ' &+'A1A' <▯K1 ' D<' '=' D1'=& 01'A' < ' <-A' ▯'\<#1 D' A 1' ?'2>< 1A' #1=& 1' D1' 01'A' " ' 0' < 1' #1' '-' =&? >1' =& 01'A'=?▯▯ ' C<'1A' <-A' B&- 1- ▯' D< ' D1-'= &>' D1-0=& D' D1' C< >1- ' &=' D ' 01'A' <--?<▯▯ 1- ' '-' =&? >1' <=& 01'A' . <?- 1A' & D1' 01'A' " ?BD10' <-A' D'0' 01- ' . <?- 1' D1 &=' &' #1' +&'A1

$ ' &' AK< A' " ?a1' &=' &a -.D<>' 0&-' &' 1- '▯< 1' " ?a1' &=' &a -.D<>' 0&-' &' < .< 1 1' &?- 10' &=' <==& A' A&?.D 1 ' &' ▯'<-& 1' ▯< 1' " ?BD10' &=' &',01 ' &# ' C1-B1 ' , - .D ' <-A' ▯'<-& 1' D'0' F =' A?- 1001' &=' F '▯ 10D' 1' <-' D 1' &=' D1' A&?.D 1 0' &=' D1' 01'A' " ?BD10' < ' &?- 1001' +1 0' A&?.D 1 ' &' ▯'\<#1 D' <-' & D 1' A&?.D 1 ' &=' D1' 01'A' " ?BD10▯ D&><0' ? .D' , - .D ' <-A' AK< A' ? .D' , - .D ' 0&-' &' < .< 1 1' <-' & D 1' &=' D1' A&?.D 1 0' &=' D1' 01'A' " ?BD10' \F '▯▯'<>' <0 &-' H?'1 ' .-1 0' <0 &-' ▯'\<#1 D' <0 &-' A&?.D 1 0' &=' --1' <-' & D 1' &=' D1' A&?.D 1 0' &=' D1' 01'A' " ?BD10' <-A' 'BD< A' ! 1' H?'1 ' <-A' <-1' D'0' F =1' <-' & D 1' A&?.DR' &=' D1' 0<>1' " ?BD10' <-A' &' D1' D1' 10' &=' 1R ' &=' D1 >' <-A' &' 1R ' & D 1▯C0&-1' & ' C0&-10' =1&==1A' & ' 01<01A' &' D?01' &= D1 >' & ' <- ' &=' D1 >' '-' <- ' &=' D1' >'0010▯' <▯▯ 0?BD1' '.D ' ' ▯1' '-R1001' B▯1 >1' <-A' C&00100' &-''-' ▯<K1' & ' B&-0B'1-B1' <0' D1 ' & <- ' &=' D1 >' & ' <- ' & D 1' &' D?01' &=' D1 >' [ε' <- ' &=' D1 >' D I+1' & ' &K1' &' D<+1' '-' <- ' &=' D1' >'0010'-' ▯'a1' ><-1 ' <-A' =&? >1 <0' D1 ' & ' <- ' &=' D1 >' 0D?▯A' & ' &K1' &' D<+1' '=' D'0' <T ▯1' D<A' -& ' #1' D<A' -1' ><A1

" $ ' <▯K<'1' D<' D'0' =▯1' -& ' -&-1' & D 1' <Q▯1' D1 <= ' ' &' #1' ><A1' '-' D'0' 01-' C< ▯1>1-'1L 1-A' -& ' -& ' #1' C 1 ?A'B'<▯▯' & ' D? =?▯▯ &' D&><0' ? .D' , - .D ' '-' &=' & ' =& ' <- ' 'K< A0D'CC10' &==' B10' =110' K<.10' & ' <--?' '10' # ' "<>1' D'▯'C' &&0' & '# ' <- ' =1&==1' & ' =1A==110' &' D▯ ' ?01' &' D'>' . <?- 1A' =& ' R <1' &=' D'0' ▯ =1' K' D'-' D1' D' 1' &=' '-B&▯-▯' #? ' D<' D1' 0<>1' D&><0' a? .D' D<+1' &BB?C'1' CB1'+1' <-A' 1- & 1' D1' 01'A' 'K< A0D'CC10' &==' B10' =110' K<.10' <-A' <--?' '10' <-A' 1+ ' &=' D1 >' =& 'R>1' &=' D'0' ▯ =1' <BB& A'-.' ?- &' D1' . <?- 1' & ' . <?- 10' ><A1' # ' D1' 0<>1' " <>1' D'▯'C' & ' # ' D1' 01'A' =1&==11' & ' =1&==110' &' D1' 01'A' D&><0' ? .D' ><A1' '-' <-A' &=' D1' C 1>'0010' ' <-' '&=' D1 >' '-' <0'▯< .1' <>" <+<'▯<#▯1' ><,' <-A' =&? >1' <0' D1' >'.D ' & ' 0D?▯A' D<+1' D<A' & ' A&&-' '=' D'0' <(▯1' D<A' ▯-1R' #1' D<AA1' & ' ><A1

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' ?.&-1' &#<0&-' I' &D<--<' ?L1'81?0

& ' D1' , -.' &? ' &+01'.D' & A

' #101BD1-' &? ' '.D-10' ?.D' &D-0&-' <-A' &D<-1'D'M' F =1' '0 ' ' <-A' D1' 1' &=' F '▯▯'<>' <>C &-' &=' ? =& A' ' ▯'< ' KD1 1' <' <' < ▯1>1-' D&▯A1-' < ' F 10 'D' D1' +' ' A< ' &=' &+1>#' D1' =' 0 ' 1 1' &=' &? ' >&0 1' -&#▯1' 1'.-1' ' K<0' # ' <A+ 01'<-A' <001-' &=' D1' & A10' 0C?<▯▯ <-A' 1>C& <▯▯ <-A' D1' &>1-0' '-' D<' 01-' < ▯1>1-' <001>#▯1A' <-A' # ' D<?'= & ' 1' &=' D1' 0<>1▯ 1-<Q 1A' 0 <#▯'0D1A' & A1 -1A' A1-'1A' <-A' A1B▯< 1A' D<' D1' 01'A' F '▯▯'<>' <>C &-&=' ? =& A' K' D' & D 1' 0D?▯A' 0 &-A' <-A' #&' B&-+'T 1' <-A' < 1 - 1' &=' '.D' 1<0&-' <-A' A'0<#▯1A' <-A' =& ?.1A' &=' <▯>< ' &=' D&-&? ' 10 < 1' A'.-' 1' <-A' 1>'-1-B1' <-A' D1' -<>10' &=' D1' 0<>1' <-A' =& =1' 1' &' &?' &? ' 01'A' &+01'.-' & A0<-A' &' &? ' D1' 10' <▯▯ <0 1▯▯10' <-1 0' & A0D'CC1<' ?-A 1A'0' ! <?-BD'010'▯'# '10' C '+'▯1.10' <A+&?0&-0' -&'<B'&-0' 01- <B'&-0' ▯&-A10' 1- '0' 1- '0' A'B10 1RB'&- ' C& B'&-0' <--?' '10' C1-B'&-0' '.D 10''-D1 ' <?-B10' .&&A'0' B< 1▯▯ 0' <-A' A1 '0' KD1 &=' D1 ' & ' 1- ' & D 1' &' D1' ' ?01' &' &' D?01' &=' <-' &=' D1 D' K1 1' 01<01A' C&00100'A' D1' LL 0 ' A< ' &=' ? 0.?0 ▯' D1' 01'A' =' 0 ' 1 1' &=' &? ' >&0 1' -&#▯1' 1'.-1' & ' 1- ' >1' <= ' ' K' D'-' D1' 1<▯>1' &=' -.▯&-A' 1▯&-A' F <▯10' & ' <▯1'0' & ' '-' D1' >< BD10' D1 &=' '-' =11' 0' >C▯1' =11' <'▯▯ & ' R>1' &=' ▯ =1' & ' ▯ =10'▯ D<' ' ' ><' ' ▯'a1' &? ' . <B'&?0' ▯'▯.D-10' · ' &? ' . B 1' ' B ' -A' C' '1' D 8 D<001=▯=" &=' D1' & A=' 0C?<▯▯ <-A' 1>C& <▯▯ <-A' D1' &>1-0' '-' D'0' 01-' < ▯1>1-' <001>#▯1A' <-A' # ' D<?(▯& ' 1' &=' D1' 0<>1▯ H' 10 <#▯'00D1' <-A' 1-<= 1▯ D<' D1' 01'A' <Q'1' &=' B&-+'BB'&-' <-A' < 1 -A 1' #1' ? 1 ▯ '+&'A1' <-A' &=' -&&-' 1=1Ti ' <.1 -0 ' D1' 01'A' F '▯▯'<>' <>C &-' <-A' D'0' D1' 10' <-A' 1R ' &=' D1 >▯' -A' D<' D1' 1'A' &D< ▯-1' <-A' D' ' D1' 10' >< ' <-A' 0D<▯▯ D<+1' 1-D1 ' 1' C&001A1' <-A' 1- & 1' &' D' ' <-A' D' ' D1' 10' <-A' <00'.-110' <▯▯ 0?BD1' ▯&-A10' 1- 10' 1- '0' ,+'B10' 1RB'&-0' '.D '0' <-A' D1 1A' <> - 10' KD'BD1' K 1 1' D1' 01'A' F '▯▯'<>' <>C &-' & ' &' 1- ' & D' ' &' D'0' ?01' <' ' >1' &=' D1' 01'A' <Q▯1' &=' < 1 -A1 ' '" 0?BD1' >< '<-A' =&? >1' <0' D&?.D' -&-1' 1 -A&? -& ' B&-+'BB'&-' D<A' D1 - ' D<AA1' <.1 -0 ' D1' 01'A' F '▯ <>' <+ -.' <▯K1 ' &' ? ' .0&-1' <-A' C0&-10' D1' ' D1' 10' <-A' <00'.-110' 0?BD1' '.D ' ' ▯1' <-A' '-R1001' <0' D1 ' D<+1' & ' D<AA1' <=& 1' D1' 01'A' <Q 1' &=' 1 -A&?

EBB ʼ . 4))ʼ *ʼ??A?9 ; / ")3"

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&-+' '&' &=B'0 < 10

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"! 2.- ;+!' ! !'" 2 ' ' <0 &&-' &D-' < 10 @< 1' &=' '=11 &-' '-' D1' &?-='1' &=' "1+&-0D' 1' E1- '@><-' D1' LL+' A< ' &=' D1' >&-1 D&&=

"!#!&' !/' -/' &+&>#'@<0 'C<001A' < F ' - BD10 =' '-' D1' &?- '1' &=' D ' &? = ' 1B1 +1A' &=' &&-' F '@@'<>' F< A1' &=' &C'0D<>'<' K ' '-.' 01-'

#.-#! +!/' ;@' = &>' &&-' &D-' <'@@&? ' &? ' 1#1@@ <-A' <' &? '#1'-.' '-' & ><-A ' '-' D1' 01 +'B1' &=' &? ' <?-B'1-' 1-1> 1' &=' ! <?-B1@ D1' 1-&? 1'

. - &=' KD'BD1' 0 ' ' - .' D1'<= ' ' =&@&K1 D@ '.D ' 1+01-A' <-A' K& 0D'C=?@@ ' ' ' D1 1@ ' 1B&><?-A1' >1' ?- & &?@ C < 1-.' &?' & <=1@ &

&?' 1>1># <?-11' D1' K& '10' K1' 0C<a1' &' .? A1 0'-' 1 ' ' 1 ' ' D' BD' &=' LB10 =' <-A' <' D1' #@<a' ! 1 10' KD1-' 1' K1 1'<' &?' # 1a1=<0 ' < A' ' ><A1' > -' 1 <-A' ?- &@ &? =& ' 01 -.' &=' 1+ A1-B1' ' @ 1' 0D<@@ ?-A' 0 <-A' D<' D1' , -.'0' E <B1' &=' ! <?-B1' # '

D<A+ B1' <-A' <001-' &=' D'0 B&?-01@@ K&@@ <'A1' <-A' 0?CC& 1' &? ' <'0 1 0 0&-' &' D'0 '.D ' <-A' <@@ D'0 @&+1 0 <-A' 01 +<-0 <-A' <a1'

D1 >' <0 D'0 = 1-A 0 #A D1'# ' @&-A' <-A' # ' K< ' ' -A' <@@ D1 ' ><' K1@@ #1' <00? 1A' 0<+1@ ' &' B&>1' '-&! <?-B1' #& D #&A 10 <-A

.&#A10 <-A'0?BD1' <0 D<+1' -&' .&&A10 D1 ' ><' B&>1' D1A1 ' <-A' #1' 1@1+1A' '=' D1 ' #1' a-&K1-'=& ?-1' >1-' &' Rh H?< 1@D <-A' &R D<'

D1' K&@@ .1+1' D1@C' &=' D' ' &K-' 0?#.'1 '0 K' D' 0D'CC10 .&@A' <-A' 0'@ ' &' B&>1' '-&-.@<-A' <-A' K' D' 0?BD' -&>#' 1' <0 0D<@@ #1' D&?.D ' #'

&?' <-A' & D 1' &? 1' ><0 1 0 0&--10 = 1-A'0 -1B100< '1' <-A' #1D&=? ' =& ' D'0 D1@C1' <-A' 0&B&? @ <-A' D1 ' &' #1' 1A ' <-A' @<-A' <' 0?BD

>1' <-A' C@<B1' <0 1' D & D 1' 0DA@ <CC& - @ <-A' P) =& 1' C < ' &?' 0D1K1' D'0 >< '1 ' ?- & 0?BD1' <0 1' a-&K1' K1@@ K&@@ .1+1' D1' '

.&A1' 1&?-01@@ <-A' <00'0 <-B1' &' A'1' 0<>1' -A' '=' 1' >< ' # ' -.' D1' <-0K1 '&=' D1' > -A1' D1 -' &? ' 01@=' &=1@@ '0' 01-A' ' # D& -<@ '

E<@1' &=' "1 1>&? D' <-A' H >< ' 0C1a1' K' D' D' >' # ' D1' 0<>1' &a1-' D<' D1' <-A' 'B&> -1A' &.? A1 ' &=' >< '1 0 &?BD'-.' &?=

><'0 1 0 0&C-1' '-' &a'-.D<>' < a KD1-' ' ' &D-' <@K1@@ D?- 1A' D1 -@ <-A' #1' &?' -& ' <=1 A1' &' 0D1K1' <@@ &? ' > -A1' ?- & D >'

=& ' D1' '0 ?0 ' '-' D'0' >< '1 ' ' ' 1' >?0 1' B&>1' &? 01@=' & '01-A' D' >' & '1@@'0 01-A' <'0 1 ' &D-' 1' F '@@ KD&>' 1' K1@@ ?0 ' <CA'

' <@0&' '=' 1' <?-0K1 1' =& ' D' >' & ' A , 0' 1' >< ' 01-A' &D-' @1 -1@ &=' &@1' KD&>' 1' ?0 ' <-A' ' <@0&@ &' &D-' == ' .D ' 01 +<-' &' > '

<A ' F< K a' ^ ' <- ' & D 1' ?0 ' #&A ' &=' &? ' a-&K@1.1' 'C < ' &?' ><a1' @<#&? 1' ?- &' > ' <A ' F< K a' &' K ' 1' &' D1' , '-.' &=

! <?-B1' <-A' &' 0?BD1' &=' D'0 &?-01@@ <0 0D1' '0 #10 ' <BB&?- 1A' K' D@ <-A' D<' A&&-' 0D1 ' <-A' 1' <-A' <@@ & D 1' &=' &? ' C< '1' 0D<@@ D<+1' <@@

D' -.'0 -1B100< '1' <0 '0 A=& 1' 1D1 B'A' ' -A' '=' D1 &' <-' ><-' &=' . 1 1 ' -<>1' D<' D' -a1 " D1' >< ' &K1' >& 1' .&&A1' D1 1' D1-' <'

>>1@ D1' >< ' 0?1 @ ' A>1' D1A' ' <-A3 K1@B&>1' -A' ' ' ' -1 ' D' -&' &' 01-A' D1A' ' <- ' . 1 1' -&>#1' =& ' D1 1' 0D<@#1' -&?.D' 1A '

=? -'00#1A' &=' <@@ D' - .B0' <-A' D1' , '-.' <-A' D'0 &?-01@@ 01 ' D1 ' K&@@ <0a1' -& D' -.' '-' 1B&>C1-B1@ #?' &' A&' ' '=& ' D1' K &-.' D1' A A'

'-' ><a' -.' 1- ' , -.' &=' -.@&-A' <-A' =& ' D1' .&&A1' K' @@ D1' &K1 D' &' D1' 0&--1' &=' &? 1' ><'0 1 ' =& ' D1 ' #1' -1 ' &=' a '?' ' ' 1'

1>1># 1' D<' D1' &a1-' #1 K11-' &?' <-A' >1' '0 @' <' 0?BD' <0 '0D<@@ 01-A' ?- &' &?' 0D<@@ <a1' &?' # ' D1' D&>#1' <0 ' A A1' KD1-' 1'

<-A' ' K1- 1' -C' &? 1' &=' D1' @&'0 1 ' ' - &' 1 - ' 1 ' 0' D' BD1' <-A' # ' D<' &a1-' 1' 0D?@A' #1' <00? 1A' &=' <@@ D' -.10' <-A' =1 1' -& D'' '

<-A' 0&' 1-0? 1' 1' <@@ &? 1' = 1-A'0' <-A' > -1' ' ' 1' 0D<@@ D1 1@# ' & D 1' = 1-A'0' ' ' D1' B&-+1-<#@1' >1' &=' D1@C1' '0 B&>1' <-A' D1 =B=3

-&K1' 1-A1+&' ' &? 1' 01@=' <-A' C?' &' &? ' D<-A' <-A' 0C< 1' -&' B&0 ' =& ' D1 1' 0D<@#1' D1@C1'@ ' -' D 1' C< '10' &? 1' &=' & <@>1' #?' D1 1' '0 '

D1' C@<B1' >&0 ' >1 1@ ' =& ' &?' <-A' KD 1' 1' 0D<@@ @<a' -& D' - . ' D1' #1 1 ' D1 &=' 0D<@@ 0D1K1' &?' >& 1' &' KD&>1' ' C < ' &?' . =

B 1A1-B1@ F ' 1-' < ' &<-' '-' & ><-A 1' D1' L+' A< ' &=' 1C 1>#' #' &?' &@A1' <BB& - <?-B1' &D-' <'@@&? ' D1' 1@A1 ' = 1 ' D1'

10B1 1' &=' KD'BD1' K ' '-.' <-A' B 1A1-B1' D1 ?CC&-' ><A1' <-A' &C1-1A@ D1' 01'A' &D-' ?-=1' D=?@@ /-T=/?- ?@ ' 0?=' 1A' D1' #' -.1 ' &=' D1'

01'A' K ' '-.' &' .&& < ' D'0 C@10? 1' K' D&?' <- ' < 10 ' & ' &?#@1' &' D' >' D1 =& ' ><A1' <-A' <@0& B<0 1' D1' 01'A' K ' '-.' '-' D1' =' 1' <-A'

&-01@1A' <@@ D1' >< '1 ' <-A' 0D1K1A' ' '-& ' &' &? ' '.D-10' -& ' &' <-' &=' &? ' &?-01@@ ?-&' D1' >1' D<' D1' 01'A' &D-' <=' ' D1'

K<0 <a1-' k'=& ' <-A' < 10 1A' ! ' KD'BD1' >< '1 0 <=C 1' 1D1 B'A' '0 #' D1' 01'A' &D-' < 10' -' 0?#0 <?-B1' B&-=1001A' <-A' a-&K@1.1A'

&-/!'" . ' ^J#!'2 1' ' D1 =& ' A1 -1A' # ' D1' 01'A' <?= & ' 1' D<' <@@ 10' C< 1- 10' <-A' . <?- 10' &=' &='B1'0 =110' <-A' <--? '10' -B'A1-' & &=

+.' &1' +' D1' 0<>1' ='B1'0 & ' =& ' D1' 1LB'01' ? 1' & ' &BB?C<B'&-' &=' D1' 0<>1' ?- & D1' 01'A' &D-' < 10' ><A1' <-A' . <?- 1A' <0K1@@ # ' A'1' , -.'

;!#. 1!' ' .&/ <0 # ' 1- ' & D 1' C0&-1' #1' ? 1@ ' +&'A1' <-A' &=' -C&-' 1=1Q';1

&-/!'" . ' $. ' -' <@K< 10' D<' D'0 <Q 1' &=' =& =1' ? 1' L 1-A' -& ' -& ' 0 1 BD1' &' D1' =& =<' ? 1' &=' <- ' &=='B1' =110' & ' <--? '10' . <?- 1A' & '

&'" 6.;!"' -.=& A1' '-' D1' D' 1' &=' & =' E1- '@><-' D1' LL'' ' A< ' &=' ?.?0 1@ <-A' D1' 01'A' ' ' &#' D1' L+'' A< ' &=' <-?< '

1;!"+!@- ' -/' ><A1' &' D1' 01'A' &D-' < 0' & D 1' D<-' &=' B'10' =110' <-A' <--? '10' #' ?0' &' D' >' . <?- 1A' & ' # ' &?' 1' A1 10' <A ' &A1 @ & ' 1@10

6&# "/' V & ! !' M&-*' .'" D1' 1'.-1' &=' &? 1' & 1'.-' & A' D1' , -.' D<' -&K1' 0@ <' 1 a'-.'' <=& 10<'A' <' &?01@ ' ><.1-1A' <-A BK-C<001A'

b!-' . ' "! 2.-' D1' A1 D1' <-A' A10 ?BB'&-' &=' &? 1' 01'A' &?+1 1'.-' & A@ <-A' <@0&' D1' 0?#+1 &'&-' &=' <@@ D'0' &'<@>1@ D<-' <-A' D1 1' <' &?0@ '@1+ 1A'

-/' B." !& 0"!' .?1 1' < 1-' &? ' 01'A' &?+1 1'.-1' & A' <-A' <AD1 1A' D1 >' <' &?0@ ' &' D< @10' D1@ ! 1-BD1' , -.' <?-B'1-' 1--1> 1' &' &? ' 01'A'

!'!.- &?+1 1'.-1' & A' <-A' D'0' &'<@>1' < 1-' D1' ' A?1 '1' <-A' ''.1<?-B1' ' 1' ' ' D1 =& 1' & A1 -1A' <-A' 1-< J1A' # ' <?T=& ' 1' &=' D'0 01-'

< @'<>1-' D<' D1' 01'A' &#1 ' <-A' 'BD< A' 0 &-A1' <-A' #1' < 1 - 1A' &=' '.D' 1<0&-' <-A' =& =<' 1' <@@ <-&' 0' @<-A10' 1-1>1- 10'

1- 10' 1,B'&-0' <-A' <@@ & D 1' D1 1A' <>1- 10' D<' D1 ' & ' 1' D1 '&=' D1 >' & ' 1- ' & D 1' & D1 ' ' ?01' & ' & D1' ?01' &=' 1' D1 ' &=' D1 >'

D<AA1' <' <- ' &=' D1' 01'A@ A< 10@ &=' <0 < 1' &=' =11' 0' >C@1' & ' =11' < @@ '-' -.@&-A' & ' F <@10

'&-*' .'" 6!-2' -/' !"' &#12 -' <@0&' ' '0 & A1 -1A' # ' D1' 01'A' <?! & ' 1' D<' 1+ ' &=' D1' , -.'0' @'1.1' C1&C@1' D1' ' 0?BB100&? 0' D1' 10' <-A' <00'.-110D<+1' <-A'

.0' .'" .'" !& !/' 1- & 1' <@@ ><=" 1- '0' A?1' <-A' &=' '.D' & D1 >' C 1 - -.' <=& 1' D1' ><a -.' &=' D'0 Q@1' & D1 >' &=' <-' &=' D1' >'0010' A? -.'

-.'?'# A'1' >1' D<' D1' 0<>1' >'0010' 1>< -1' <-A' <#'A1' '-' D1' C&00100'&-' &=' &? 1' 01'A' &?+1 1'.-1' & A' & ' D'0 D1' 10' C -A' '=' <-' '&=' D1'

-/' !"' &#12 >'0010' D1 <= ' ' #1' . <?- 1A' # ' D1' , -.' & ' 1- ' &=' D'0' D1' 10' # ' ' 10' C< 1- 10' &' <-' C0&-1' =& ' R>1' &=' @ =1' '-' =11' 0' >C@1' & ' =11

9(. 4&)’ 2;’27 ;>:

@++’ ’ !-’ ..’ 2.-!2’2.’ 2!&2!/’ .+/!’ !’2 1!’ -.&"2’+ -/!2’ -/’ .H8)’ <1&22!2’ . ’20# !’ 2.-!2’ !&"’ !&"!2’ -/’20##!22.0"2’ ..-+@’ -/’ ;@’ !’2 1!’<’&#!2’ 2’ !’2 1!’ -.&"2’+ -/!2’ -/’ !-!1!- !2’ -/’ . "!’<1&22!2’7!"!’ -/’2 0+/’ ’!’;!_-’ .+/!-’ -/’ # "*!/’7& ’ ."!’ !’1 E&-*’.’ &2’ !’ .1 *!’.’ !- 0- !2’ .’" $1!’.’+@’..-+@’!%#!

’+2.’;!’&’."/!@-!/’ -/’ !2 ;+&22 !/’ ;@’ !’2!&/’ /’@2!’ 22!-’ -/’ 0/&."& !’ ’&’ -@’.’ !’2!&/’ 2.--!2’;@’ &2’ /+!’ !@-!/’ ’!’1 /!’ -@’2 !’!.!1!-’.’" /&2#.-&-0 -#!’.’ -@’+-/!2’ !-!1!-!2’"!-&2’ .22!22&.-2’ -/’ . "!’ !"!/& <&!-&2’7!".’ !@’;!!’."’ -@’.’ !@1’7!"!’2!&2!/’."’ .22!22&/’&-’ !’"&* ’.’ -@’.’ !&"’V@!2’ ’/&!’ @1!’.’20# !’!2 !’!.!1!-!2’."’ /&2#.-&-0 0-#!2’1 /!’ .’ -@’2.-!’."’ 2.-!’&-’ -@’7&2!’ ’ !’ !&/’+-/!2’ !-!1!-!2’"!-!2’ .22!22&.-2’ -/’ !"!/& 1!-!2’;!’ -.’#.1 "&2!/’&-’ &2’ ^!’;0’0 &"+@’;!’ !%#! !’ -/’ ."&2!/’.0!’.’ !’2 1!’<’ -/’ ’ !’"&* ’ -/’ &+!’.’!’)@.’ !’2!&/’ V@!2’.’ -/’&-’ +’20# !’+-/!2’ !-!1!-!2’"!-&2’ .22!22&.-2’ -/’ . "!’ !"!/& 1!-!2’;!’ -/’"!2!’&-’ !3@’.’ !’2!&R’V@!2’ -/’ !@’ .’;!’ ’ !&"’ ##&.-2’ -/’ "!#.0,!!2’.’ !’2 1!’ -/’!<@’ "#!+’ !".’ ##."/&-*’ .’ !’#.0"2’.’ !’#/!-’+7!’.’ -*+.-/’ &2’ ^!’.’" -@’. "!’ & !’.’".’/&- 0-#!’&-’ &2’<2!-’ ’"& 1!-’1 /!’.’" .’;!’1 /!’-.7& 2 -/&-*’H’ -/’ +2.’ ’&’;!’+0 0+’.’ !<@’.’ !’2!&/’V@!2’ -/’V.1!-’ -/’ .’!<@’.’ !&"’!&"!2’;@’ H2’ ^+!’-.’ !@- !/’ .’ !-"!’&-’ .’ !’2!&/’ -.0"2’+-/!2’ !-!1!-!2’"!-!2’ .22!22&.-2’ -/’ . "!’ !-!"!/& 1!-!2’&-.’7 ..2’ .22!22&.-’2.!’) !@’;!’2!&2!/’ .’ #.1!’ 2’7!+!’0 .-’+&&!’ .22!22&.-’.’ !’M@-*’.0"’ .<!&*-!’ .”/’ 2’0 .-’ !’ .22!22&.-’.’ -@’. "!’ 2.-!’."’ 2 -!2’@’ &2’ ^!’-.’ !@- !/’ -/’ !@1’ -/’!,@’.’ !@1’ .+/!’ -/’!-H.@!’ .’ !@1’ -/’ .’ !&"’ !&"!2’;@’ &2’ !’ -.’ !@ !/’ ##."/&-*’ .’ !&"’ &+!’ -/’&-!"!2’&-’ !’2 1!

’1."!.<’;!’&’."/!@-!/’;@’ !’2!&/’ 0 ."&!’ ’!<@’.’ !’7@ ’.’!<@’.’ !’2!&/’2.--!2’-.7!’ ’@-*’;@’ &2’ ^+!’ !@- !/’."’0- ;+!/’ -/’!<@’20# !’V.1 -’20# !’2’7 ’ !’7@!’.’ -@’.’ !’2!&/’2.--!2’-.7’/!/’;@’ &2’ ^!’ !@- !/’."’0- ;+!/’"!+@’!-H.@!’ ’!’ -/’ .22!22!’ &"’ !’/! ’.’ !" 02;.-/’ +’ &"’.V-!’&- "& 0-#!’.’ &"’ -/’ .’ &"’ !&"!2’.’ "!’ -’;!’ !@- !/’."’0- ;+!/’;@’ &2’ ^!’-/’ +’ 2!+!2’ ."/2 & !2’ -.&"2’+-/!2’!-!1!-!2’ -/’ "!’ !’<1&22!2’7!".’2!’ !’2!&/’%%&&&H’/@’.’ 0*02’ -/’ !’2!&/’%’&H’/@’.’ -0 "@’&-’ -@’7&2!’V 2’2!&/’."’ .22!22!/’& ’!’.7-!’"&* ’2 !’."’ .22!22&.-’."H.&-+@’7& ’ !’"2&/’ 02; -/’."’7& ’ -@’. "!’2.-!’."’ 2.-!2’."’7& ’ -@’ 2.-!’."’ 2.-!2’V!"!’2!&2!/’ .’ 02!’.’ -@’.’ !’2!&/’V.1!-’."’ .’ 02!’.’ -@’.’ !’2!&/’V.1!-’ -/’ &"’2&/’ 02; -/<’ &"’ 0"1!’ -/’ -!"’ -/’&-’+&E!’7&2!’2’ !@’."’ -@’.’ !@1’ -/’&-&+!/’&-’ !’2 1!’ !’2!&/’%%&&&H’/@’.’ 0*02’ -/’ !’2!&/’%’&H’/@’.’ -0 "@’ -/’ ’/O"&-*’ !’2!&/’ 2 !’&’;!’-.’2!&2&;+!’-."’2!&2!/’;@’ &2’ ^+!’&-.’ !’M@-*’&2’ -/!2’-!"’ !’M@&+*’.’;!’ 0-27!"!/’.’ -@’&220!2’."’ & !2’ ’!-@’ "#!+’ !".’ !’2 1!’ 2 !’/O"&-*’H’ -/’ ’&’;!’+! 0+’ ’!<@’.’ !’2!&/’V@!2’ -/’V.1!-’&-/’!$@’.’ !&"’ !&"!2’;@’ &2’ <&!’-.’ !@- !/’-.’" 0- ;+!/’ -/’.’!<@’ 2.-!’.’" 2.-!2’2!&2!/’ .’ !’0 2!’.’ -@’. ’ !’2!&/’V.1!-’ "’ .’ 02!’.’ -@’. ’ !’2 1!’V.1!-’ &"’2!&/’ 02; -/&2’ -/’ !&"’ !&"!2’.’!-"!’&-.’ !’2 1!’ 2 !+!2’ -.&"2’ ."/2 & !2’ -/’ . "!’ !’<1&22!2’ -/’!<@’"8’ !@1’&-.’ 7 .2!’ .22!22&.-’J’ !@’;!’2!&2!/’."’#J1!’27"&+’0 .-’ .’ .22!22&.-’.’ !’M@-*’2’0 .-’ !’ .22!22&.-’.’ !,@’. "!’2.-!’."’ 2.-!2’;@’ &2’ ^+!’-.’ !@- !/’-!"’0- ;+!/’ -/’ !@1’ -/’!<@’.’ !@1’ .+/!’ -/’!-H.@!’.’ &"’ -/’ .’ &"’ !&"!2’;@’ &2’ !’ -.’ !@- !/’0!"’0- ;+!/’ ##."/&-*’ .’ "’."’ !&"’ &+!’"&* ’ -/’&-’!2’&-’ !<2 1!

. L’.’!,@’2.-!’ -/’ !&"’ !&"!2’. "!’ -’20 !’2.-!2’2’;!!-’@’ &2’ ^+!’ !@- !/’ -/’ !&"’ !&"!2’ -/’ !’ !&"!2’.’!,@’.’ !@1’ -/’!3@’2.-!’#+ @&@-*’;@’ !’2!&/’(2.- !2’2;.’ !@- !/’.’" !&"’ !&"!2’ ’ -@’.’ !@1’.’."&* ’&+!’ ##&.-’!-"!!’ -/’&-!"!22!’&-’."’.’ !’ "!1&22!2’ -/’!_@’.’ !@1’2’ !@’ 0+/’ ’!’ //!’&’ &2’ ^+!’ //!’"&.’;!’1 /!

" s ’+7@’ ’ &2’ <!’.’ !@-/"!’."’ ."!&0"!’.’" -@’. "!’ +!’1 /!’."’ .’;!’1 /!’&-’ &2’H<2!-’3 "+& 1!-’&-’ -@’ 7&2!’!% !-/’-.’ .’." .<’ !’ -!"’.’ +’ .1;!"2’&-’ @-*’7& ’ 0" !- -#!2’&-’ !’ .0- &!’.’ 22!%’-."’ .’ ." ."’ !’"!<#&.-’ .’ !’2 1!’-."’ .’." ."’ -@’+.-/!2’."’ !-!1!-!2’&-’ @-*’ ."2!&/’7& ’ !&"’ 0" <- 0-#!2

3". ’&2.’2’ .’ -/2’ &-’ &-*

A ’ 22(8

’ ’=& ’ D1’ &?- ’ <⇳1- -1’ &=’ <-B<0 1

.’ !’M@-*’.0"’ ., @-’ ."/

V 6 ’ !’ .0- &!’.’ -# 2"!’&2’ -/’.’+.-*’@1!’ ’;@-’L’ .0- &!’3 +@- @"&!’1 /!’ -/’."/!@-!/’."’*"! !’#.-2&/!" #& -’ -/’ V<&-’L !’2 1!’ ’ @-’ /’ -/’02!/’ HO"&2/&##&.-’".& +’ -/’ +’ @-*’.’ ’ .0- &!’3 +@- @-!’;!+.-*&-*’&-’ !’/ @!2’ !22&.-’"!2 # &-*’. ’ !’- ;+!’ *!"&&.<2(.L’.0" ., @-’ .@/’ !’ M&-*’.-.’ !’;!*@--@-*’. &2’<!"&’3 +& &"&!-’ ’ !’M-@* &2’.’ &"!’ -/’. "!’-.;+!’2.--!2’.L !’2 1!’ .0- &!’;!@-*’ ;2!-’ -’ ^]’7 2’1 /!’ ’ !’20 !’.’ ’ &# .+!"’ 2.-"&!’ #<’ &2’ "&#O+!"’# 02!’ &-’ -# 2 &"!’ -/’ @!-2’ !’#.!-’7!+!’.’ +’ .H$)[.’ ;"!**!’ !’2 1!LHO"&2/&###&.-’ 2’.0# &-*’ 2.--!2’/7!++&-*’.0’.’ !’2!&/’ .0- &!’&< + 7!/’ "! ! +!/’ 0 .-’ #!22!’1 /!’&-’ !’2 1!’ .0-/!’ ."’ 1 &!"2’ -/’ # 02!2’/..-’&-’ !’2 1!’ !’7 &# !’2.--!’ .0’;!’&’ !@’7!"!L’/0+@’ 0+7!/’2 0+/’-.’ .”!& !’ !&"’ *..!!2’ !’7 &# !’ !@’ /’.0!’.’ !’2 1!’ .0- &!’;@’ !’! !^+!’.’ !’2 1!’ <!’H’ !’7 &# !’ ^+!’7 2’"&.’.-!+@’#.- `"&!’.’ !’2!&/’HO"&2/&###&.-’.’+.-*’@1!’ !"!’02!/’ -/’ 0"!0+’.’/&!’&- +- 1 !2’.’"&&!’2 1!’ .0- &!’ -/’ +’.’ !’ 7 &# !’ /’ "0!’# 02!’.’ ###&.-’ .’" 10"/"!2’".;;!"&!2’ "!2 22!2’.; * #&.-2’#.-" / 2’/-/’ <’+0"&& ’# 02!2’/.-!’ 7& &-’H)’2 1!’ .0- &!’;@’/7!+!"2’7).0’ 0’ +2/’&-’+! @-*’.’ 02&#!’ -/’+ 0 0+’"!1!/@’L.’& !@1’7V# !’ /’+0 0 ’# 02!’.’ 20# !’ ###&.-2’ -/’;@’"! 2.-’.’ !’2 1!’ !’7!"!’+! !’7).0’+ 0 0+’"!1!/@’&-’ ’;/& +H’ ’;!’ !" .”!;@’ !’ /’@#!’ -/’ 22!-’.’ !’ ."/&2’2 0 +2’ -/’ !1 ." +2’ -/’ .1@-2’&-’ &2’<2!-’3 "+& 1!-’22!1;+!/’ -/’;@’ 0<+.”& !’.’ !’2 1!’ !’&&H’/@’.’B!;"0 "@’ !’&H<’@!"!’.’ !’"!&*-!’.’.0"’2!&/’ .,!&*-’ ./’!-<!/’."/!@-!/’ -/’2 ;+&22 !/’ ’ &&!’2!&/’ +!’ -/’ +’ <2’.’ 3+!1!-’1 /!’&-’ &2’<2!-’ "+!1!-’.0# &-*’ !’2!&/’ .0- &!’3 +@- @-!’.”’ !-@’ " !’.’ !’ HO"&2/&###&.-’ !".’.”’1 /!’.’ !’ ;"!**!1!-’.’ !-@’ " !’.’ !’2 1!’HO"&2/&###&.-’.”’ .0# &-*’!-@’ ." !& 0"!’." .22!’.’*../!2’ !’7 &# !’.”2 0+/’*".7!’.”’ !-’ ;@’"! 2.-’.’ !-@’ #!22!’.”’ !%&*!-/’1 /!’.”’.’;!’1 /!’7& &-’ !’2 1!’ .0- &!’;!’0 !"+@’.&/!’ -/’.’-.’ ."#!’-!’ H’ -/’ !’2 1!’ .0- &!’3 +@- @-!’ -/’ +’ !’HO"&2/&###&.-’ I$.’;!’&-’ !,@’ .@-’ .0# 1*’< ’ #!22!’ .+ !& 0"!2’ -/’.I$< &-*!2’ 2’ + "*!’ -/’.’+&E!’ ."#!’C’! ! !’ 2’&’7<2’ !’/@’-!%’;!.”!’ 0"2’/@’.’ H 2!-’3 "+& 1!-’ -/’ 2’& ’ !’2!&/’ <!’ /’-.’ @-’1 /!

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ˈ ˈ <.< -0 ˈ +<B<#&?-A0ʹ <-Aˈ #1..1 0

ˈ ˈ <0ʹ D1ˈ , -.ˈ0ʹ .ℕB1ˈ >&&0ˈ 1- ˈ1 @ ˈA10ˈ 1 Dʹ <>&-.10ʹ <@@ˈ 1ˈ D@ ˈ Dˈ-.ˈ0ʹ D1ˈ C0Cˈ 1ˈ <-Aˈ 10 =?@-10ʹ &=ˈ !& &A1ˈ ˈ-. ˈ D'0ʹ D'0ʹ @<-Aˈ <-Aˈ D'0ʹ 0?#.1 ˈ0ʹ &=ˈ D1ˈ 0<>1ˈ &ˈ `ˈ@1+1ˈ ˈ H?ˈ1 @ ˈ<-Aˈ `0? 1=?@@ ˈOPˈ &ˈ D1ˈC@10? 1ˈ &=ˈE&Aˈ<-Aˈ<BB& Aˈ-.ˈ .ˈ ˈ ˈ 'B='ˈ"Ō :9 &ˈ D'0ʹ @<K10ϑ K'@@ˈ-.ˈ <-Aˈ<@K1'00ʹ &=ˈ D'0ʹ C' ˈ1ˈ ˈ- 1-Aˈ-.ˈ &ˈ 1A?B1ˈ D1 -ˈ D1 ?- &ˈ # ˈ0&= 1 ˈ >1<-10ʹ D1-ˈ# ˈ0?BDˈ31L 1>1ˈ ˈ.&? ˈ D1 =&ˈ C +1ˈ1Aˈ ˈ-ˈ<ˈ < ? 1ˈ ><A1ˈ ˈ-ˈ D1ˈ >1ˈ &=ˈ , ˈ-.ˈ 'BD< Aˈ D1ˈ01B&-Aϑ B&-0'A1 ˈ-.ˈ <@0&ˈ D1ˈ . 1< ˈ BD< .10ʹ D<ˈ0D?@Aˈ. &K1ˈ &ˈ D'0ʹ 0?#.1 ˈ0ʹ =& ˈ # ˈ-.ˈ-.ˈ &=ˈ +<.<#&-A10ʹ &ˈ D1ˈ E<&@10ʹ <BB& Aˈ-.ˈ &ˈ D1ˈ0<>1ˈ < ? 1ˈ <-Aˈ D1ˈ @&-.ˈ <#'Aˈ-.ˈ &=ˈ D1 >ˈ D1 ˈ-ϑ KD1 # ˈ# ˈ a1@1D1A1ˈ><-ˈ &=ˈ D1 >ˈ 0D?@Aˈ @&01ˈ D1ˈ ˈ@'+10ϑ -`>&A ˈ-.hᴾ &=ˈ D1ˈ01'Aˈ 10 < ? 1ˈ D'0ʹ D'.D-10ʹ K?@@ˈ # ˈ D<?= & ˈ 1ˈ &=ˈ D'0ʹ C01- ˈ C< @ˈ<>1-ˈ ˈ ˈ#1ˈ& A1 -1Aˈ <-Aˈ 1-<ɪ1Aϑ D<ˈKD1 1ˈ 0?BD1ˈ > 0A&1 0ʹ 0D?@Aˈ #1ˈ # ˈ1L< <ˈ-<B'&-ˈB& > 1Aˈ &ˈ D1ˈBA1-ˈ.<&@1ˈ D1ˈ &ˈ 1>< -1ˈ <0ʹ ˈ ˈ <=& 01'Aϑ D<ˈ D1ˈ` D ˈ 1= <ˈ 10ˈ <'@@'=0ʹ ˈ.Dˈ &-0 <#@10ʹ <-Aˈ 1 ˈ &-0 <#@10ʹ <-Aˈ <@@ˈ & D1 ˈ E&+0-1 0ʹ <-Aˈ ==ˈB1 0ʹ &=ˈ ˈ 110ʹ ? .D10ʹ &K-10ʹ &K-0 'ĝCCOʹ 'ĝĝ<.10ʹ <-Aˈ & D1 ˈ C@<B'0ϑ K' Dˈ-ˈ ˈˈ Aᴾ@10ʹ <= 1 ˈ D'0ʹ <ˈ @1ˈ CB@<>1Aϑ ><a1ˈ A?1ˈ 01 BDϑ <-Aˈ <a1ˈ & ˈ B<?01ˈ &ˈ #1ˈ 'a1-ˈ <@@ˈ 0?BD1ˈ +<.<#&?-A10ʹ 'A1@@ˈ <-Aˈ 0?0C1 1ˈC0&-10ʹ@ + -.ˈ0?0C1B'&?0@ ϑ <-Aˈ D1 >ˈ0&ˈ <a1-ˈ &ˈ 01 1ˈ ˈ-ˈ0 &aa10ϑ D1ˈ &ˈ 1>< -1ˈ # ˈ D1ˈ0C<B1ˈ &=ˈ ˈˈ Aᴾ@10ʹ <-Aˈ ˈˈ - .D 10ʹ <-Aˈ D1ˈ &ˈ D<+1ˈ -&&-ˈ & D1 ˈ 0?0 1-<?-B1ˈ#? ˈ =ˈ 1A1ˈ <-Aˈ K< 1 ˈG <-Aˈ<= 1 ˈ D1ˈ0 'Aˈ ˈˈ Aᴾ@10ʹ <-Aˈ ˈˈ - .D 10ʹ &ˈ #1ˈ D<Aˈ &? 1ˈ <-Aˈ 01ˈ <ˈ @< .1ˈ <-Aˈ D1-ˈ &ˈ #1ˈ BA><?-A1Aˈ &ˈ <+&'A1ˈ D1ˈ &K1-G -Aˈ '=ˈ 1= 0&-10ʹ D1ˈ #1ˈ <a1-ˈ ˈ-ˈ 0?BD1ˈ A1=<? 1ˈ ˈ-ˈ D1ˈ 0<>Cˈ &K-ˈ& ˈ &K-0D'Cˈ D1-ˈD ˈ &ˈ #1ˈ01 1ˈˈ-ˈ D1ˈ@'a1ˈK'01ˈ ˈ-ˈ &aa'0ʹ # ˈ D1ˈ0C<B1ˈ&=ˈ+ˈA<'10ʹ K' Dˈ @'a1ˈ A'1 1ˈ <0ʹ '0ʹ #1=& 1ˈ 1D1 B1AG <-Aˈ =ˈ 1- ˈ C0&-1ˈ ˈ C0&-10ʹ .1+1ˈ 1- ˈ D1 ˈ >1 1ˈ& ˈ A ˈ-a1ˈ &ˈ D1ˈ01'Aˈ > 0A&1 0ʹ #1ˈ-.ˈ ˈ-ˈ 0 &aa10ʹ ˈ-ˈ =&? >1ˈ<=& 01'Aϑ & ˈ D1ˈ 0<>1ˈC '0&-1 0ʹ=<+&? ˈ ˈ-ˈ D1ˈ ˈ > 0A& -.ϑ D<ˈ D1-ˈ D1 ˈ =& =1ˈ 1ˈ =& ˈ1, ˈ >1ˈ0&ˈA&ˈ-.ˈ L'ˈA

ˈ ˈ <@0&ˈ ˈ ˈ'0ʹ & A1 -1Aˈ # ˈ D1ˈ01'Aˈ<? & ˈ 1ˈ D<ˈ <@@ˈ ><5ˈ &=ˈ#1..1 0ʹ -& ˈ <#@1ˈ &ˈ K1 a1ϑ K' D'-ˈ + ˈ K1a'0ʹ -1a ˈ <= 1 ˈ CB@<>B'&-ˈ ><A1ˈ&=ˈ D'0ʹ <A1ϑ .&1 10 ˈ<-Tᶠ <#'A1ˈ'-ˈ `D'0ʹℕPˈD?-A 1Aˈ KD1 1ˈD1ˈ@<0 ˈAK1@@1Aϑ& ˈ D1 ˈ KD1 1ˈD1ˈ'0ʹ #10 ˈa-&F1-ˈ & ˈ #& -ϑ D1 ˈ &ˈ 1>< -1ˈ& ˈ<#'A1ˈK' D&? ˈ#1..ˈ-.ˈ ?ˈ&=ˈ D1ˈ0<'Aˈ ?-A 1Aϑ C&-ˈC< -1ˈ &ˈ#1ˈC?? 00D1Aˈ<0ʹ '0ʹ #1=& 101'Aˈ -Aˈ D<ˈ -&ˈ ><-ˈ #1ˈ 1LB?01Aˈ # ˈ D<ˈ D1ˈ '0ʹ <ˈ @ a1ˈ &=ˈ&-ˈ - C0' 1ˈ ˈ&=ˈ & D1 ϑ K' D&? ˈ D1ˈ0D1K1ˈ D1ˈ ˈ 10ʹ &=ˈ D1ˈ D<?-B1@@1 ˈ&=ˈ D1ˈ - ,0' 1ˈ = &>ˈ KD1- ˈ D1ˈ01' Dˈ D1ˈ B& > Dϑ -& ˈ -&-1ˈ & D1 ˈ B<@@'-.ˈ D'>01@=ˈ <ˈ ?@A1&? ˈ D'C-@<-ˈ & ˈ <+1@ -.><-ˈ K' D&? ˈ D1ˈ# ˈ-.1ˈ<ˈ ˈ 1ˈ = &>ˈ D'0ʹ <C < -ˈ & ˈ = &>ˈ D1ˈ &K-ˈKD1 1ˈ D1ˈ @<-A1Aϑ <-Aˈ D<ˈ D1ˈ D1-ˈ &ˈ #1ˈ B&><?-A1Aˈ &ˈ .&ˈ D1ˈ `0 1'.D hᴾ D'.Dˈ K1 ˈ ˈ- &ˈ D'0ʹ &?-

ˈ ˈ "ˈ D'0ʹ ˈ ˈ'0ʹ & A1 -1Aˈ # ˈ D<?= & ˈ 1ˈ <#&+101'Aˈ D<ˈ ˈ=ˈ<- ˈ D= 1=ˈ ˈ& D1 ˈ ==ˈB1 ˈ <=& 1ˈ 1D1 B1Aˈ 1L1B? 1ˈ -& ˈ D1ˈ C>'0010ʹ <<ˈ '0ʹ <#&+1ˈ01'Aˈ &=ˈ1, ˈ+<.<#&?-A# D=ˈ 1> 1ˈ& ϑ#1..1 ˈ<#@1ˈ &ˈ @<# 1ϑ & ˈ B@1 aˈC'@. >1ˈ& ˈ 0D'C><-ϑ <0ʹ &= 1ˈ <0ʹ 1- ˈ 0?BD1ˈB&> Dˈ '-ˈ#'0ʹ 0'.D'8& ˈ D<ˈ D1ˈ D< Dˈ D1 &=ˈa-&K@1.1ˈK' D'-ˈ D1ˈ &K-1ˈKD1 1ˈ D1ˈ D< Dˈ<?A& ˈ 1ˈ ?@1ˈ & ˈ.&,-<?-B1ϑ D<ˈ <0ʹ &= 1-ˈ<0ʹ 1- ˈ0?BD1ˈ&=ˈ D1ˈ 01'Aˈ > 0A&1 0ʹ <#'A'-.ˈ D1ˈ# ˈ D1ˈ 0C<B1ˈ &=ˈ<ˈ A< ˈ A1C 1-ˈ ?-1L<> -1Aˈ <-Aˈ ?-C?- 00D1Aˈ <0ʹ '0ʹ <#&+101'Aϑ =& ˈ1, ˈ > 0A&1 ˈ0&ˈ A1C 1Aˈ D1ˈ &ˈ @&01ˈLL'A ˈ -Aˈ D<ˈ D1ˈ@& Aˈ &=ˈ 1+0 ˈ @1 1ˈ K' D'-ˈ D'0ʹ 1<@>1ˈ <-Aˈ D1ˈ D' 1=ˈ'-ˈD'0ʹ &? -1ˈD<+1ˈ<?A& ˈ'1ˈ &ˈ 1-H? 1ˈ D1 &=ˈ'-ˈD'0ʹ 1 1ˈ <-Aˈ &? -1ˈ<-Aˈ D1ˈ@& Aˈ &=ˈ D1ˈ @1 1ˈ &ˈD<+1ˈ=& ˈ 1+0 ˈA1=<? 1ˈ=&?-A1ˈ <0ʹ '0ʹ <#&+101'Aϑ L]ˈA'G -Aˈ D1ˈ D' 1=ˈ &ˈ 1-H? 1ˈ'-ˈ D'0ʹ &? -1ˈ&=ˈ 0?BD1ˈ 10B<C10ʹ K' D'-ˈ D1ˈ ?ˈ'0A'BB'& ˈ &=ˈ D'0ʹ &? > 1ˈ <-Aˈ &ˈ D<+1ˈ LLA ˈ=& 1+ ˈ 0?BDˈ A1=<? 1ˈ =&?-A1ˈ'-ˈ D'0ʹ &? -1ˈ' -Aˈ D<ˈ D1ˈ C1-<@ ˈ1ˈ @ > 1Aˈ # ˈ D'0ʹ & A -D?-11ˈ &ˈ #1ˈ=& =1ˈ 1Aˈ # ˈ <- ˈ &=='B1 ˈ & ˈ <- ˈ & D1 ˈ C0&-1ˈ=& ˈ -&?-ˈ C?- 00D1>1- ˈ &=ˈ <.<#&?-A10ʹ <-Aˈ& D1 ˈ > 0 ?@1Aˈ C0&-1 ˈ K' D'-ˈ1C ˈ ˈ1ˈ KD1 1ˈ <ˈ 1ˈ<-Aˈ @A1 >1-ˈ #1ϑ D<ˈ D1ˈ C=ˈ 1ˈ &=ˈ 1C ˈ 0?BD1ˈ C1-<@ ˈ1ˈ#1ˈ?- &ˈ D1ˈ @A1 ><-ˈ&=ˈ `ˈ1C ˈ ˈPˈ F< A1ˈKD1 1ˈ0 BDi ˈ=& =1ˈ ? 1ˈ'0ʹ D<Aˈ ˈ><A1ˈ &ˈ D'0ʹ &K 1ˈ?01ˈ< ˈA'Cˈ=ˈ 1

ˈ ˈ <@0&ˈ ˈ ˈ'0ʹ & A1 -1Aˈ <-Aˈ 1 < 1Aˈ # ˈ =1ˈ01'Aˈ<?=@& ˈ 1ˈ D<ˈ ˈ ˈ0D<@#1ˈ @<?=?@@ˈ &ˈ 1, ˈ><-ˈ 'C ˈ @1Aˈ &ˈ D<+1ˈ D1ˈ 01'Aˈ C1-<@ ˈ1ˈ &ˈ A'0 1 -1ˈ=& ˈ ˈ ϑ ˈ-ˈ @'a1ˈK'01ˈ <0ʹ D1ˈ@& A1ˈ&=ˈ<- ˈ@1 1ˈ >< ˈ A&ˈ =& ˈ<='B'<>1- ˈ0ʹ <-Aˈ = -10ʹ D<Aˈ <-Aˈ<001001Aˈ ˈ-ˈ D1ˈ0<>1ˈ @1 1

C ˈ =1 D1 >& 1ˈ ˈ ˈ'0ʹ & A1 -1Aˈ <-Aˈ 1-<= 1Aˈ # ˈ D1ˈ 01'Aˈ <?A@& ˈ 1ˈ D<ˈ -&&-ˈ <CC 1- 'B1ˈ -1ˈ +<?- ˈ &=ˈ D?0#&-A ˈ @<#& 1 ˈ -1 ˈ M+<?- ˈ< 'ˈ='B1 ˈ C@1 ˈ< ˈ D1ˈ <#@10ʹ= &>ˈ D1ˈLWˈA< ˈ &=ˈ <-?< ˈ -1L ˈB&> D.ˈ #? ˈ&-1@ ˈ =& ˈ >1 1ˈ <-Aˈ A ˈ-a1ϑ -1 ˈ< ˈ D1ˈ 1- 0ʹ @&00D1ˈ" ˈ'01ˈ < '10ʹ &K@10ʹ -& ˈ<=ˈ ˈ& D1 ˈ ?-@<?=?@@ˈ .<>1ˈ ˈ-ˈ -&ˈK'01ˈ&? ˈ =ˈ '0 ><0ϑ <-Aˈ'-ˈ '0 ><0ʹ &ˈC@1 ˈ &&-@ ˈ ˈ-ˈ D1ˈ AK1@@ˈ-.ˈD&?01ˈ&=ˈD'0ʹ ><'0 1ˈ & ˈKD1 1ˈ D1ˈ ><'0 1ˈ =ˈ<- ˈ D1ˈ01'Aˈ M+<?- 10ʹ '0ʹ 1- ϑ ?C&-ˈC1 -1ˈ &=ˈ'>C '0&-1>1-ˈ # ˈ D1ˈ 0C<B1ˈ &=ˈ<ˈ A< ˈ ˈ-ˈ D1ˈ &aa'0ʹ &C1-@ G -Aˈ D<ˈ D1ˈD&?0D& A1ˈ KD1 1ˈA'0 -.ˈB< A'-.ˈ 1- 0ʹ C@1ˈ -.ˈ#&K@10ʹ @&00Dˈ& ˈ <- ˈ& D ˈ ?-@<K=?@@ .<>1ˈ <=& 1ˈ 1D1 B1Aˈ 0D<@#1ˈ ?01Aϑ & D1 K'01ˈ D1-ˈ '0ʹ <=& 1ˈ 1D1 B1Aϑ <-Aˈ D<ˈ @<?=?@@ ˈ #1ˈ C01- 1Aˈ #1=& 1ˈ ?0 'B10ʹ &=ˈ 1<0ʹ D1ˈ <ˈ 1ˈ D' 1=ˈ'-ˈD'0ʹ & -1ˈ& ˈ ?< Aˈ ˈ-ˈD'0ʹ @1 1@ & ˈ# ˈ1L<> -<B'&-ˈ D<Aˈ <=& 1ˈ D1ˈ01'Aˈ ?0 'B10ʹ &=ˈ C1< ϑ D<ˈ C110ʹ #1ˈ ><A1ˈ?C&-ˈ D1ˈ 0<>1ˈ <0ʹ ?C&-ˈ1-A >1-ˈ &=ˈ 10C<0ʹ < 1-0ˈ D1ˈ,ˈ-.ˈ0ʹ ˈC1<0ʹ <-Aˈ D<ˈ D1ˈ 01'Aˈ > 0A&1 ˈ #1ˈ<A> 1Aˈ &ˈ -&ˈ= -1ˈ?-A 1ˈ D1ˈ 0&>1ˈ H=ˈ+ˈ'0ˈ+''ˈAϑ -Aˈ D<ˈ ˈˈ#1ˈ@<?=?@@ˈ &ˈ ˈˈ &=ˈ D1ˈ ?0 'B10ʹ &=ˈ D1ˈC1<0ʹ KD1 &=ˈ&-ˈ0D<@#1ˈ &=ˈ D1ˈ ^?& ˈ K ˈ-ˈ D1=ˈ <?=@& ˈ 1ˈ &ˈ 1 1= 1ˈ<-Aˈ C? ˈ<K1 ˈ B&>1-ˈ<@1ˈ 01@@ˈ-.ˈ ˈ-ˈ &--10ʹ <-Aˈ C@<B10ʹ KD1 1ˈ D1 ˈ 0D<@@ D'-a1ˈ B&-+1- 1- ϑ <-Aˈ &ˈ <a1ˈ 0?1 ˈ1ˈ &=ˈ D1ˈa1C ˈ &=ˈ<@1ˈ D&?010ʹ &=ˈ D1ˈ ˈ .&A1ˈ #1D<+ -.ˈ# ˈ D1ˈA'0B 1 '&-ˈ &=ˈ D1ˈ01'Aˈ ?0 'B10ϑ <-Aˈ ˈ-ˈ D1ˈ0<>1ˈ &ˈ#1ˈ<+ 01Aˈ<-Aˈ<.. 11Aˈ< ˈ D1ˈ >1ˈ&=ˈ D1ˈ ˈ 100'&-0

$. ˈ ˈ <@K1 ˈ D<ˈ A > -?B'&-ˈ . ˈC?- 00D>1- ˈ &=ˈ +<.<#&?-A10ʹ <-Aˈ #1..1 0ʹ <=& 01'Aˈ >< ˈ <-Aˈ 0D<@#1ˈ D<Aˈ =& ˈ K&>1-ˈ . 1< 1ˈ K' Dˈ BD'@Aϑ <-Aˈ >1-ˈ <-Aˈ K&>1-ˈ ˈ-ˈ 1L 1>1ˈ 0'a1-10ʹ # ˈ D'>ˈ D<ˈ `D< 0Pˈ <?= & ˈ 1ˈ & A& =1ˈ 01'Aˈ C?- 00D>1- '0ϑ D'0ʹ <Q 1ˈ -& ˈ K' D0 <-A'-. 3"."ˈ&2.ˈ .'"V.1!-ˈ ˈ 0 0 2ˈ00V

V@ +1ˈ ˈ D< ˈ0? 1@ ˈ / 0 1ˈ.D Ō >&A1 ˈ-.ˈ `>&A1 < ˈ-.ᴾ D<

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'-' <' B1A?@1' ?- &' D'0' C201-' #'@@' <- -1L1A@ D1 ' &' 1'-< -1' =& ' , ' '-' D1' a1C'-.' &=' D1' <' 1' <'@@" & ' & D1 ' D1A &=='B1 ' =& ' D1' >1' #1'-.' &=' D1' 0<>1' ' '1' ' '.D' & ' &?-' 8<0' D1' , '-. '0' 0 <-A< A' &=' K1'.D ' <-A' >10? 1 -A' #' D'-@'' <'> 10' &=',<@@ ,' 11,0' ? .D0' <-A' <, a1, ' &?-10' K' D',-' 1, ' ,&=' D1' 01'A' D' 10' 0D<@@@' &,-' , D,'0' D<@=1' D1' =10 ' ,&=' D1' < > 1' &=' 1 - ' &D-' 0 <C '0 ' -1L ' B& - .,@ > <a1' & ' B<?01' &' #1' > <A1' B& > 1-' >10? 10' <-A' K1'.D '0' <BB& A'-.' &' D1' K1'.D '0' <-A' >10? 10' <#&+101'A@ &' 1>< -1' K' D'-' D1' 0<>1' ' '10' ? .D0' <-A' < a1 ' &K--10' <-A' 1, ' &=' D1 > -A' D1' 0<>1' K1'.D '0' <-A' >10? 10' &' #1' +1KRA' 1L<> -1A' C '- 1A' 0'.-1A' <-A' >< a1A' # ' D1' <' 1' <'@@ ' & ' & D1 ' D1A1' &=='B1 ' '-' KD&01' C&00100'&-' D1' <=& 01'A' 0 <-A< A' 0D<@@ 1>< -1¢ -A' D<' 1, ' &=' D<=& 01'A' <' 1' <'@ ' & ' D1A' &=='B1 ' D<+ -.' D1' 01'A' K1'.D 10' <-A' >10? 10' 0'.-1A' <-A' C '- 1A' `<0' '0' <= 01'A' D<+1' <?==& ' 1' <-A' C&K1 ' &' ><a1' 0'.-1' <-A' C '- 1' ?-A 1' D1' 0'.-1' <-A' C '- 1' =& ' D1' 0<>1' K' D' <' 1' ' B &K-1A' &' #1' C '- 1A' &' 0'.-1' <-A' C '- 1' @'a1' K1'.D '0' <-A' >10? 10' ?- &' 1+ ' D1' , '-.10' @'1.10' <-A' 0?#.1' 10' A?@ ' 1H?' '-.' D1' 0<>1¢ <a'-.' =& ' >< a'-.' &=' 1C ' #?00D1@@ ' A ' -A' D<' = &>' D1' 01'A' =10 ' &=' D1' < '+' 1' &=' 1'-' &D-8 <C '0 ' -&1' >< BD<?-' -1' & D1 ' C0&-1' -1' C0&-10' K' D'-' 1-' ' '1' & ' < a1 ' &?-' # 1' -1' 01@@ K' D' <'@ ' K1'.D ' A ' >10? 1' 1LB1C 1' ' '#1' C'< a1A' 0'.-1A' &=' C '- 1A' '-' >< ' <-A' =&? >1' <=& 01'A@ -1' <-' & D1 ' C0&-1' & ' C0&-10' &? ' &=' D1' 01'A' ' '10' ? .D0' <-A' < a1 ' =&K-10' 1LB1C ' ' ' #1' Da1' <-A' 1.<@@' K' D' D1' 01'A' 0 <-A< A ' -A' D<' 1, ' C0&-1' <0K1@@ K' D&?' ' '10' ? .D0' <-A' < a1 ' &?-10' <0' $ K' D'-' #'1' <-A' 01@@ K' D' <' #?00D1@@ 01<@1A' 0'.-1A' ' >< a1A' <= 1 ' D1' =& >1' <=& 101'A' <-A' '-' -&&-' & D1 K'010 -A' D<' <@@ D1' <' 10' <'@@'=0' <-A' <@@ & D1 ' D1A' &= B1 0' &=' 1, ' E' '1' ? .D' & ' < a1 ' &K-' 0D< @ B<?01@ K'01' '-' D1' 1 1' & ' &= 1-1 ' <0' D1 ' 0D<@@ D'-a1' -1B100< @ <@@ K1'.D '0' <-A' >10? 10' K' D'-' D1' 01'A' ' 1'0' ? .D0' <-A' < a1 ' &K-10' &' #1' # &?.D ' <=& 1' D1 >' < 'A' &' #1' A1K@ ' +1K1A' <-A' 1L<> -1A@ < A' 0?BD' <0' D1 ' 0D<@@ ?C&-' D1' 01'A' 1L<> -<B'&-' =' -A1' A1=1= '=' ''-1A'< @" &' #1' # &a1-' <-A' # 1- @ < 'A' D1' C " & ' ? !' KD'BD' '-' D< ' #1D<@=' D< D' &==1-A1A' <-A' #1' =&?-A1' A1=1B '=' 0D<@@ =& =1' 1' =& ' D1' =' 0 ' '>1' +' 0 ' +'' ' A ' B@(=& =1' ? 1' D1 &=' &' #1' ?- &' D1' 01'A' <' 1' <'@@" & ' <- ' & D1 ' D<+ -.' ? '0A'BB'&-' <-A' B& 1BB'&-' '-' D< ' #1D<@= ' <-A' < ' D1' 01B?-A' >1' D1' 01'A' &==1-A1 '@'a1' F'01' &' =& =<' ' L'H' 0 ' ''' ' A ' <-A' < ' D1' '' ' >1' @'a1' K'01' &' =& =1' 1'] L' 0 ' <-A' =& ' =1 D1 ' C?- 00D-@1- ' &' #1' 1 1' ?C&-' D1' C'@@& ' ' D1-0<>C@1' &=' D1 ' -A' D<' ' ' ?0 'B10' &=' D1' 1<0' KD1 &=' &&-' 0D<@#1' &=' D1' ^?& ' D<+1' <?= & ''1' <0K1@@ # ' 1L<> -<B'&-' <0' # ' 1-H?1 ' &' D1 1' <-A' A1 1 > -' D1' A1=<? 10' &=' D1' 01'A' <' 10' <'@'10' & ' & D1 ' D1A' &==' B1 0' '-' D<' #1D<@=' 1L 1-A1' -&' &' <- ' &?-' <@@ #'1 0' <-A' 01@@1 0' A&'-.' B&- ' &' D'0' C01-' '<= 1' <-A' & A'-<?-B1' <-A' &' 01 ' = -1' <-A' >1 B1>1-' ?C&-' D1' &==1-A1 0' # ' D1' ' A'0B 1B'&-' G <-A' D1' 01'A' K1'.D 10' <-A' >10? 10' 0&' =&?-A' A1=1= '=' &' #1' =& =1' ' <-A' # 1-

' & ' +2.' ! - ! / ' ' !'" ; !' ; 0 ' -+@' '&&H' ; O22 !++!2' " 2 ! / ' - / ' 2 "! E ! -' .' !' S0 " !'" . ' ." - ! ' - / ' %&&&H' +; ' .' !' ." -' -/' V . . +' 2 . - !' . 'V . ++!' - / ' %W ' H .- !' .' !' 2 EE !

' ' ' <@0&' & A1 -1A' #" <?= & ' 1' <#&+101'A' D<' D1' ?0 'B10' &=' 1<0' <#&+101'A' D<+1' <?= & ' 1' &' > <a1' @'a1' C110' < 1-0 ' <@@ C0&-10' =&?-A1-' <0' '0' <#&+101'A' A1=1B '=@ <-A' =& ' 0?BD1' = -10' <-A' < B'<>1- '0' <0' ?C&-' D1>' 0D<@#1' B100'A@ <0' '=' D1 ' K1 1' 1-A' 1A' <=&'1' D1>' =& ' # 1a'- ' &=' D1' , '-.'0' C1<0' G -A' ` D<' KD1 1' # ' & D1 ' < ? 10' <-A' A'-<?-B10' <=& 1' @ > 1A' ' ' '0' & A1 -1A' D<' 1, ' ' '1' ? .D' <-A' &?-' D<' D<' D' < &-0 <#@1' 0D?@A' D<+1' B&1-' K1'.D '0' <-A' '10? 10' 1<@1A@ C&-' C1-<@ '10' '-' D1' 0<>1' @'> 1A@ D<' `' D'a1' H' C1-<@ '10' '-' D<' #1D<@=' 1L 1-A1' -&' &' <- ' &?-' KD'BD' '0' -&' ' '1' ? .D' -& ' < a1 ' &?-

! " $ ' <@K1 ' D<' D'0' = 1' 0D<@@ -& ' 1L 1-A' -& ' #1' C ?A'B'<@@ &' <- ' C0&-1' 01@@' -.' & ' # 1-.' # ' K<R' >10? 1' K' D'-' D1' D'C' # A1¢ -A' D<' ' ' #1' # ' <?= & ' 1' <#&+101'A' 1-<= 1A@ D1' C> 0010' & ' <- ' & D1 ' & A'-<?-B1' &=& 1' ><A1' -& K' D0 &-A'-.@ D<' D1' 01'A' F < 1 >10? 1' K' D'-' D1' D'C' D& A1' 0D<@@ &-1= ' B&- 1 -' + ' C1aa'0' <= 1 ' D1' 01'A' 0 <-A< A' <01A' <-A' 0 1a1-

$. ' -' +2.' ' % 1@- #&.-' . ' / ! 0 !2' ; . ' !2!&/' - / ' 0-@22 1 ! - ' .' !' . !-/!"2' . ' ! ' @' . !-#!' #. 1 & ! / ' . !0##2' &-' !' !" !'" 7 & &-' ! - @' . ' !' 2!&/' ' ' ." ! 2 ' 2 ++' ; !' /' / . . -' - / ' / 1 * 1 @2 "! / ' ; @' !' ." / ! ' V "/ ! -' . ' !' 2!&/' ' ' ." ! 2' &-SO!' 3." 2 ' ." ; @' &2' +&!0 ! - 0 - ' . ' !' 2 1 !' .'" !' @ 1 !' ; ! @ - *' - / ' ; @' - . - !' . !" ' !' "! 1 @22!2' - . 7 R - / &-*

" $ ' <@K1 ' D<' D'0' = 1' &=' K1'.D '0' <-A' >10? 10' 1L 1-A' -& ' -& ' #1' '-' <- ' K'01' D? =?@@' & ' C@ ?A'B'<@e' &' D1' '-B1' K '-' D1' " ?BD'1' &=' & -1K<@@' =& ' <- ' K1'.D '0' <CC1 1 - -.' <-A' #1@&-.'-.' &' D1' ?-<.1' &=' --1' K' D'-' D1' ." -7 ++' ' &?- '10' &=' & -1K<=@ <-A' " 1+&- i DD1G' #? ' D<' <@@' 0?BD' F 1'.D '0' #1' ?01A' & A1 1A' A1>1<-1A' <-A' B& 1= 1A' <0' ' ' D< D' #1-' ?01A' <-A' <0B?0 ?>1A' #1=& 1' D'0' >1@ D1' 01'A' <= 1' <-A' & A -<?-B1' -& K' D0 &-A'-.

4 ' &=' &?-10' @ >@ 1A' =& ' D1' 0<?=' B?= &A'1' &=' K1'.D 10' <-A' >10? 10' <BB& A'-.' &' !' , '-.'0' <-A< A@ =& ' D1' D'=10' =&@&K'-. <0' C 'B?@< @ ' <CC1 ' D .7-2' C#' '&-* !' 02 . <' . ' -/ "/' &<!&* 2 -/' ! 20"!2

F 10 ' I	8'	D1'	&?-1' &=' CC?@#	1 B=	D1' &?-1' &=' 91 B10 1 ' 0
& D?>#'	8'	D1'	&?-1' &=' 1?B<0 1@@	F < =	D1' ' '1' &=' &+1- 1
?'	'	D1'	' '1' &=' < @' &@	& 1@	D1' &?-' &=' CC ?.#<>
<-@=' S	8'	D1'	&?-1' &=' <-B<0 =	& D	D1' &?-1' &=' & D<>C &-
#&	8'	D1'	' '1' &=' & a1	4 ! / ' L	D1' &?-' &=' 1A=& A
'-B&@-	8'	D1'	' '1' &=' '-B&@-	?a	D1' &?-18&=' ?a -.D<>
" 1 #	8'	D1'	&?-1' &=' " 1 #	<- 1#	D1' &?-1' &=' <>#' .1
& -.D	8'	D1'	&?-' &=' & @-.D<-'	?-=	D1' &KC1' &=' ?- '-.A&-

'0-/!'" !' c&*-!' "@- !' .'" !' 2 1!' 7 & ' ' ! !'" ' #". 7 - ! / ' .' ; !' "@- ! / ' .' 22&*-!' -/' "@- !' %% ' %' .$- +
'0-/!'" !' 2&*-' -/' "&-' .'" !' 2 1!' 7 & ' ' ! !'" ' #". 7 - ! / ' !' 0 "& @' -/' 3 . 7 !'" ' %' .$ '
<' .' 1 E!' 2&* ' C' L &
Q' 7 !"!' ' %' .$- + ' .2!' %' .$- +

& ==		D1' ' '1' &=' & K'BD	F .& >		D1' ' '1' &=' F & B1 ? ' 9
?==	8	D1' &?-' &=' 1' @ ' A > &-A10' ? 9	F '@ 10' / 8		D1' ' '1' &=' 1K1' <@ 0#-
001L		D1' &?-' &=' D1@ > 10=& A	? ='		D1' ' '1' &=' F -BD10 1
1 =		D1' &- -1' &=' 1 =& A9			D1' &- -' &=' @BD10 1
'AA		-' F 10 > -0 1	"& 0		D1' &?-' &=' "& BD10 1
, <-1		D1' &?-' &=' <'A10 &-	"1+&-		D1' 1 F 1' &=' LB10 1
? =		D1' &?-' &=' E?@A1=& A	&> -#		D1' &?-' &=' &0 ?A 1@@
?001L		D1' &- -' &=' 1K109	&-A&-	8	D1' 0<>1' ' '1
L&-		D1' &?-' &=' L=& A9	'0 &@@		D1' 0<>1' &?-
1 a		D1' &?-' &=' 1A'- .	^?'-H9' & ?0		D1' <0 1 ' h=' " &+1
<@&C	8	D1' &- -' &=' D 1K@0#?	'+' <0' &+1- '	8	D1' 0<>1' 'A1
<==		D1' &?-' &=' <==& A9	? D<>C &-	8	D1' 0<>1' &?-
1 1=	8	D1' ' '1' &=' 1 1=& A	'+' <0' 10 =	8	D1' 0<>1' ' '1
E@&?B	8	D1' &- -' &=' E@&-B10 =			

'

' =& ' A'1' C?@@' - . 1' A&K - 1' &=' F 1< 10' <-A' - . -0

&2# &! ' . ' V ! "2 ' !#' 7 & -' < ' ! -' . ' .0 1 .-e

' ' <0' D1' & 0' <+1-0' , 0' 1a'0' <-A' < +1@ ' &=' D'CC'09' K' D' -' D'0' 1<@ > 1' &=' - . @&-A' <-A' D1' E&&0 10' &=' D1' 0<>19' #1' -&K1' &=' @< 1' . '1<A ' <-&'1A' D'K 1' <-A' A1a<'1A9' <-A' '-' 10C1A<@@' D1' C& 1' <-A' D<+1-' &=' ? D<>C &-9' D1' KD'BD' #1=& 1' D'0' > 1' D< D' #11-' D1' . 1 10 ' D<+1-' 0?BB&? ' <-A' 1B1' 1' <0K1@@ =& ' >< BD<?- 10' <-A' 0D'CC10' &=' D'0' 1<@ > 1' &=' - . @&-A' <0' &=' < a'0' E<@1 10' <-A' & D1 ' D'CC10' <-A' >< BD<?- 10' &=' & D1 ' 1. '&-0' <-A' ?- 1'10' D1 ' < +'- . ' <-A' 10& '- . 9' C' D1' C=' 1' &=' &? 1' &, 1' . -' & A' D1' , '- . ' D1' . 1< 1' 1 - B 1<B1' &=' D1' >< BD<?- 10' &=' D'0' @&<A' <-A' D1' B&>1 -' F 1@1' <-A' B&>=& 1' &=' <@@' D1' &- 1 ' D1 &' <A & - - . 9' D1' KD'BD' '0' -&K' @< 1@ ' . 1< @ ' A1B< 1A' <-A' '0' @' a1' 0D& @ ' > & 1' &' A1B<'1' # ' 1<0&-' <-A' &BB<0'&-' &=' A@, 0' <-A' >< - ' F 1< 10' <-A' & D1 ' - . -10' =C ' ='0 D' - . ' D1 ' >< A1' @1+ 1A' ='L1A' <-A' D<A9' #' KC-' <' R 1 -' C <B1' >' D1' 01'A' <+1-' B<@@1A' <@0D& A' <-A' <-& D1 ' C@<B1' '-' D ' 01'A' <+1-' B<@@1A' 1A# ' . . 1' A 1 I @ 9' 0&' D<' # ' 1<0&-' &=' D1' 01'A' F 1< 10' <-A' - . -10' K' D' -' =1K1' 1 10' -&' D'C' &=' . 1< 1' #? A1-' 0D<@@' > &K1' BJ > 1' & ' < '+1' '-' D1' 01'A' <+1-' K' D&? ' A?1' <-A' D<0 ' 1 > 1A ' #1' C? +1'1A' '-' D'0' #1D<@=1G ! & ' 1 > 1A ' KD1 &=' <-A' =& ' D1' B& > 1-' K11@ &=' D'0' 1<@ > 1' &=' - . @&-A' <-A' D1-B 1<B1' &=' D1' >< BD<?- 10' &=' D1' 0<>19' D1' , '- . ' ? 1' & 1' . -' & A1' # ' D<001- ' &=' D'<' @& A10' 0C?<@@ <-A' 1 > ' <-A' D1' B& > 1-0' '-' D'0' 01- ' C< @' <>1- ' <001 > #@1A' <-A' # ' <?==& ' 1' &=' D1' 0<>1' & A1 -1 D' 10 <#@' D' <-A' 1-<= 1 D9' D< ' ' ' #1' @<K1=?@@' &' 1C ' >< -' & <#< 1' C@?Ba1' ?C' <-A' <a1' <K1 ' <@@' <-A' 1+0 ' &=' D1' 0>A' F 1< 10' <-A' - . -10' <-A' 1, ' &=' D1 >' < ' <@@' >10' < ' D1' ' C@1<0' 1' #1' - . ' '-' D1' 01'A' <+1-' #1 K1-1' D1' 01'A' C@<B10' B<@@1A' <@0D& A' <-A' 1A# ' . . 1' A' 1= @ ' K' D&? ' &##@H' @1 1' & ' +1L<B'& "&=' <- ' >< -'G -A' D< ' -&' <-' @1 1' &#@1' +1L1' D? 1' & ' 0?1' D1' C@?aa1 0' ?C' <-A' <a1 0' <K1 ' &=' D1' 01'A' K1< 10' <-A' 1 - . -10' & ' <- ' &=' D1 >' ?CC&-' C< -1' &=' =& =<' ? 1' &=' L@' ' &=' 1, ' &=' D1 >' D< ' 0&' @1 ' D' &##@1 D' 0?1 D' +1L1 D' & ' D? 1 D@ <-A' D< ' '=' <- ' C0&-1' & ' C0&-1 ' = & > ' D1-0=&? D' > <a1' @1+ 1' ='L1' & ' 01 1' <- ' F 1< 10' & ' -. -10' =& ' ='00D' - . ' 0 &-1' > # 1' & ' D' '-' A' 1' 0AA' <+1-' A' 1 ' ' # K1 ' D1' 01'A' C@<B10' D<-9' D1' & ' D1 ' D< ' 0&' A&&' 0D<@@ =& =1' 1' <-' ' ' 'G D1' &-' D<@-1' &=' 1' D1 ' &=' D1' 01'A' 0' ' > 10' &' #1' &' D1' , '- . ' &? 1' &, 1' . -' & A' <-A' D< ' & D1 ' D<@-1' & D > ' & ' D1 > ' D< ' K ' @@' 0?1' '-' D< ' #1D<@-1' # ' <BB'&-' &=' A1 1' C@< - ' & ' #' @@' '" '. =& > <B'&-' #1' -& ' 100& -1A' -& ' <- ' C 1 ==' &-' #1' <@@&K1A' =& ' D' > ' -& ' #1' <A> 1A' &' K<. 1' D'0' @<K1' '-' D< ' #1D<@=1 ; A' D'0' <==1' &' 1-A? 1' D1' 0C<B1' &=' LLW 1 10' -&K1' -1L ' 1-0? - .

.-&-0 -#!' . ' &2 <

' ' =& ' D1' C< >1-' &=' ?0 ? > 10' =& ' K&@@1-' @& D' <-0C& 1A

6!#& ≠ . ' 0 !' V≠ / 7 ' '#' ' 2 . ' @&-≠ 02 . 12' . -' V . . +!-' +. ' !% ." ! / =

V ' '-' D1' C< @' <>1- ' D&@A1-' < ' F 10 >' D1' L ' N N 1 1' &=' D1' <' . -' &=' , '- . ' AK< A1' D1' ''' N @< 1' , > . ' &=' - . @&-A9' <>&- . 1' & D1 ' D' - . ' ' ' ' K<0' & A1 -1A' 10 <#@' 00D1A' <-A' 1' '< 1A9' D< ' KD1 1' <- ' F &@1 -' @& D10' K1 1' & ' 0D?@A' #1' C<Ba1A' '-' <- ' C& 1' K' D' -' D'0' 1<@ > 1' &=' - . @&-A9' <-A' D1-' &' #1' B< '1A' = &>' D1-0' &' <- ' & 1' K' D' -' D'0' 1<@ > 1' &0' #1' B< '1A' &, ' D1' 119' D< ' D1 -' D1' 0<>1' @& D10' 0&' &' #1' C<Ba1A' <-A' B< '1A' 0D?@A' #1' C<Ba1A' '-' D1' 01-0' &=' D1' ?0 ? > 1 0' <-A' &&- & 1 0' &=' D1' C& 1' KD1 1' D1' 0<>1' @& D10' 0D?@A' #1' 0&' C<Ba1A9' <-A' C< ' D1' B?0 ?>10' <-A' 0?#0'A'10' &=' D1' 01'A' @& D10' A?1' &' D1' @ . ' 0D?@A' #1' C<'1A' <-A' B&- 1 - ' ?- &' D1' B&@@1 &? 0' &=' D1' B?0 &>1' K' D' -' D1' 0<>1' && 19' <0' '-' D1' 01'A' < 1' C@1 -@ ' <CC1 1 D@ KD'BD1' I 1' =& ' A', 0' <-A' >< - ' B<?010' <-A' B&-0'A1 <B&-0' 0' D&?. D ' D? =?@@' <-A' C ?A'B'<@@' <0 F 1@@ ?- &' D1' , '- . ' &? 1' 0&, 1' . -' @& A' <0' &' D1' >< BD<?- 10;' -' B&-0'A1 <B'&-' KD1 &=' #1' ' ' & A -1A' 10 <#@'00D1A' <-A' 1 -<= 1A' # ' D1' , '- . ' &? 1' & 1' . -' & A' # ' D<001 - ' &=' D1' @& A10' 0C?<@@' <-A' 1 <C<@@ <-A' D1' &>1 -0' &=' D'0' C01 - ' C< @' <>1 - ' <001 > #@1A' <-A' # ' <?= & ' 1' &=' D1' 0<>19' D< ' = &>' D1 - 0=&? D' D1' B?0 &>1' <-A' 0?#0'A'1' &=' <@@ F &@1 -' @& D10' &' #1' 0D'CC1A' & ' B< '1A' &+ ' D1' 119' F D1 1' 0&' 1, ' D1 ' #1' C<Ba1A9' 0D<@@ #1' C<'1A' &' D1' ?0 ? > 1 0' &=' D1' && 1' & ' ! & 10' KD1 1' <- ' 0?BD' @& D10' 0D<@#1' @<A1' & ' 0D'CC1A9' & ' &' D1' ' " 1C? 10G D'0' ^ 1' & ' <- ' & D1 ' A@1' D1 1' #1=& 1' > <A1' &' D1' B& - ' -& K' D0 &-A' - .

0# ' V ! "2 ' C#' 1 @' ; ! ' ; ! /' ; @' -@' . -!

3! - + &!2' . -' "!"&2 &-≠ 20# ' ; ! 1 ! - ' HL' .-' 1 E&-≠ V ! "2 ' C#' !"!

0# ' 02 . 1' 2 +≠ ; !' &/' / ' !' 3!"' ' . ' % ." &. -

‘ >

‘ ‘ <.< -0 ‘ & 0‘ <-A‘ ?-@<K=?@@ <001>#@ 10

‘ D1‘ &>1-0‘ &=‘ D‘0‘ &? 1‘ @<-A‘ ‘-‘ D‘0‘ C01- ‘ C< @‘<>1- ‘ <001>#@1A@ D< ‘ KD1 1‘ =& ‘ D1‘ . 1< 1‘ 0?1 ‘1‘ 10 ‘ B.“1!“ 72‘ 2‘ .‘ 6&. 2 ‘ C#
C1<0‘ <-A‘ ‘H?‘@@‘ 1‘ &=8 C? ‘ 01‘A‘ &>1-0‘ ?1‘ @‘1.1>1-‘ <-A‘ 0?#.1 ‘0‘ ‘-D‘ 1A‘ ‘-‘ D‘0‘ &? 1‘ 1<@>1@ A C0‘ <-A‘ ><- ‘
.&A1‘0 < ? 10‘ <Q ;10 <-A‘ C A -<?-B10‘ D<+1‘ #1-‘ ><A1‘ ‘-‘ >10‘ C<0 ‘ & A1 -1A‘ <-A‘ 10 <#@‘00D1A‘ &‘ ?#A?1‘ <-A‘ C?- 00D‘ ‘& 10‘
=& ‘ D1‘ ?-@<?=?@@ 1 0‘- .‘ <-A‘ @1A‘- .‘ &=‘ ` &? 1 P‘ C1&C@1@ ‘& 10‘ &? ‘0‘ <-A‘ & D1 ‘ C-@<?=?@@ <001>#@110@ KD1 # ‘ ><- ‘
1+ @@ A1A‘0‘ &CA‘10‘ C‘@@1 ‘ =11 1‘ <-A‘ A 1A1‘ &‘ &? ‘ 0?#.1 ‘0‘ D<+1‘ . &K1-@ <-A‘ D1 ?CC&-‘ . 1< 1‘ C1-<@ ‘10‘ 01 1‘ ?C&-‘ D1‘
01‘A‘ ‘& & ‘ <-A‘ &==1-A1 0@ <‘0 ‘-‘ A , 0‘ 1 -1># 1A‘ 0 < ? 10‘ <A 10‘ <-A‘ & A -<?-B10‘ ‘-‘ D1‘ A ?10 &=‘ &? 1‘ -&#@1‘ C .1 &? 0‘
< 01 <@@ >10‘ ><A1‘ & A1 -1A‘ <-A‘ C+ A1A‘ >& 1‘ < ‘ @< .1‘ A& D‘ <-A‘ >< ‘ <CC1 1‘@ 1 ‘ D1‘ 0<>1‘ < 1\‘ -& K‘ D0 &-A‘ -.‘ 6&. 2 ‘ 6 .0 2 ‘ C#‘
0&>1‘ C0&-10‘ -& ‘ A 1A‘ -.‘ E&A‘ D1‘ ‘ &, 1‘ . -‘ @& A1‘ -1‘ D1‘ C?- 00D>1- ‘ &=‘ D1‘ @<K10‘ ><A1‘ <-A‘ D<A‘ ‘-‘ D‘0‘ #1D<@=1‘ &= 1‘ ;@‘ 6 ! &-!“2‘ -/‘
>10‘ <0K1@@‘ # ‘ B&@&? ‘ &=‘ 0?BD1‘ &=='B1R‘ <0‘ D1 ‘ D<+1‘ &# 1 -1A‘ <0‘ 1 1 +&? 0‘ ?< A10‘ <-A‘ <‘@‘==‘0‘ \&=‘ @& A0D‘C0‘ <-A‘ !“‘ - 2‘ C#
& D1 ‘ &==‘B10‘ <R‘ # ‘ C 1+ ‘ 1 1 -A&? 0‘ # ‘ & D1‘ C > 001‘ B&+1-<?- ‘ <-A‘ & D1 K‘01‘<-A‘ B@< > -.‘ <@0&‘ A? ‘1‘ &=‘ D1 ‘ 1-<?- 10‘
<-A‘ M+<?- 10@ KD1 1‘ -&-1‘ 0?BD1‘ A? ‘1‘ ‘0@ &‘ .&1‘ K‘ D‘ D1 >‘ KD1-‘ 0?BD‘ <001>#@1‘ ‘&? 1‘ & ‘ &? 1‘ 0D<@#1‘ -A‘ <= 1 ‘ D1‘
0<>1‘ A‘ ,0‘ &=‘ D1‘ 01‘A‘ ,+<?- 10‘ <-A‘ C0&-10‘ &= 1‘ >10‘ 1 1‘ <-A‘ <#01- ‘ D1>‘ 01@=1‘ # ‘ D1‘ <. 1>1- ‘ =&+ -1‘ <-A‘ B&?-01@@
&=‘ D1‘ ‘01‘A‘ <‘0 1 0‘ <-A‘ &=‘ D1‘ 01‘A‘ C ‘-B‘C<@@ ‘& &? 0@ 0& D< ‘ D1 ‘ >< ‘ -& ‘ #1‘ <a1-‘ -1‘ # &?.D ‘ &‘<-0K1 1‘ &‘ D1‘
@<K1‘ <0‘ D1‘ @<F10‘ 1H? 1‘ -A‘ ‘=‘ 1- ‘ 1-A‘ 1>1 0‘ #1‘ D<A‘ ‘ ‘ 0D<@#1‘ ><A1‘ ?C&-‘ 0?BD1‘ C0&-10‘ <0‘ 0& 1 1‘ <-A‘ <#01- ‘
D1 &01@=‘ <-A‘ -& D‘- .‘ =&?-A1-‘ < 1 -0 ‘ D1‘ 01‘A‘ C ‘-B‘C<@@10‘ ‘& &? 0 ‘-‘ A‘0B1‘ 1‘ <-A‘ = <?A0‘ &=‘ D1‘ 01‘A‘ .&A1‘ 0 < ? 10‘
<= 10‘ <-A‘ & A -<?-B10‘ D1 &=‘ ><A1@ &‘ D1‘ . 1< ‘ B& <.1‘ #&@A-1001‘ < A‘ B&>=& 1‘ &=‘ D1‘ 01‘A‘ 1+ @@ A&1 0@ >&&0 ‘ A<? .1 ‘
1&CA‘1‘ <-A‘ C< 1A‘ &=‘ &? 1‘ 01‘A‘ K1@@ A‘0C&01A‘ 0?#.1 ‘0@ <-A‘ &‘ D1‘ K& 0 ‘ 1L<>C@1‘ D< ‘ D1 # ‘ >< ‘ 1-0?1‘ =‘ D<0 ‘
1>1A ‘ D1 ‘-‘ #1‘ -& ‘C ‘A1A;‘ ‘ >< ‘ D1 =& ‘ C@1<0‘ &? 1‘ ‘.D-10‘ &=‘ &? 1‘ >&0 ‘ @&+ -.‘ A‘0C&0‘B‘&-‘ D< ‘ 1‘ D1 1‘ <-A‘
&K1‘ &‘ D1‘ B&>1-‘ K1@1‘ &=‘ D‘0‘ &? 1‘ @<-A@ <-A‘ &‘ D1‘ . 1< ‘ 0?1 ‘1‘ &=‘ &? 1‘ 0?#.1 ‘0‘ &=‘ D1‘ <K1‘ # ‘ D<A+ 01‘ &=‘ D1‘
@& A10‘ 0H?<@@ <-A‘ 1 ‘C<@@ <-A‘ D1‘ &>1-0‘ ‘-‘ D‘0‘ C01- ‘ C< @‘<>1- ‘ <001>#@1A‘ <-A‘ # ‘ <?==& ‘ 1‘ &=‘ D1‘ 0<>1‘ &‘ A&‘
& A1 0‘ 1-<=@1‘ <-A‘ 10 <#@‘00D@ D< ‘ KD< ‘ 0& 1, ‘ C0&-1‘ & ‘ C0&-10‘ F ‘-‘ D‘0‘ &? 1‘ 1<@>1@ &=‘ KD< ‘ 10 < 1‘ A1. 11‘ & ‘ -‘ .1 + &- ‘ .‘“
B&-A‘ ‘&-‘ D1‘ #1@ D< ‘ D1 1<= 1 ‘ ? @<?=?@@ ‘ 1 01‘ <001>#@1‘ & ‘ @1A1‘ &? 1‘ C1&C@1‘ K‘ D‘-‘ D‘0‘ & 1‘ 1<@>R@ K‘ D&? ‘ &? 1‘ -/&# 1 !-‘ .‘ ‘
B&><?-A1>1- ‘ & ‘ <?I & ‘ 1‘ &=‘ &? 1‘ @<K10@ <-A‘ B&>‘ 1‘ <- ‘ ‘& 1‘ D< ‘ ='1-‘ ‘=‘ D1‘ C ‘ . 1+1A‘ & ‘ <- ‘& D1 ‘ C0&-1‘ ‘-‘ D1‘ “&. .0Z 22!1 ;+&!2‘ C#
,‘-.‘ ‘ #1D<@=‘ B&>C@< -‘ &‘ D1‘ ?0 ‘B10‘ &=‘)1‘ 1< ‘ K‘ D‘-‘ D1‘ B&?-A1‘ KD1 1‘ 0?BD‘ ‘& 1‘ ‘0‘ A&&-@ & ‘ &‘ <- ‘ &=‘ D1>‘
D<+ -.‘ <?=@& ‘ 1‘ &‘ 1-H? 1‘ &=‘ D1‘ 0<>1‘ KD1 1‘ 0?BD1‘ ‘& 1‘ <-A‘ ?-@<K=?@@ <001>#@1‘ 0D<@#1‘ ><A1@ # ‘ #‘@@ B&- 1 - -.‘ D1‘
‘& 1‘ <-A‘ D1‘ B‘ B >0 <?-B1‘ &=‘ D1‘ 0<>1@ <-A‘ &=‘ KD< ‘ &?-‘ 0D‘ 1‘ > 0 1 1‘ & ‘ B&-A‘B‘&-‘ 1+0 ‘ &=‘ D1‘ C0&-10‘ < 1-0 ‘ KD&>‘
D1‘ 0<>1‘ B&>C@1 - ‘ #1‘ ><A1‘ ‘R‘ AK1@@‘- .@ & ‘ 1@0 ‘=‘ D1‘ 01‘A‘ ‘& &? 0‘ #1‘ 1-A‘ 1A‘ D1 &=@ DR-‘ D1 ?C&-‘ D1‘ 01‘A‘ ?0AB10‘ 02 &#!2‘ 2 +‘ 1 E!‘
<-A‘ 1 ‘ &=‘ D1 >‘ D<+1‘ <? & ‘ 1‘ <-A‘ C&?1 @ ‘-‘ D1‘ -1L ‘ .1 <@@ 0100‘&-0‘ &=‘ D1‘ 1<0‘ K‘ D‘-‘ D1‘ 0<>1‘ &?-A1‘ &‘ #1‘ 3“.#+ 1 &.-‘
D&@A1-‘ <= 1 ‘ D1‘ B&>C@1 - ‘ 0&‘ &‘ D1 >8><A1‘ & ‘ ‘-A‘ 1>1- ‘ = 1 C=‘ D<AA1‘ <=& 1‘ D1‘ 0<>1‘ ` ?0AB1@0P‘ &‘ A&‘ ><a1‘ * &-2 ‘ !‘ (
CB@<><B‘C-‘ D<‘ D1‘ 1‘A‘ ><‘0 1 ‘ & ‘ ><‘0 1 0‘ C ‘-B‘C<@@ ‘& ‘ C ‘-B‘C<@@‘0‘ @1A1 ‘ & ‘ @1A1 0‘ D< ‘ -@<?=?@@ ‘ B<?01‘ D1‘ 01‘A‘ 3“&-#& +‘2 .‘“ ! ‘“
C1&C@1‘ &‘ .1A 1‘ & ‘ ‘01@ D< ‘ D1 ‘ <CC1 1‘ C0&-1@@ ‘ < ‘ D1‘ -1L ‘ .1 <@@ 0100‘&-0‘ &=‘ D1‘ C1<R‘ <= 1 ‘ ‘ 01‘A‘ CB@<>< ‘ ! /!“2‘ .‘ ‘ !22&.-2‘ C#
><A1@ <-A‘ 1 ‘ & D1 ‘ C0&-1‘ & ‘ C0&-10‘ D< ‘ F1 1‘ C001- ‘ <-A‘ < 1-A<?- ‘ ?C&-‘ D >‘ & ‘ D1 >‘ # ‘ D‘0‘ & ‘ D1‘ ‘ B&><?-A1>1- ‘
CB ‘-.‘ & ‘ <001- ‘ B&- 1 -1A‘ ‘-‘ D1‘ 01‘A‘ CB@<><B‘&-‘ < ‘ D1‘ 01‘A‘ ‘& 1‘ &? 1‘ <-A‘ <001>#@1@ <-A‘ 1, ‘ &=‘ D1 >@ C0&-<@@“
&‘ <CC1 1‘ < ‘ D1‘ 01‘A‘ -1L ‘ 0100‘&-0‘ &=‘ D1‘ 1<0‘ -1L ‘ <= 1 ‘ D1‘ 01‘A‘ CB@<><B‘&-‘ &‘ #1‘ D&@A1-‘ K‘ D‘-‘ D1‘ 01‘A‘ B&?-A1G
< ‘ KD‘BD1‘ A< ‘ ‘=‘ D1‘ 01‘A‘ ><‘0 1 ‘ & ‘ ><‘0 1 0‘ C ‘-B‘C<@@ ‘& ‘ C ‘-B‘C<@@10‘ @1A1 ‘ & ‘ @1A1 0‘ & ‘ <- ‘ & D1 ‘ &=‘ D1‘ =& 01‘A‘ &==1-A1 0‘
<CC1 1@ D1-‘ D1‘ & ‘ D1 ‘ #1‘ C?‘ &‘ <-0K1 1‘ D1 ?- &‘ ‘=‘ ‘ ‘ 1>1‘ &‘ D1‘ 01‘A‘ ?0 ‘B10‘ 10&-<= @1@ <-A‘ #H‘ C?‘ &‘ 0?==‘B‘1- ‘ #<‘@@
‘ 1B&-=0<?-B1‘ #1=& 1‘ D1‘ 01‘A‘ ?0 ‘B10‘ &‘ <CC1 1‘ C0&-1@@ ‘ = &>‘ 100‘&-0‘ &‘ 100‘&-0‘ ?- &‘ >1‘ D<‘ D1‘ B&>C@1 - ‘ #1‘
A‘0B?001A@ -A‘ ‘=‘ #1‘ & ‘ D1 ‘ 1=?01‘ 0&‘ &‘ AC&‘ D1-‘ D1‘ ‘ D1 ‘ #1‘ B&>‘ 1A‘ &‘ F< A1‘ D1 ‘ &‘ 1><-1‘ A@@ D1 ‘ K ‘@@G
<-A‘ ‘=‘ 1- ‘ &=‘ D1‘ C0&-10‘ < 1-0 ‘ KD&>‘ 0?BD‘ B&>C@1 - ‘ & ‘ ‘-A‘ 1>1- ‘ ‘0 D<A‘ & ‘ ><A1‘ AK1@@ ‘-‘ <- ‘ D1 ‘ B&?- ‘1‘ ` D1 - ‘P‘ 3“.#12@ * &-2‘ !-/!“@ .0‘ . ‘
‘-‘ D1‘ 0<>1‘ &?-A1‘ KD1 1‘ 0?BD1‘ ‘& 1‘ &? ‘ <-A‘ <001>#@1‘ ‘0 ><A1@ D< ‘ D1-‘ D1‘ ?0 ‘B10@ &‘ & ‘ <=& 1‘ KD&>1‘ D1‘ 0<>1‘ !‘ .0- @
B&>C@1 - ‘ & ‘ ‘-A‘ >1- ‘ ‘0 D<A‘ ‘ ><A1@ A&‘ 1-A‘ <‘ <-0B ‘C 0‘ &=‘ D1‘ 0<>1‘ B&>C@1 - ‘ & ‘ ‘-A‘ 1>1- ‘ &‘ 0&>1‘ ?0 ‘B10‘ &=‘
D1‘ 1<0‘ ‘-‘ D1‘ &?-A1‘ KD1 1‘ 0?BD‘ C0&-1‘ ‘0‘ AK1@@‘- .@ A10‘ ‘- .‘ D >‘ &‘ B<?01‘ CB@<><B‘&-‘ &‘ #1‘ ><A1‘ ‘-‘ D1‘ -1L ‘ .1 <@@
100‘&-0‘ &=‘ D1‘ 1<R‘ ‘-‘ D<‘ &?-A1‘ &‘ #1‘ D&@A1-@ D< ‘ D1‘ 0<>1‘ C &-1‘ & ‘ C0&-10‘ <CC1 1‘ < ‘ D1‘ -1L ‘ ` .1 <@@ OP‘ 100‘&-0‘
&=‘ D1‘ 1<0‘ ‘-‘ D1‘ D‘ 1‘ KD1 1‘ D1‘ 01‘A‘ ‘& 1‘ ‘0‘ A&-‘ -1L ‘ <= 1 ‘ D1‘ 0<>1‘ CB@<><B‘&-‘ &‘ #1‘ D&@A1-‘ G <-A‘ ‘=‘ D1‘ 0<>1‘ C0&-1‘
& ‘ C0&-10‘ AK1@=‘- .‘ ‘-‘ <‘ =& 1-‘ 0D‘ 1‘ <CC1 1@ D1-‘ ‘a1‘ & A1 ‘ &‘ #1‘ D<AA1‘ =& ‘ D >‘ & ‘ D1 >‘ 0&‘ <CC1 ‘-.‘ <‘0 ‘0‘ <=& 1‘ 0C1B‘=‘1A‘
=& ‘ <-A‘ &‘ D1 >‘ D< ‘ #1‘ AK1@@‘- .‘ ‘-‘ D1‘ 01‘A‘ ‘=‘‘ 1‘ KD1 1‘ D1‘ 01‘A‘ ‘& 1‘ ‘0‘ ?CC&01A‘ &‘ #1‘ A& -‘ & ‘ >< A1G -A‘ ‘=‘ D1‘ ! -/!“@ 1 E&-*‘
<>1‘ C0&-1‘ & ‘ C0&-10‘ & ‘ <- ‘ &=‘ D1 >‘ < 1-0 ‘ KD& D‘ 0?BD‘ CB@<><B‘&-‘ ‘0‘ ><A1‘ ‘-‘ D1‘ &?-A1‘ KD1 1‘ D1‘ 01‘A‘ ‘& ‘ ‘0‘ ! 0+‘ &-‘ ! “]‘2 &‘
0?CC&01A‘ &‘ #1‘ A&&-@ <-A‘ D1 ‘ #1‘ AK1@@‘- .‘ < ‘ D1‘ >1‘ &=‘ D1‘ 0<>1‘ CB@<><B‘&-‘ ><a‘- .‘ ‘-‘ D1‘ 0<>1‘ &?-A1@ ><a1‘ 2 -/‘ #.-‘&# !/
A1=< 1‘ <-A‘ <CC1 1‘ -& ‘ <@ 1‘ 01‘A‘ .1 <@@ 100‘&-0‘ &‘ D+>‘ & ‘ D1 >‘ @ > 1A‘ ‘-‘ D1‘ 01‘A‘ CB@<><B‘&-@ <-A‘ 1= 0&-10‘ <= 1 ‘
D< ‘ ><a1‘ A1=<? 1‘ <-A‘ <CC1 1‘ -& ‘ < ‘ D1‘ -1L ‘ .1 <@@ 100‘&-0‘ <= 1 ‘ D< @ 0&‘ D< ‘ @‘a1‘ CB@<><B‘&-‘ #1‘ ><A1‘ <0‘ ‘0 <=& 101‘A ‘
-A‘ ‘=‘ <- ‘ &=‘ D1‘ 1‘A‘ ‘& &? 0‘ < 1-0 ‘ FD&>‘ C @< <<B‘&-‘ ‘0‘ ><A1‘ ‘-‘ <‘=& 1-‘ D‘ 1‘ FD1 1‘ D1 ‘ #1‘ AK1@@‘- .‘ ><a1‘ A1=<? 1‘
< ‘ D1‘ A< ‘ <-A‘ C@<B1‘ ‘-‘ D1‘ 01‘A‘ CB@<><B‘&-‘ &‘ D1 >‘ @ > 1A@ D1-‘ D1‘ & ‘ D1 @ ‘-‘ FD1 D1 ‘ &=‘ D1‘ 01‘A‘ D‘ 10‘ D1 ‘
AK1@@ D< ‘ 0& ><a1‘ A1=<? 1@ &‘ 0 <-A‘ <-A‘ #1‘ <A ?. .1A‘ <-A‘ B&-+‘= 1‘ C&-‘ D1‘ 0<>1‘ A1=<?@ ‘0‘ &=‘ D1‘ 01‘A‘ ‘& 1‘ <-A‘ ?-@<?= @@
<001>#@1@ <0‘ ‘=‘ D1‘ & ‘ D1 ‘ K1 1‘ D1 &=‘ &-+‘ ^1‘ # ‘ D1‘ A?1‘ & A 1‘ &=‘ D1‘ @<K1G K‘ D&? @ D1‘ & ‘ D1 ‘ B<-‘ ><a1‘ 0?BD1‘ @<?=?@@
1LB?01‘ <0‘ D1‘ 01‘A‘ ?0 ‘B10‘ 0D<A@ D‘-a‘ 10&-<#@1‘ # ‘ D1 ‘ A‘0B 1B‘&-‘ <-A‘ D1 ?C&-‘ 0?BD‘ C110‘ &‘ #1‘ <K< A1A‘ < 1-0 ‘ D1 >‘
<0‘ ‘0 <BB?0 &>1A‘ ?C&-‘ B&-A1>C-<B‘&-0 &=‘ 10C<0‘ ‘-‘ &? 1‘ &>1-‘ 1-BD1‘ < ‘ D1‘ 0? 1‘ &=‘ D1‘ < G -A‘ D< ‘ D1‘ 01‘A‘
?0 ‘B10‘ &=‘ 1<0‘ D<+1‘ <?=@& ‘ 1‘ <-A‘ C&K1 ‘ &‘ D1 1‘ <-A‘ A1R> -‘ D1‘ 1D1 B1A‘ B<?01‘ <0K1@@ ?C&-‘ #‘@@ #1=& 1‘ D1 >‘ < ‘ # ‘
1-A‘ 1>1- 10@ <-A‘ ?C&-‘ D1‘ 0<>1‘ #‘@@ & ‘ ‘-A‘ 1>1- ‘0‘ &‘ CB1A1‘ <-A‘ A1 1 > -‘ D1‘ 0<>1‘ # ‘ 1-H?10 10‘ <BB& A‘- .‘ &‘ D1‘
B&? 01‘ &=‘ D1‘ B&>1-‘ @<K1@ <-A‘ D1‘ C 1‘ D1 # ‘ <-A‘ D1 ?C&-‘ &‘ 0 <-A1‘ B&-+‘A@ <0‘ C=‘ 1@ ‘ <0 ‘=‘ D1 ‘ K< 1‘ D1 ?C&-‘
B&-+‘=‘1‘ # ‘A?1‘ C110‘ &=‘ D1‘ @<K1G <-A‘ ‘=‘ D1‘ 01‘A‘ ><‘0 1 ‘ & ‘ ><‘0 1 0‘ C ‘-B‘C<@@ @1A1 ‘ & ‘ @1A1 0@ & ‘ <-

‘ # ? !. 1& ‘ ?0 ‘B10‘ # ? ! ‘ D<-‘ # ? ! ‘ # ? !&>‘

; / (' ’ . 4)) ’ 9 D B KG

3 . - &2 1 ! - ’ ’
! - / ! " Z ; @ ’
& - " & . - 1 ! - ’
- / ’ B & - !

& D1 ’ <=& 1 ’ 1D1 B1A’ &==1 - A1 9 #1’ B& - + ’= 1’ ?C& - ’ D1’ CD - 001 ’ D1 - ’ D1’ & ’ D1 ’ #1’ B& > 1A’ &’ C 0& - ’ D1 ’ &’ 1 - < - ’ <- A’ <#’A1’ K’ D&? ’ #<’@@ & ’ >< - C ’01 9 # ’ 0?BD1’ >1’ <= A’ 0C<B1’ <0 0DTA#1 D&?.D ’ 10&-<#@1’ # ’ D1’ A’0B 1 ’& - ’ &=’ D1’ 01’A’ ?0 ’B10 ⁝ <- A’ D1 - ’ ` ’& ’P’ D1’ & ’ D1 ’ A1C 1’ &? ’ &=’ C =1& - 1’ &’ C< ’ D1’ ’ = - 1’ B1001A’ <= 1 ’ D1’ A’0B 1B’& - ’ &=’ D1’ 01’A’ ?0 ’B10 9 D’0 & ’ D1’ ’ D<+1&? 0 <- A’ &=1 - B10 B& - 0’A 1A

! - / ! " Z # - ’ & / ! / ’ 2 +’ ; ! ’ ; 3 <- / ’ .’ E ! ! ’ ! ’ 3 ! #!

’ ’ D< ’ ’ #1’ 1 - < 1A’ # ’ D1’ 01’A’ <? ^ &= 1’ D< 9 # ’ D1’ A’0B 1B’& - ’ &=’ D1’ 1’A’ ?0 ’B10 <- A’ 2’ D1 ’ #1’ - 1A1 9 ! , @ ’ &=’ = 1’ 01’A’ ’D<’0 1 ’ & ’ >< 0 1 0 C ’ - B’C<@@ ’C ’ - AC<@@’0 @1AC ’ & ’ @1A1 0 <- A’ & D1 ’ D1’ 01’A’ &==1 - A1 0 0& B& - + ’= 1’ #1’ #&?- A1’ & D1’ , ’ - . ’0 C1<B1’ = & >’ D1 - 0=& D 9 ’ - ’ 0?BD’ &>1’ & ’ 0& >10 &=’ > & - 1 ’ <0 0D<@#1’ B& - 0’A 1A’ # ’ D1’ 01’A’ ?0 ’B10 <- A’ D1’ 0AA’ 0?1 ’1 9 &’ 0 <- A1’ # ’ A’0B 1B’& - ’ &=’ D1’ 01’A’ ?0 ’B10

Ɣ 0 2 &#!Z’2 +’#!" & @ ’ !& - . 0Z 6 &. Z ’ . ’ !’ M &- $’ - /’ .0 - #&’ . ’" B0 - &2 & ! -

C ’ ’=’ ’ ’ #1’ 0&’ D<’ D1’ 01’A’ ’& 1’ <- A’ ? - @<?=? ’ <001 > #@1’ #1’ B& & - ’ 1A’ K’ D’ D1’ - & > # 11 =’ L @ ’ C< 0& - 10 &’ ’ <#&+1 9 & ’ K’ D’ @1001’ - & > # 1’ D1 - ’ L @ ’ <- A’ D<’ ’ # ’ D1’ A’0B 1B’& - ’ &=’ D1’ 01’A’ ?0 ’B10’ ’ ’ #1’ D&?.D ’ D< - &?0 9 D<’ ’ D1 - ’ ’=’ D1’ 01’A’ >< ’0 1 ’ & ’ >< ’0 1 0 C ’ - B’C<@@ & C ’ - B’C<@@10 @1A1 ’ & ’ @1A1 0 D<’ ’ D<+1’ <CC1 1A’ <- A’ 0&’ D1 &=’ #1’ B& - + ’= ’1 9 D<’ ’ D1 - ’ D1 ’ 1 &< - ’ ’ - ’ C ’ &- 1’ ? - &’ > 1’ D1 ’ D<+1’ =&? - A1’ 0? ==’ B’1 - ’ 0?1 ’1’ &’ <CC1 1’ <=& 1’ D1’ , ’ - . ’ <- A’ D’0 &? - B1@@ < ’ <’ 1 - ’ A< ’ # ’ D1’ 01’A’ ?0 ’B10’ &’ #1’ @ > 1A 6 < ’ D1’ KD’BD’ A< ’ & ’ <=& h’ D1’ a1C1 ’ &=’ D1’ \ )’ &@@’0’ &=’ D1’ 0<A’ 1B& A’0 0D<@@ A&’ &’ #1’ 01 - ’ ? - A 1’ D’0’ 01<@1’ D1’ 01’A’ D&@1’ 1B& A’ &=’ D1’ B& - + ’ ’&- ’ &’ D1’ , ’ - . ’ C? 1’ & <. - ’ # A1’ <- A’ F0’ B&? - B’@@ &’ D1 - 1 - ’ D< ’ D’0’ ’ . D - 10’ <- A’ D’0’ B&? - B1@@ >< ’ <K< A1’ 0 BD1’ >C ’0&-1 > 1 - ’ <- A’ = - 10’ &=’ D1’ 01’A’ <’0 1 ’ & ’ <’0 =’= ’ C ’ - B’C<@@ & ’ C ’ - AC<@@’0’ @1A1 ’ & ’ @1A1 0’ <0’ # ’ D’0’ ’ . D - 10’ <- A’ # ’ D 0’ 01’A’ B&? - B1@@ 0D<@#1’ D&?.D ’ B&- + 1 - 1 -

. 2 Z’ . ’ 3 " &! Z’ *"&! ’ ! / ’ ; @’ +2! ’ . 1 + &- 2)

’ ’ ’=’ D1’ C ’1’ B& > C@1 - <- ’ <0’ ’0’ <=& 101’A’ B<-’ - & ’ C+1’ D1’ >< 1 ’ &=’ D’0’ 01’A’ #’@@ &’3#1’ ?1 9 D1 - ’ D1’ &’ C< ’ 10&-<#@1’ & 10’ <- A’ A< > <. 10’ &=’ D1’C ’1’ +1L1A 9 <0’ 0D<@#1’ D&?.D ’ 10&-<#@1’ # ’ D1’ A’0B 1 ’&- ’ &=’ D1’ 0< > 1’ ?0 ’B10 9 <- A’ D1 ’ & ’ ’<a1’ < 1 - 0 ’ D1’ < > 1’ 1&> C@1 - <?< 9 - &’ + - .’ D1’ >< 1 ’ &=’ D’0’ 01’A’ #’@@ &’ #1’ ?1 9 0?BD1’ C110’ < 1<0 ’ D > ’ =& ’ D1’ 0AA’ B&0 10’ <- A’ A< > <. 10’ <0’ ’0’ <=& 1’ @ > 1A’ < 1 - 0 ’ D1’ 01’A’ ’& &? 0’ B&- + ’A1’ =’ D1’ 01’A’ ’& 1’ =& ’ D1’ C< > 1 - ’ &=’ D1’ ’ 01’A’ = - 10 ;’ - A’ ’ D1’ 01’A’ B& > C@1 - <?- ’ & ’ B& > C@1 - <?- 10’ D<+1’ - & ’ 0?==’ A1 - ’ K D1 &=’ &’ 10 & 1’ D1’ C ’1’ <- A’ C ’10’ 0& +1L1A’ & &#@1A’ ’ - ’ =&? >1’ <=& 101’A 9 D<’ ’ D1 - ’ D1’ > > 1A’ < @ ’ #1’ B& > 1A’ &’ D1’ B&1 - ’ E<&@1’ # ’ D1’ 01’A’ ?0 ’B10’ D1=’ &’ 1>< - ’ D1’ 0C<B1’ <- A’ >1’ <0’ 0D<@#1’ D&?.D ’ #" D1’ 0AA’ ?0 ’B10’ B& - + 1 - 1 - ’ <- A’ 10&-<#@1’ - A’ D<’ ’ D’0’ = 1’ &’ ’A? 1’ #? ’ ? - &’ =&1’ - 1L ’ C< @’ < - > ?

C ’ C ’ <. < - 0=’ 0? 1

6 7 ’ . ’ 0 !’ 3 ! - ’ ’ [’ ’ 6 ! _ " &- ’ . ’ 2 0 " @’ J

; ’ D1’ & > 1 - 0’ ’ - ’ D’0’ =@01 - ’ C< @’ < > 1 - ’ <001 > #@1A 9 D<’ ’ KD1 1’ ’ - ’ D1’ C< =’ < <1 - ’ D&@A1 - ’ < ’ F 10 - ’’ D1’ ’ ’ 0’ 1 1’ &=’ &? 1’ > &&0 ’ - &#@1’ < . - 9 ’ ’ K<0’ 1 - <A1A’ & A - 1A1 <- A’ 0 <#@@00D1A 9 D<’ ’ #’=& ’ < - A’ ?C&- ’ #< . 1 - 10’ . &? - A1A’ &’ ?0 ? 9 B&@& 1A’ # ’ D1’ > 1 <- 10’ &=’ - 1K1’ BD1 + 10 ? - B1’ & ’ 10BD<?- . 1 9 B& - = ’ &’ D1’ =B K1’ &=’ - < ? <@@ ?0 ’B1 9 &’ D1’ . 1 < ’ A’0C@10’ 1’ &=’ . &A’ < - A’ &=’ &C 1’ 01’A’ & 1’ . - ’ @& A1’ <- A’ D1’ B& > 1 - ’ D? 1’ &=’ D’0’ D’0’ @&- A1 9 D<’ R 1 - ’ C?- 00D > 1 - ’0’ < - A’ C1 - <@ 110’ 0=<?@A’ 1 - ’ ?C&- ’ D1’ &==1 - A1 0’ ’ - ’ D<’ #1D<@==1 9 <0’ ’ - ’ D1’ 01’A’ <A1’ > & 1’ < ’ @< . 1’ ’0’ B& - B’ - 1A6 KD’BD’ <A1’ K<0’ <- A’ ’0’ 0&’ &#0B? 1’ A1 a1’ < - A’ A’ ==?01’ D<’ ’ D1’ ?1’ 1 - 1 - ’ &=’ D1’ > <a1 0’ D1 &=’ B< - - & ’ C=’ 1@ ’ #1’ ?- A 10 & - A6 F D1 =& ’ <- A’ =& ’ D1’ C@< - ’ 1LC@<- <B’&- ’ <- A’ A1B@< <B’&- ’ &=’ 0? 1’ <- A’ &=’ C1 - <@ 110’ &’ #1’ D1 1 <= 1 ’ 1L1B? 1A’ ?C&- ’ D1’ &==1 - A& ’ ’ - ’ D1’ 0< > 1 ’ D1’ , - . ’ &? ’ &, 1’ . - ’ =& A’ # ’ D<001 - ’ <= A’ <A+a1’ &=’ D1’ @& A10’ C?<@@ <- A’ 1 > C<’ ’ <- A’ =&1’ & > 1 - 0’ &’ D’0’ C201 - ’ C< @’ < > 1 - ’ <001 > #@1A’ <- A’ # ’ D1’ <?A& ’ 1’ &=’ D1’ 0< > 1 9 & A1 - 1 D’1 - <A1 D’ < - A’ 10 <#@’00D1 D 9 D<’ ’ <@@ >< ’ &=’C &- 1’ & ’ C0&’’10’ `@1? - . ’0P’ > & - 1 ’ &’ <- A’ =& ’ <’ > 1 9 <a’ - . ’ =& ’ D1’ 0’ > 1’ @&- 1’ < - ’ D’ - . ’ > & 1’ #10’A10’ & ’ ’ <#&+1’ D1’ > & - 1 ’ @1 - 1’ # ’ K1 ’ &=’ B&- <A1’ &=’ B&+1 - <?- 1’ < ’ D1’ > 1’ &=’ D1’ 0< > 1’ @&- 1 9 <+ - . ’ @<?=?@@ C1 - <@ 110’ =& ’ - &?- C< > 1= ’ &=’ D1’ 0< > 1’ > & - 1 ’ @1 - 6 <- A’ D<’ <@@ >< ’ &=’ C0&- 1’ <- A’ C0&- 10’ KD’BD’ D1 1< = 1 ’ 01@@ 1 - ’ . &&A10’ B< 1@@10’ & ’ ’D<? - A@010’ &’ 1 - ’ C0&- 1’ & ’ C0&- 10’ # < - . ’ ’ - ’ - 1B10< 1 9 <- A’ D1’ 01@@1 ’ D ?’’ 01@=’ & ’ # ’ D’0’ # &a1 ’ & ’ =<A&? ’ ’ - ’ D<’ #1D<@=<.1 - ’ ’ = 1 ’ D1’ 0< > 1’ . &A10’ B< 1@@10’ & ’ I D<? - A’ 010’ 9 &=’ D1’ 0< > 1’ C0&- 1’ &’ KD&> ’ D1 ’ K1 1’ 0&@A1 9 #1’ - . ’ ’ - ’ - 1B100’ 1 9 &=’ D’0’ # &a1 ’ & ’ =1A&? ’ ’ - ’ D<’ #1D<@=<1 9 K’ D’ - ’ ’ ’ > & - 1 = &10’ <= 1 ’ D1 ’ #1’ 0&@A’ =& ’ <’ @1001’ 0& > 1’ &=’ > & - 1 ’ D1 - ’ D1 ’ K1 1’ 0&@A’ =& 9 a=@&K - . ’ =&1’ 0< > 1’ . &&A1 0&’ #&?.D ’ < 1 - ’ <=& 1’ # ’ D1’ 0< > 1’ #’1 ’ & ’ #’1 0’ &’ #1’ 0&@A’ <= 1 ’ =&1’ =&? > 1’ <=& 101’A6 - A’ D<’ 1 ’ C0&- 1’ <- A’ C & - 10’ @1= - . ’ ’ <a’ - . ’ <- ’ > & - 1 ’ &’ 1 - ’ C0&- 1’ & ’ C0&- 10’ &’ <’ R 1 - ’ > 1 9 <- A’ <a’ D’ @& A10’ 1 - 1 > 1 - 10’ & ’ <- ’ D1 1A < > 1 - ’0’ & ’ & D1 ’ #& - A10’ =& ’ ` 0?1 ’1’ C=’ 1’ <- A’ 0? 1’ 1C< > 1 - 3 P’ &=’ D’0’ & ’ D1’ ’ > & - 1 ’ @1 - ’ <’ D1’ > 1’ <00’ . - 1A’ K’ D&? ’ <- ’ B& - A’ B’& - ’ & ’ <+1 - ? &9 <- A’ < 0&’ <’ D1’ > 1’ &=’ D1’ 0< > 1’ @&- 1’ & ’ <a’ - . ’ &=’ D1’ 01’A’ > & - ’ B&+1 - <? > 1 D’ <CC& - 1 D’ & ’ B&- <A1 D’ B&+1 - <?- 1 - ’ <CC& - 1 - ’ & ’ B&- <A1 - ’ D<’ D1’ & ’ D1 ’ D<’ 0&’ `@1 - 10 P’ & ’ <a1’ - ? > 1 ’ 0D<@@ D< +1’ =&1’ 1+1 - ?10’ <- A’ C=’ 10 8&=’ D1’ @& - A10’ > 1 > & ’A0’ & ’ D1 1A’ <> 1 - ’0’ &=’ D’ > ’ D<’ 0&’ # &?1=&’ & ’ <a1’ D’ > & - 1 ’ # ’ <’ R 1 - ’ > 1 6 D<’ ’ D1 - ’ 1C ’ C0&= 1’ D1 <= 1 ’ ?C&- ’ - ’ &=’ D1’ C > 001 0’ B& - + ’A1A’ =& =1’ 1’ D1’ > &’ 1’ &=’ D1’ + <@?1’ ’ - ’ > & - 1 ’ &=’ D1’ 01’A’ > & - 1 ’ . &&A10’ B< 1@@10’ = ’BD<? - A’ 010’ <0’ ’0’ <=& + 1’A’ 0&’ 0&@A1’ & ’ @1 - 1 9 <= 1 ’ 0? BD’ + <@?1’ . D1 ’ #1’ 0&@A’ & ’ @1 - ’ =& ’ <= 1 ’ <- ’ =&? >’ <=& 01’A6 KD1 &=’ =&1’ , ’ - . ’ 0D<@@ D<+1’ D1’ &&’ ” > &’ C’ &=’ D1’ 0< > 1’ =& =1’ ? 1’ <- A’ D1’ CA1’ D<’ K’ @@ 0?1’ D1’ & D1 ’ > & ’ 1 9 <- A’ ’=’ - &’ > <- ’ K’ @@ 0?1’ D1 - ’ =&1 ’ , ’ - . ’ &’ D<+1’ D1’ D&@1’ 6 <- A’ D’0’ 0? 1’ =& ’ D1’ 01’A’ C1 - <@ ’1’ > A’ =& =1’ ? 1’ &’ #1’ <0K1@@ < ’ D1’ , ’ - . ’0’ 0? 1’ <0’ < ’ <- ’ & D1 ’ D<’ F &@@ 0?1’ # ’ ’ - =& > <B’&- ’ ’ - ’ <- ’ &=’ D1’ , ’ - . ’0’ &? 10’ &=’ 1B& A1’ <- A’ 0? BD’ C110’ &’ #1’ D<A’ ’ - ’ D1’ 0< > 1’ 9 ’0’ ?01A’ ’ - ’ & D1 ’ <BB’&- 0’ &=’ A1 1’ <’ D1’ B& <1 - ’ @<K1’ &’ D1’ 0< > 1’ B&? 10 6 &+’A1A’ <@K1 ’ D<’ ’ - ’ D1’ &? 10’ &=’ D<?- M 1’ <- A’ 0BD1H?1 ’ D1 ’ 0D<@@ > <a1’ 0? BD1’ C110’ <0’ D<’ D’ #1’ ?01A’ <=& 1’ > 1’ ’ - ’ ’ - =& > <B’&- 0’ <=& 1’ =&1 > ’ B& ’1 - B1A9 KD1 ’ - ’ D1’ A1=1 - A<?- ’ 0D<@@ - & ’ K<. 1’ D’0’ @<K1’ - 1 ’ C 1BB’&- ’ - 1’ <00& - 1’ A1’ , +’B1’ @1’ & ’ ’ - ’ D1’ 0< > 1’ <@&?<#@1 ’ - A’ D<’ D1’ 0< > 1’ <^ 1’ <- A’ & A’ - <?D11’ > <A1’ D1’ 01’A’ ’ 0’ 1 1 9 <- A’ <@@ D’ - . ’ D1 &’ B& - 1’ - 1A’ #1’ = & > ’ D1 - 0=& D’ ? 1 @ ’ &’A1’ <- A’ [=’ - & - 1’ 1==1 1 ;’ 101 + - . ’ <@K1 ’ &’ D1’ 0C?<@@ ? ’0A’ B’&- ’ D1’ ’ #K1=?@ ’ C?- 00D > 1 - ’0’ &’ 1+0 ’ B<01’ &=’ 0< ’1 9

Ɣ ! ’ ! ’ Ɣ b @ . +
(C1 =’ 1’ 0 - 1 1’ <- A’ 0? 1’ C< > =&’

- ' 5?!

' ' &' > <a1' D1' & A0D'CC' &=' & D' -A<@@' I ' &? D' -A<@@' &' #1' K' D'-' D1' &?- ' &=' & D?> @<-A

' ' <0' D1' '-D' <?- 10' <-A' AK1@@1 0' K' D'-' D1' & A0D'C' <-A' &?-A10' &=' & D' -A<@1' <-A' &? D' ' %#!22!2' -' <." ;' -/' .0 ' @-/ +!' -A<@1' -& ' &-@ ' '-' D1' ' &K-1' C0&-10' #? ' <@0&' &= 1- >10' <BB&>C<- 1A' <-A' B&-=1A 1A' K' D' B& '0' <?-B'1- ' ;@' ;02!' . ' 1 '1D 10' &' D'0' 1<@>1' D<+1' < ' > <- ' 01<0&-0' '-' >1' C<0 1' B&>' 1A' <-A' A& -1 ' <-A' 1 ' A<'@@ ' <-A' - .D @ ' B& - 1' B" -# &2!2' !"!' > <-A' A&& ' . 1< 1' <-A' D< -&?0' > ? A 10' 1<0&-0' &##1 '10' =1@&- 10' A1CA<B'&-0' '& 10' <-A' & D1 ' . 1< 1' 10C<B10' ?C&-' D1' , '-.' &? ' &, 1' .-' & A10' ?1' <-A' =1' D=?@@' @'1.1' C1&C@1' <-A' 0?#.1 10' '-#@ 1 0' <-A' AK1@@1 0' K' D'-' D1' D' 10' &=' & D?>#1@<-A' ?>#1 @<-A' I ' F 10 ='@&-A' L<>0D' 1' D1' ?00D&C 'a1' &=' "? D<>' <-A' '-' <' C< 1' &=' a10D' 1@ KD'1D1' 1<0&-0' >? A 10' &##1 '10' =1@&- 1 ' <-A' & D1 ' D1' >'0010' D<' 1' -& ' 'A' >1' C<0 ' '-' <- ' ><5' &=' =&? >1' #1' C?- 00D1A' <= 1 ' D1' & A 1' <-A' B&? 01' &=' D1' B&1-' @<K1@ # ' 1<0&-' &=' 0?BD1' = <?-BD'0 ' <0\ F<0' ?01A' K' D'-' D1' 0<>1' KD'@1' ' K<0' '-' D1' C&00100'&-' &=' <- ' & D1 ' & A1' & '@& A10' D1-' &? 1' & 1'. -' & A'0@<-A' D?0' =& ' @<Ba1' &=' C?- 00D1>1- ' &=' D1' 01'A' 1<0&-0' >? A 10' &##1 '10' =1@&- 10' <-A' & D1 ' D1' C> 0010@ D1' , '-.'0' ?1' <-A' =1' D=?@@' @'1.1' C1&C@1' <-A' 0?#.1 '0' '-F 1 0' <-A' AK1@@1 0' K' D' '-' D1' D' 10' <-A' C@<B10' #1=& 1' 1D1 B1A' B<--&' # ' '-' <- ' > < ' &=' 0?1 '1' &=' D1' ' #&A'10' & ' .&&A10@ -1 D1 ' 1 ' @ 1' '-' D1' ' &K-' D&?010@ #? ' 1' D1 ' &' #1' > ? A 1A' & ' <a1-' & ' B< '1A' '-' & B& @<-A' <-A' D1' ' <?-0&>1A' & D1 ' . 1< ' A10 ?BB'&-' &=' #&A ' <-A' .&&A10' <-A' ? 1 ' 1>C&, 00D'-.' =& ' 15@ &-@1001' A?1' <-A' D<0 ' 1>1A ' #1' D<A' <-A' =&?-A1' '-' D1' > 10',' -' B&'@0'A1 <B'&-' KD1 &=' D1' , '-.'&? 1' 01'A' &C1'. -' & A' =& ' +1 < ' \1@1' <-A' . <B'&?0' =1+1 ' D<' D1' #1B' D' &' D1' BC>1-' K11@ &=' D'0' D'0' 1<@>0@ -& ' K'@@'-.' U0'8= ?1'? 'A' =1' D='' @@' @'1.1' C1&C@1' <-A' 0?#.1 '0' &' =<'@@' &=' 1>1A ' '-' D1' C> 00B0@ D< D' & A1 -1A' 10 <#@'00D1A' <-T@ 1-<=@1A' # ' D<001-' & =' D'0' A1 ' 0C?<@@' <-A' 1>C<@@' <-A' D1' &>1-0' &=' D1' 0<>1' D'0' 1<@>0' '-' D'0' C01-' C< @' <>1-' <001>#@1A' <-A' # ' <?^& ' 1&=' D1' 0<>1@ D<' D1' 1'A' @& A0D'C' <-A' #&?-A1 ' &=' & D' <-A' &? D' -A<@1' -&K1' #1' -.' '-' D'0' D<-A10@ <-A' <@@' @&-A10' <-A' ; !' .'/2 & ' -/' 4.0-/2 . ' ." ' 1-1>1- 10' K' D'-' D1' 0<>1' '-' KD&01' C&00100'&-' 0&' 1 ' D1 ' #1' <-A' 1, ' C< 1' D1 &=@ 0 <-A1' <-A' #1@ = &>' D1-0=& D' -/' .0 ' @-/ +!' .'@A<#@1' <-A' C 1' &=' D1' D' 1' &=' & D?>#1@<-A' <=& 01'A@ <-A' -&1' = <?-BD'01' -1' = <?-BD'01A@ #?' D<' <@@' >< ' &=' D1' 2 +' !' 1/% M* ' ,'-.'0' F ' A0' 0D<@@ 1--1@ <-A' <@@' D'0' &=='B1 0' <0K1@@ a1 ' F< A1-' & ' F< A1-0' &=' D1' 0 ' <-A' 'AA1@@ < BD10' -/' 3 "' ' !' &"!' . ' ." 01 ; !"+ -/' -.@&-A' &K< A10' B& @<-A' D1' ' @ 1? 1-0- 1' & ' @'1? 1-<?- 10@ D1' ?0 'B10' &=' 1<0' D' 1=' 0B#1 &? ' & &-1 0' <'@@'10' +' V "& 2' 2 +' "0-' !"! ' C# <-A' <@@' & D1 ' ==' B1 0' <-A' D1' ' A1C? '10' <-A' 15 ' &=' 'D1 >@' &=' <-A' K' D'-' D1' &?- '1' &=' & D?>#1@<-A' <=& 01'A@ <-A' <@@' D1' ' F < <- 10' <-A' CB1C '0' 0D<@#1' &#1'1A@ <-A' &=' <0' . 1< 1' <?= & ' 1' '-' D1' @<K1' # ' 1<0&-' &=' D'0' <Qa1' F' D'-' D1' 01'A' @& A0D'C' <-A' #&?-A10' &=' & D' <-A' &? D' = A<@1' <-A' '-' 1, ' C 1' D &=@ <0' '-' <- ' & D1 ' C 1' &=' D1' 01'A' D' 1' &=' & D?>#1@<-A

B

C ' 5' D'0' D<' -&1' C0&-1' & ' C0&-10' &=' KD<' 10 < 1' A 11' & 'B&-A=B'&-' D1' ' D1 ' #1' &=@ D<' -&K1' D<' D' & ' D<' D1 1<= 1 ' 0D<@@' D<+1' <?=@C ' 1' & ' C&K1 @ '-' #'0' & ' D1' ' &K-1' '. D ' & ' <- ' & D1 ' ><-- 0@ &' A > 1' & '@1 1' &'=1 >1' =& ' 1 1' &=' & 10' R>1' &=' @'=1' & ' <' K'@@' <- ' @&-A10' & ' 1-1>1- '0' K' D'-' D1' @& A0D'C' <-A' #&?-A10' &=' & D' <-A' &? D' -A<@1' <=& 01'A@ @1 ' & ' A > 1' &' =1 >1@ =& ' 1 1' & ' 1 10' R>1' &=' @'=' & ' <' K'@@@' <- ' @&-A10' & ' 1- 10' K' D'-' D1' !%#! ' !' !22!!' @& A0D'C' <-A' #&?-A10' <=C 01'A@ #?' D<' D1' @10011' & ' @100110@ #1=& 1' D1' & ' D1 ' <a1' & ' &BB?C'1' #'=& B1' &=' <- ' 0?BD1' !- !"&- ' 6!#.*-&2 -#!' 7& ' @1<0' <- ' 0?BD1' =&-A10' <-A' 1-1>1- 10@ = -A1' .&&A1' <-A' 0?== B'1-' 0?1 '1@ < ' D1' @10 ' K&' C0& 10' D<+ -.' @1-A0' <-A' 7.' 0"! &!2' .' 1 '0' K' D'-' D1' 01'A' D' 1' = & D?>#1@&-A' -&' #1'-.' K' D'-' D1' 01'A' @& A0D'C' <-A' #&?-A10' &=' & D' <-A' &? D' ! '" -/' -27!'" .' +' ##02 &.-2' -A<@1@ &' D1' =?@@' 1 @ ' <@?1'&=' A0' & ' <-A' <#&+1' <@@' >< ' BD< .10' <-A' 1C '010@ #' 11&- 0<?-B1' &' D1' , '-.' C? 1' . ' "! 2.- 01'A' & 1'.-' & A' '-' LL' '' #1=& 1' K&' < ' D1' @10' &=' D1' ?0 'B10' &=' 1<0' &=' D1' 01'A' D' 1' &=' & D?>#1@&-A' =& ' D1' >1' #1' -.@ KD1 &=' &-' 0D<@#1' &=' D1' ?&@ ?C&-' D'0' B&-A'B'&-@ D<' '=' D1' 01'A' @10011' & ' @10010@ K' D'-' +'' ' A< 10' K<> -.' & D1 >' & '<- ' &=' D1 >' C0&-<@@ ' & ' 1+1-@ ' < ' D'0' & ' D1' ' &K-1' D&?01' & ' '-' D'0' & ' D1' ' C< '00D1' BD? BD' 1+1-' # ' < ' &=' D1' 0<A' ?0 'B10' &=' D1' 1<0@ D1' D' 1=' &=' D1' 01'A' &?- '1' &=' & D?>#1@<-A@ & ' F < A1 -' &=' D1' 0 ' <-A' 'AA1@@ < BD110' =& ' < 1-0 ' B& @& A' & ' D'0' @'1? 1D<?- 1@ C0&-<@@ ' <CC1 1' -& ' #1=& 1' D1' 0<>1' ?0 'B10' &=' D1' C1<0' K< A1 -' & ' @'1- 1-<?- 1' < ' <- ' 10<&-' & ' 100' &-0' .<&@1' A1@ +01' F < A1 -' B&? 1@ < ' d BD1' C@<B1' <-A' A< ' K' D'-@ D1' 01'A' D' 1' &=' & D?>#1@<-A@ & ' A< ' ' A<'10' &=' '1?L' FD1 1' 0&1, ' ' ' 0D<@@ =& ?-1' D1 >' &' #1' <00' . -1A@ <-A' <0' D ' & ' <- ' &=' D1 >' 0D<@#1' D1 >- C' <0' #1=& 1' '0' 1D1 B1A' F< -1A@ #1 1' <-A' D1-' &' <-0K1 1' <@@ 0?BD' 1<0&-0' =1@&- 10' >? A 10' <-A' 10C<B10@ & ' < '1 &C < 10' B& - W ' &' D1' 1?L' = & >' D1-0=& D' # ' D1 >' & ' <- ' &=' D1 >' &' #1' A&&-@ D<' D1-' D1' 01'A' 0&>1' =' LL' ' 0D<@#1' =& =1' 1' D1' &-1' D<@=1' D1 &=' &' D1' , '-.' &? 1' 01'A' & 1'.-' & A' <-A' D1' &C' D<@=1' &' D' >' & ' D1 >' D<' K&@@ 0?1' D1 =& ' G 1+ -.' D1 &=' &' D1' ?0 'B10' D'=& 1' KD&>' D1' 11&- 0<?-B1' '0' & ' 0D<@#1' <a1-@ <=R@ ` D1L<>' -< #-' OP D1 &=' #1' D<A@ &=' D'0' 01'A' C 1' 0&' 1B& 1A' L@ 08' <-A' D<' D1' 01'A' ?0 'B10' &=' C1<0' <=& 1' KD&>' D1' 01'A' B&-'0<?-B1' '0' & ' 0D<@#1' <a1-' <0' #1=& 1' '0' 1D1 B1A@ <-A' <@@' & D1 ' ?0 'B10' &=' D1' C ' K' D'-' D1' 01'A' D' 1' &=' & D?>#1@<-A' =& ' D1' >1' #1' -.@ 0D<@@ # ' 1<0&-' &=' D'0' 01'A' <Q 1' D<+1' =?@@ <?=@& ' 1' &' 1-H 1' D1 &=' <-A' &' ='1' C01- >1- '0' <-A' '-=& ><B'&-0' D1 ?C& @ <-A' &' <K< A1' C110' <-A' BL1B?B'&-' &=' <-A' =& ' D1' 0<>1' 0&>1' ?C&-' <- ' - > 1 - ' & ' '-=& ><B'&-' ><A1' D1 &-@ ' ' '@ a1' <-A' <0' <>C@1' =&? >1' <0' D1' , '-.'0' ?0 'B10' &=' D'0' #1-BD1' 0D<@@ & ' >< ' A&&' =' & ' =& ' <- ' 11&- 0<?-B1' <a1-' #1=& 1' D1 >' =& =1' 1' =& ' D1' =B1C' -.' &=' D ' , '-.10' C1<0@ <-A' '=' <- ' C0&-1' & ' C0&-10' <= 1 ' D1' =10 ' &=' 0 1 ' -1L ' B& > -.' <a1' ?C&-' D >' & ' D1 >' &' @1 1' & ' A > 1@ <0' # =& 1' '0' 1D1 B1A@ <- ' @&-A10' & ' 1-1>1- 10' K' D'-' D1' 01'A' @& A0D'C' '#&?-A1' &=' & D' <-A' &? D' -A<=&@ KD1 1' -&1' 0?BD1' 0?1 '1' '0' #1=& 1' D<A' <-A' =&?-A1' <0' #1=& 1' '0' 1D1 B1A@ D<-' D<' C0&-1' <-A' C0 -10' D< 0&' @1= 0' & ' A > 10' 0D<@@ # ' D'0' 0<>1< 1' =& ' 1 ' <B 1' &=' . &?-A1' <-A' 1, ' >101' <-A' <<-B'&-' & ' AK1@@' -.' C@<B1' K' D'-' D1' @& A0D'C' <-A' #&?-A10' <=& 01'A' # ' D' >' & ' D1 >' 0&' @1 1-' & ' A > 1' =& =1' 1' L 0 ' D1' &-' D<@=' ' D1' , '-.' U>A' =&1' & D1=' &' D >' & ' D1 >' D<' K&@@ 0?1' D0 =&

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02 &#!Z H

-A D<' D1 ?0 'B10 &=' DR 1<0 &=' D1 0AA D' 1 &=' & D?>#1@&-A =&' D1 >1 #1 -.' 0D<' D<+1'@'a1'<?= & '1' '-'<@@ D'-.=' B&- - .' D'0 =&=1' ? 1 <0#" D'0 = 1'<-A A -<-B1'0 .1+1-' &' D1 >''-' D1' 1B&- 0<-B1' <=& 1' 1L=0001A
<-A D<'<@@ >< ' &='@1<0010 A > 00'&-0 ><A1'& ' &'#1'><A1'&='<- ' H-A10 & ' 1'@1>1-0 K' D'-' D1' 1'A'#&?-A10

! 2!Z '.&/'

&= & D' <-A' &? D' -A<@1 =&' D1' KD'BD' -&1' 0?BD' 0?1 '1' 0D<@#1' D<AA1' <-A' =&?-A1' <' D1' 01'A' 10'&=' 0 1' <-A'0&

3!-+@' .-'3!"2.-Z
#.-" "@' .' &Z
' 1 "&2.-1!-

=&? D' <0 &=& 1' '0' 1D1 B1A #1' <-A' 0 <-A' = &>' D1-0=&= D' K< A' +&'A1' <-A' &=' -&&-' 1=@=1 I 1' -A' '=' 1- ' C=&-1' &'
C0&-10 &='KD<' 10 < 1' A1. 11' &' B&-A' '&-' D1' &' D1 ' #1'&=@ <a1' ?C&-' D >' &' D1 >' <= 1' D1' 01'A' =10' &=' 0 1' &'
1- 1' &BB?C@1' AK1@@ D&@A' &' '-@' 1' <-' H-A10 1-1>1- 10 ' . &?-A1' K' D'-' D1' 01'A' @& A0D'C' <-A' #&?-A10' &=' & D' <-A'
&? D' -A<@1 -&' #1'-.' D'0' &K-1' 1-D1 ' <?-B1'``'-'=11'0 >C@1' & ' '-' =11' <'@@1 K' D&?' @<?=?@@ &' 0?=='B'1-' <?I&' 1'
<-A' 0?=='B'1-' 0?1 '1'# ' D >'&' D1>'=&?-A1' <0 #1=& 1' '0 1D1 B1A 1LB1C 1' ='1' #1'<@& A1' 0C?<@@ & ' 1>C<@@ &=' D'0
1<@>1 D<' D1' <-A' D1 '0&' A& -.' D<+1' >C '0&-1>1-' # ' D1' 0C<B1' &=@<' 1 1' K' D&?' #<'@@ & ' >< -C '01' <-A' 0&' &'
B&- -1K1' '@@ D1' D<+1'=&?-A1' 0?='B'1-' 0?1 '1' &' D1',' -.' # ' 1B&- 0<?-B1' <=& 1' D1' ?0 'B10 &=' D1' 1<0 &=' D1' 01'A'
&?- '1' &' #1'&=' .&&A1' #1 -.'< 1-0' D1',' -.'<-A' @@' D'0 @'1.1' C1&C@1

3 6' W

@' ' 1-1+&@1-B'<

4! !'.+!-#!Z
*" -!/'.' !'
M&-*'H 3 "' !"!.'
;!&-*' &/' -/'3 "'
'"!1 &-&-*'0- &/'H

3 . <?- 1A' &' &?' '.D-10' A',0' 0&>10' &=' >&-1' &=' D1'' = 11' K'@@10' <-A' #1-1+&@1-B1' =&' D1' A1=1-B1' &=' D'0' &? 1'
1<@>1@ CK< A10' D1' BD< .1' <-A' . 1<' 1LC1-010' D<' &? 1' '.D-10' 0?0 1 -1A' <-A' D1 1' =& D1' 01'A' A1=1-B1' <0 1@@ '-'
&? 1' 01'A' +'<.1' &'<@ ''-' D1' C '10' &=' ! <?-B1' #1 &-A' D1' 11' <0' &-' D'0' 0'A1''-' =&' <-A' <#&? 1' D1 '0<>1@ KD'BD'
+'<.1' &? 1' 01'A' '.D-10' &a1'?C&-' &?''-' &? 1' > '&0' &'<@@ C0&-1' &' D1' . 1< 1' 1&CA'1'<-A' @<# 1' &=' D1' 0<>1@ <0K1@@
=&' D1' 01'A' A1=1-B1' &=' D'0' &? 1' 01'A' 1<@>1' <0' =&' D1' 0?1 '1' C=' 1' K1@1' <-A' B&>&A' 1' &=' 0' <@@ &? 1' ?1' @'1.1>1-'
<-A' 0?#.1 '0''-D<#' 1A''-' D1' 0<>1@ &=' KD'BD' 0&>10' &=' >&-1' A ,0' &? 1' 01'A' 0?#.1 10' =?@@ @&+ -.@' D<+1' ><A1' &
&?' ?1' C< >1-' <BB& A'-.' &' D1' . <?- 10@ <-A' & D1' ><-' 01,1@@ 0&>10' &=' >&-1' # ' A',0' &? 1' 0?#.1 '0' &' &?''-'
D<' C '1' . <?- 1A' <0' 1' 1>< -' -&' B&- 1-' -1' C<'1A@ C 1' KD1 &=' 10''-' D1' D<-A10' &=' D1' 01'A' . <?- &? 0' <-A' C< 1'
'-' D1' D<-A10' &=' D1' &> 00'&-1 0' &@@1 I &? 0' <-A' 1B1 +&? 0' '-' D<' C< '1' <00'.-1A' =&' D1' @1+ 1' 1 '-.'<-A' a1C'-.'
&=' D1' 0<>1@ KD'BD' '0' -&' &-1@ ' &' D1' A<><.1' @&&001' <-A' D? 1' &=' &? ' 01'A' '.D-10g#?=' <@0&' &' D1' >? >&1' . ?..1'
<-A' > 01 - 1- @-.' &=' 0?BD' &? 1' 01'A' 0?#.1 10' <0' D<+1' ><A1' D1' '01'A' C< >1- 10' '-' D<' #1D<@=1@ KD1 =&' ''' >< '<@1<0'
&? 1' 01'A' '.D-100@ D<' # ' D<A+ 01' <-A' <001-' &=' &? 1' @& A'0' 0C?<@@ <-A' 1>C<@@ <-A' D1' &>1-0' '-' D'0' C01-'

3". #+ 1 &.-'2 +'
;!' 1 /!' .'"
3 @1!-'&-' +&"!!'
.- Z'.'20#'
<4!-!'.+!-#!Z Z'
"!1 &-'0- &/' .'
' .1 1&22&.-!"2'C#'
.'; ! .&- !/

C@'<>1-'<001>#@1A' <-A' # '<?= & ' 1' &=' D1' 0<>1@ &' & A1 -1' 1-<A 1' <-A' 10 <#@'00D@ D<' CB@<><B&-' #1' ><A1''-' 1, ' D' 1'
&?-'<-A' ?-A 1A' K' D'-' D'0' &? 1' 1<@>1' D<' 1, 'C0& 1' <-A' C0&-10' KD'BD' D<+1' -&' B&- 1-' <-A' C<'1A' D1' 0C>10' &='
>&-1' # ' D1 >' . <?- 1A' & &? 1' '.D-10' =& ' D1' B<?01' 1>1># 1A' ` D< 0P' 0?BD1' B&> 00'&-1 0' &@@1=@&? '
10 1 +& 0' & ' & D1 ' C0&-10' A1C? 1A' &' 1B1 +1' D1' 0<>1@ D<' D1 ' A&&' ><a1' C< >1-' D1 &=' K' D'-''' '>&-1 D'0' -1L'
<= 1' D1' 01'A' CB@<><B'&-' ><A1@ &' D1' 01'A' &> 00'&-1 0' &@@1=@&? 0' 1B1 +&? 0' & ' & D1 ' C0&-10' D<' D1 1<= 1' 0D<@#1'
D1 ?-&' A1C? 1A' & ' <00'.-1A' # ' &? 1' '.D-10' # ' &? 1' ' 10' C< 1-10' ?-A 1' &? 1' . 1< 1' 1<@1' '-' @'a1' K'01' &' #1'
CB'<>1A@ <-A' D<' D1' 01'A' &> 00'&-1 0' D<+1'<?= & ' 1' <-A' C&K1 ' &' ><a1' C110' &' <a1' 1, ' 0?BD1' C0&-1' & ' C0&-10'
<0' 0&' 0D<@@ ><a1' A1=1? 1' &=' C< >1-' # ' D'0' #&A @' <-A' D1' 0<>1' &' B&> 1' &' D1' B&>1-' .<&@1' D1 ' &' 1>< -' <-A'
<#'A1' K' D&?' #<'@'1' & ' >< >C '01' ?-&' D1' >1' D1' D< D' C<'A' D'0' 01'A' A? '10' & ' 1@0' = -A1' 0?=='B'1-' 0?1 '1' =& ' D1'
C< >1-@&=' D1' 0<>1' &' D1' 01'A' &> 00'&-1 0' <.. 1<#@1'@ <-A' '=' <-' 0?BD1' C0&-1' D<' D<' D' -& ' ><A1' C< >1-' &=' D'0
01'A' A? '1' . <?- 1A' #1¦A1BB<001A' D<' D1-' D1' .&&A10' <-A' B< <@@10' &=' D >' A1B1<001A' #1'-.' '-' D1' D<-A10' &=' D'0

.1 1&22&.-!"2'Z2 +'
##.0-'.'" +'
.-!@' "!#!&'!/'
;@' !1'H

1L1 ? &? 0' & ' <A> - 0 < C? 0' -& ' <A> - 0 1A' #1' BD< .1A' <-A' BD< .1<#@1' & D1' 01'A' C< >1-' -A' D<' D1' 01'A'
&> 00'&-1 0' D<+1'@'a1' <?= & 1' <-A' C&K1 ' &' A&' & A1 -1' <-A' <K< A1' C110' =& ' DR' @1+ 1' &=' D1' 0<>1@ <0' D1' < &-0' &='
@ D1' ,'-.'0' 0BD1H?1 ' A&' <-A' >< ' A&&' =& ' D1' ,'-.'0' A? '10' 10 '-.' <=& 1' D1>' &=' 1B& A1' '-' D1' 0AA' 0B '1H?1 '
-A' D1' 0 'A' &> 00'&-1 0' &@@1<&? 0' & ' 1B1 +&? 0' <=& 1' D'0' >1' D1 ?-&' A1C? 1A' & ' D<' D1 <= 1' =& ' <-A' & D1'
0<>1' 0D<@#1' A1C? 1A@ D<+ -.'<-A' <a -.' D1' 1B1C 1' &=' D1' 0<>1' &? 1' >&-1' & ' <- ' CB1@@ D1 &=@ #1' 01 <@@ ' B&?- <#@1'
=& ' D1' C& A&-0' # ' D1 >' 01,<@@ ' 1B1 +1A@ #1=& 1' &? ' 10&? 1' &=' &? ' F< 10' D<' K<0' # ' &?' <00'.-1A' '-' &? '
01'A@+'<.1' &'<@@ & '<- ' & D1' C0&-1' & ' C0&-10' D<' D1 1<= 1' # ' &? 1' '.D-10' 0D<@#1' D1 ?-&' A1C? 1A' <-A' <00'.-1A@
&=' <-A' =& ' <@@ 0?BD' 0&>1 =' >&-1' <0' D1 ' 01,<@@ ' D<+1' 1B1 +1A' & ' 0D<@@ 1B1 +1' & ' D<' 01 <@@ ' 0D<@@ &>1' &' D1 '

-' 3!-+@'.' 1 "&2.-1!-

D<-A10@ #1=& 1' 0?BD1' <?A@ &? 0' <0 # ' &? 1' '.D-10' 0D<@#1' <00'.-1A' '-' D<' C< '1;' -A' '=' <-' &=' D1' 01'A' &> 00'&-1 0'
&@@1 I &? 0' & ' 1B1 +&? 0' B&>1'-& ' &' ><a1' D1' < B&>C '0' <'80?BD1' A<' <-A' C@<B1' <0' 0D<@@ #1' @ > 1A' '-' &? 1' C '+1'
01<@1' &' D1 >' A' 1 I 1A' '-' D<' C '1@ D<' D1-' ?C&-' '='B<' &=' D1' A1@ +1' &=' D1' 01'A' F ' '0' & ' C '+1' 01<@10@ ><A1' # '
D >' D<' D1' 0<>1' A1='-1A@ ?C&-' D'0' & D1' ?-&' D1' D<?-B1@@1'=' &=' -.@&-A' =&' D1' >1' #1 -.@ D1' 01'A' D<?-B1@@1'
=& ' D1' 0<>1' >1' #1'-.' D<+1' <?B & ' 1' <-A' C&K1 ' &' ><a1' &> 00'&C0' ?-A 1' &? 1' . 1<' 01<@1' &' I 1 -' C0&-10' # ' D'0'
A'0B 1B'&-' &' #1'@ > 1A' <-A' BD& 1-@ &' <a1' D1' #&A'10' &=' D1' 01'A@ C0&-10' D<' 0&' 0D<@@ ><a1' A1=1? 1' <-A' D1 >' &
B&> 1' &' F< A1@ &-@100' D1-' D1' ><a1' #1=& 1' ?'' 01'A' 10& 1' & ' &> 00'&-1 0' 0?BD1' 1LB?01' <0' &' D1 >' 0D<@@ 01>1'
10&-<#@1@ D1' &' 1>< C' '@@ D1' D<+1' ><A1' D1' '<BB&>C 10' &=' <-A' =&' D1' 'C>'0010@ <-A' 0<' 0='1A' B&- 1-' <-A' C<'1A' D1'
A? '1' # ' D1 >' A?1' ?C&-' D1' ' 01'A' <BB&>C 1R' ?-&' &? 1' 01'A' D10& 1' &=' &? 1' K1 10@ &' &' 0?BD' & D1' C0&-1' &' '
C0&-10' &' &? 1' ?01' <0' &? 1' EJB1'0D<@@ A1C? 1'<-A' <00'.-1' '-' D<' C< '1' &' 1B1 +1' D1' 0<>1

' # ? !' &>' V # &

" , (' ʾ ʾ0 ʾ # ʾ -,♯ -- ; : :#

C ' ,' D'0 #1' ' ' 1-<=@1A' # ' D1' 01'A' <?A & ' 1' D<' '=' <- ' <+1 0' =& ?-1' &' #1@ #1 K11-' D1' 0<A' &> 00'&-1 0' <=& 1' D'0 >1' <00'.-1A' &' 1B1 +1' D1' ,'-.@0' 01'A' "? '10 &@@1= &? 0' <-A' D1' 01'A' . <- &? 0' &=' <-A' =& ' C< 1-.' <-A' -& ' C< '-.' 1B1 '-.'& ' -& ' 1B1'+ -.' &=' D1' 01'A' 0&>1' & ' 0&>10' &=' >&-1 ' & ' <- ' C< 1' D1 &=@ D<' D1-' '=' D1' 01'A' . <?- &? 0' 0D1K1' <BH?'1 <?-B1' K ' -.10' #'@@10' & ' #'@@1 '0' KD1 # ' ' ' >< ' <CC1 1' <=& 1' D1' &> 0<&-1 0' D1 <= 1 ' &' #1' <00'.-1A')' D1' 01'A' &> 00'&-1 0' & ' &@@1=@&? 0' <=& 1' D'0' >1' <00'.-1A' '-' =&? >1' 1D1 B1A' D<+1' 1 1 +1A' D1' 0&>1' & ' 0&>10' &=' >&-1 ' & ' <- ' C 1' D1 &=' D<' 0D<@@' #1' '-' <+1 0@ & ' D<' D1' 01'A' <?- ? 0' &== 1' &' # '-.' '' K' -10010' & ' >&&' D<' K&@@ K' -1001' <-A' 10 1='1' D1' 01'A' C< >1-@ & ' D<' <- ' . <?- &? ' & ' . <?- &? 0' A1- 1' D1' . <?- 1' &=' <- ' 0?BD1' 0&>1' & ' 0&>10' &=' >&-1 ' & ' <- ' C< 1' D1 &=' &=' D1 >' A1><?-A1A@ D<' #1 ?C&-' D1' 01'A' &> 00'&-1 0' D1 1<= 1 ' &' #1' <00'.-1A' D<+1' <?=@& ' 1' <-A' C&K1 ' &' D1 1' D1' D&@1' >< 1 ' 1+ A1-B1\' F ' '-.=' K' -10010' <-A' +1 ' B - @ -.' D1' 01'A <+1 0' <-A' A1- 1-.' &=' D1' 01'A' `'. <?- 110@'0P' <-A' D1-' &' BD< .1' <-A' A'0BD< .1' 1+ ' &=' D1' 01'A' C0&-10' # ' D1' ' A'0B 1B'&-0' <0' D1 ' 0D<@@' 01>1' #10 ¢ <-A' D1' 0<>1' BD< .1' & ' A'0BD< .1' &' # -%1' <-A' A'0BD< .1' 1, ' &=' D1' 01'A' C '10' < 1-0 ' D1' ,'-.'0' '.D-10' <0' '=' ' ' K1< 1' <A ?.1A' #1=& 1' D1' ?A' &? 0' <00'.-1A' # ' A1K1' & '. -<@@' '-' <- ' &=' D1' ,'-.10' &? 10' &=' 1B& A1' # K1-1' C '1' <-A' C '1' '-' <BB'&-' &=' <BB&>C 10@' & ' 1@@'0' D<' D1' ,'-.' K1< 1' C@< - '=' '-' D1' 01'A' <BB'&-' &=' <BBC>C 1

(' ' '<@0&' A1 -1A' # ' A'1' 01'A' <?==& ' 1' D<' D1' 1'A' &> 00'&-1 0@ D1 1<= 1 ' &' #1' <0A.-1A' # ' D1' ,'-.10' '.D-10' 0D<@@' # ' D1' ' A'0B 1B'&-@ ?C&-' D1' ' <BB&>C 1' <-A' =?@@' C< >1-' ><A1' =' <@@ 0&>10' &=' >&-1 ' # ' D1 >' 1B1 +1A' & ' &' #1' 1B1'+1A' # ' <- ' &@@1A &? 0' & ' 1B1 +&? 0' &=' D1' 01'A' 0&>10' &=' #1-1+&@1-H1' `0D<@@' # ' D1' ' A'0B 10'&-0@ '<@@&K0' ?- & D1' 01'A' 1B1'+&? 0' <-A' &@@1A@&? 0' 0?BD' D1' ' 10&-<#'1' B&0 10' <-A' 1K< A10@' <0' D1 ' =& ' D1' .1A '-.' &=' D1' 01'A' 0&>10' D<+1' 0?0 1 -1A

" "' <@K1 ' D<' D'0' Q@1' 0D<@@' -& ' 1L 1-A1' & BD< .1' <- 'D1' 1' =' <= ' ><-' D<' D< D' <='0 1' >1' . <?- 1A' <- ' 0&>1' &=' >&-1 ' # ' K1 ' &=' D'0 #1-1+&@1-B1

H ']

C ' C ' <.< -0 ' 0?BD' D1 1 0' &=' F & 0 1A0' <0' D<+1' -& ' # -' <CC 1<A010' &' D<' <A1

3 ' D1' &>1-0' 'C' D'0' C01- ' C@'<>1-' <001>#@1A@ D<' KD1 1' D1' ' '1' &=' & K'BD' KD'BD' '0' <-' <?-B'1- ' ' '1' '0' . 1< @ ' A1B<'1A@ D1' 10 <@@' B<?01' KD1 &=' '0@ =& ' <0> B#1' <0' D1 ' '0' < < ? 1' ><A1' < ' F 10 -'' '-' D1' +' 0' 1 1' &=' D1' =1' . -' &=' , '-.' 1-=' D1' ''' =' B&- 1 - -.' <>&-.1' & D1 ' D'-.10' D<' -& ><-' -& ' K&><-' 0D<@@' C? 1' D1' ' 0&-' & ' A&.D 1 ' &' #1' <CC 1-A01' K' D'-' <- ' ' '1' & ' & '-' K' D'-' D'0' 1<@>1@ #?' '=' D1 ' D<+1' @&-A10' & ' 1- '0' & D1' +<@?1' &=']]' 0 ' < ' D1' @10 ' # ' D1' 1 1' <-A' D<' &' #1' 10 '='1A' ?-A 1' D1' 01<@10' &=' ' ' ?0 'B10' &=' D1' 1<0' KD1 1' D1' 01'A' @'@A1' F<0 #& -1@ ' # ' =& B1' &=' KD'BD' < ? 1' ><- ' <-A' A' i 0' . 1< 1' 1L<B'&-0' 1#@10' <-A' @&0010' D<+1' #1' A&&-' &' D1' ' 1\1D0' &=' D1' 1'A' ' '1@ <0K1@@ =& ' D1' B1 + -.' &=' D1' ' &K-.1' D'@A 1-' <0' &=D1 ' &' #1' D1' ' <CC 1- 'B10@ FD1 # ' D1' >&&0 ' 0?#0 <-B'<@@ B <= 1 ' '-' D1' 01'A' ' '1' B<@@1A' F & 0 1A1' F 1+1 0' <-A' @& D'1 0@ # ' K#'BD1' B <='10' D1' K1@1' &=' D1' 01'A' ' '1' D< D' I ' 0D?@A' #1' >< - 1-1A' 0?CC& 1A' <-A' B&- -?1A' <>&-.' & D1 ' A + ' B <= 10' D1 ' ?01A@ #1' . 1< @ ' A1B< 1A@ # ' 1<0&-' KD1 &=' D1' &-.' C1&C@1' &=' D1' 01'A' ' '1' #1' . &K1C' &' A1@-10' +'B10' C-A' & D1 ' A', 0 > 0.& -<?-B10@' <-A' '=' -&' 1>1A ' D1 '-' #1' D<A' ' ' '0' @'a1' &' #1' D1' ? 1 ' A10 ?1A&-' &=' D1' 01'A' ' '1@ KD1 =& ' C@1< 1' ' ' &? &' '.D-10' &=' &? 1' >&&0 ' #1- .-1' .WB1' '-' B&-0'A1 <B'&-' &=' D1' C> 0010' # ' D<001-' &=' D1' & A10' 0C?<@@' <-A' 1 -C<)¢' <-A' =D1' & >&-0' '-' D'0' C201-' C< @'<>1-' <001>#@1A' <-A' # ' <-A& ' 1' &=' D1' 0<>1' 1-<B 1' & A1 -1' <-A' 10 <#@'00D' D<' D1' 01'A' ' 1\1 0' <-A' ' &=' D1 >' =& ' 1+1 ' = &>' D1-0=&? D' 0D<@#1' <' D1' ' @'# '10' &' 1B1 +1' <-A' &' <a1' &' D1' ' <CC 1- '010' D1' 0&-' & ' A&?.D 1 ' &=' <- ' C0&-1' & ' C0&-10' KD'BD' K&@@ C? ' =@'1' ' 01'A' 0&--10' & ' A&-.D 1 0' &' #1' <CC 1- '010' '-' D1' 01'A' ' '1' D1' < ? 1' =& 01'A' <-A' D1' C -10' '-' D1' 0<>1' B&- 1 -1A' -& K' D0 &-A@-.' -A' D<' D1 ' <-A' 1, ' &=' D1 >' =& ' 1, ' = &>' D1-0=& D' 0D<@#1' =& C '01A' <-A' 1LB1C 1A' &? 1' &=' Q ' C?- 00D>1-' <-A' D? 1' B&- < -1A' '-' C ' 01'A' < ? 1

, ,' KD1 1' '-' D1' 01'A' ' '1' '-' >1' C<0 ' D< D' &=' @&-.1' -'1' #1' ?01A' D<' D1 ' 0D'AA' -&' ><-' <a1' ?C&-' D >' &' 0D1 1' FC 0 1A10@ B<@@1A' 1-' 1 A10' <> -0' -1' ' & D1 ' F & 0 1A'0@ #?' '=' D1' D<A' #1' <CC11- '01' &' D&BB?C<B'&-' &=' 0D1 '-.' &=' F & 0 1A'0' # ' D1' 0C<B1' &=' +' ' 1 10@ 0& D<' D1' > .D ' D<+1' D1 a-& F@1.1' <-A' B?- -.' '-' D<' B>= @ D&?' #1' ' ' -&K1' &=' @< 1' ><- ' <-A' A', 0' C0&-10' <0K1@@ <@'1-0' 0 <-.@1 0' <0' & D1 ' = 1-0' -& ' AK1@@' -.' -& ' '-D' 1A' D<+1' K' D'-' ? 1' 01'A' F1' # ' 0?CC& <B'&-' <-A' >< - 1-W-B1' &=' A ,0' C &-10' '?='' <?- 10' '-' D1' 1'A' ' '1' =& ' D1'=' 0'-.@ ' @?B 1' <a1' ?CC&-' D1 >' D&BB?C<B'&-' &=' 0D1 '-.' &=' F & 0 1A10' <-A' <> -0' KD'BD' D<+1' -& ' D1' 0'.D ' -1 ' B& - -.' 'A' D<' &BB?C<B'&-' -1 ' D<+1' #1' <CC 1- 'B1' &' D1' 0<>1@ # ' KD&>' . 1< 1' D? 10' <-A' A' i 0' @&0010' D<+1' #1' =& ' A1=<? 1' &=' B?- - -.' # ' a? -.' <-A' & D1 K'01' &=' D1' 01'A' F & 0 1A10@ &' D1' &K-1 0' <-A' &C' & 1' 0?#.1 '0' '-' D'0' &? 1' 1<@>1@ '-=<> 1'<@0&' <-A' 0@<?-A1 ' <0K1@@ &' D1' &BB?C<B'&-0' &=' F & 0 1A'0' <-A' F & 0 1A' D1 D1-' <0' &' D1' < BD<?- '0' FD'BD' C? 1' D1 >' 0&' D? 1' <-A' a? 1' '-' D1' 0D1 -.' &' 0<@1@ <-A' '=' 1A ' 1>1A ' #1' -& ' D<A' '-' D1'0' > 0010' <-A' 1=& ><B'&-@ #& D' D1' 01'A' &BB?C<B'&-' &=' F & 0 1A' ><a'-.' <-A' <@0&' &=' F & 0 1A' 0D1 '-.' KD'BD' .&A' =& #1A1' '0' @'a1@ ' &' #1' A'0 &'1A@ =& ' @<Ba1' &=' .&&A1' C&@10 ' <-A' & A 1'¢ F D1 =& ' ' ' >< ' C@1<0' &? 1' '.D-10' # ' D1' <?^& ' 1' <=& 01'A' =& ' D1' B&>1-' K1@1' &=' &? 1' >< BD<?- 10' <-A' & D1 ' &? 1'0?#.1 '0' &=' D'0' & 1' 1<@>1' <-A' =& ' D1' B&-01=+< '&-' <-A' 0 0 1 - @.' &=' D1' 01'A' &BB?C<B'&-' &=' F & 0 1A'0' <-A' F & 0 1A' 0D1 '-.' &' 1-<= 1' & A1 -' <-A' 10 <#@'00D@ D<' = &-' D10=&& D' -&' ><-' 0D<@@ <a1' ?CC&-' D >' &' 0D1 1' K& 0 1A'0' K' D'-' D1' 01'A' ' '1' #?' '=' D1' D< D' #1' <CC 1- '01' &' D1' BB?C<B'&-' &=' F & 0 1A1' 0D1 '-.' # ' D1' 0C<B1' &=' +' ' 1 U0@ & ' 0?BD' <0' D1' <'0 1 0' &=' D1' 01'A' &BB?C<B'&-' K' D'-' D1' 01'A' ' 1' =& ' D1' >1' #1' -.

(' *" - 2' ?4!
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+<. -!' 2 +' 2 ! '" V .''2 ! / 2' &-' .''7&# ' 0-+!2Z !' ' ; ! ! -' "! - &#!' !''! . ' C#' 3!''2. -2' - . ' ; !&-*' ! "1 ! -' 2 +' . / ' ! 1 +.@' _ ! "1 !%&

<CC &+ -'G D1' ' B1- - - 'K' D' D<A+ B1' &=' D1' <' 1' =& ' D1' >1' #1 =@.' K& '<A> 1' -A' D 9' D< ' <a1' ?C&-' D1 >' D1' B&- '1 9' <-A' D1' >< - 1-&? 0' &=' D'>' & ' D1 >' 0& > 0A&' - .' <0' <=& 1' '0' 01'A 9' 1BD18' &=' D1 >' &' =& =< 1' =& ' 1 ' A1=1? 1']]' 0 ' D<@=' &' &-' . 0A&?0' <-A' &, <. -' & A1' <-A' D<@=' &' D1' 01'A' <' 1' <-A' <'0 1 0' &=' D1' 01'A' &B&?C<B'&-' &=' F & 0 1A' 0D1 ' - .' =& ' D< ' >1' #1' - . G -A' < ' -&' >< I ' '- D' <- ' '- ' D1' 01'A' ' '1 9' ' 1\1 -'& ' & D1 ' #1 <. ' -&1' D1 'C<-' a1C1' <- ' D1 ><-' &=' F & 0 1A'0' K' D' -' D'0' D&?01' <= 1 ' D1' =10 ' &=' 0 1 ' -1L ' B& - .' ?-A 1' D1' C< -1' &=' L@0 ' <0' &= 1' <0' D1' #1' ' -' A1=<? 1' ' -' D1' 0<>1' D1' &-' D<@=1' &' #1' 1>C@K1A' & &?' B? 1' &=1 . -' & A' <-A' D1' & D1 ' D<@=1' &' D1' 01'A' <' 1' <-A' <'0 1 0' &=' D1' 01'A' &BB?C< '&-' &=' 0D1 ' - .' &=' F & 0 1A'0 ' -A' = '<' D1' 01'A' <'0 1 R' &=' D1' 01'A' &BB?C<B'&-' &=' 0D1 ' - .' &=' F & 0 1A' D<+1' = 11' 01 BD&=' D1' 01'A' B <= 1' &=' F & 0 1A' 0D1 ' - .' ' -' 1 , ' C@<B1' <0K1@@' K' D ' D1' AK1@@' - .' C@<B10' &=' D1 >1 -' A'1 0' <-A' <@1 - A1 < 0' &=' D1' 0<>1' F & 0 1A'0' <-A' & D1 ' ' -D' <?- 10' ' -' D1' 01'A' ' '1' <-A' C 1B -= 1' &=' D1' 0<>1G -A' '=' <- ' ' 1\1 -' & ' D)@@@ <?- 1' &=' D1' 0 'A' ' '1' A1- 1' D1' 0 'A' K< A1 -0' &=' F & 0 1A' 0D1 ' - .' A?1' 1 BD' & ' A&&' B&' = '1' &' D'0' C+ 0'&-' <-A' & A -<?- B1' 0D<@@' =& =1' 1' D1' 0&>1' &=' L@' 0 ' =& ' 1+ ' A1=<? 1 9' D1' >&' 1' D1 &=' &' &?' &R01' . -' & A1' <-A' D1' & D1 ' >&a1' &' D1' =& 01'A' <'-1' <-A' <'0 1 0' &=' D1' 01'A' &BB?C<B'&-' 9' D1' 01'A' C< -10' &' #1' @1+ 1A' <= 1 ' D1' =&? >' 1-A' & A -<?- B1' C? +1'1A' =& ' D1' B& 1BB'&-' &=' D1' B <= 1' <-A' &BB?C<B'&-' &=' F & 0 1A' K1+1 0' K' D' -' D1' 01'A' ' '1

"/&- -#!Z ; ' ! "1 ! -' .' ; ! ' ".' ! / ' ; @' ! ' @." ' _##

" $ * '<@K1 ' D<' D1' 1'A' &BB?C<B'&-' &=' F & 0 1A1' 0D1 ' - .' 0D<@@' ><a1' & ' A&' &' #1' ><A1' -&-1' & A -<?- B1' B&-R- -.' D1' 01'A' &BB?C<B'&-' <> &- .1' D1 >' 01@=1' #? ' 0 - BD1' <0' D1' <a1' =& ' D< ' >1' #1 ' - .' K' D1' D'0' D 1 D1' ' @A1 >1 -' 0D<@@' D' - a1' - 1B100< ' <-A' C=' <#@1' &' D1' K1<@1' &=' D1' , ' - .' 0' ?#.1 '0

' D1' &>&-0' '-' D'0' C01- ' C< @'<>1- ' <001>#@1A' D<' KD1 1' D1' , ' - .' &? 1' &+01' . -' & A' &=' D'0' -@&0' . <B'&?0' A'0C&0'A&-' K'@@1 D' <-A' 1- 1-A' D' '-A'== 1- ' ?0 'B1' &' #1' D<A' <-A' > - 0 1A' <BB& A' - .' &' D'0' B&>1-' @<K10' &' <@@' D'0 ?1' 0?#.1 '0' <0K1@@' &' C&!<0 'BD19' KD'BD' C&M' 0?#.1 '0' #1' -& ' &=' <#'@' 1' -1' C&?1 ' &' 0?1' <BB& A' - .' & D1' @<?10' &=' D'0' @&-A' =& ' D1' 1A 1001' &=' ' - ? '10' <-A' K &- .10' &' D1 >' A<'@@ ' A&&-9' <0K1@@' B&-R- -.' D1' ' C0&-10' D1' ' 1-D1 ' <?-B1' <0' & D1 ' B<?010' =& ' 1>1A ' KD1 &=' '-' D1' #1D<@=' &=' D1' C&5' C0&-10' &=' D'0' @&-A' -& ' <#@1' &' 0?1' =& ' D1' ' 1>1A ' <= 1 ' D1' B&? 01' &=' D1' B&>1-' <K1G 1' ' ' & A1 -1A' <-A' 1-<=@1A' # ' &? 1' '.D-10' <-A' # ' D1' & A10' 0C?<@@' <-A' 1>C<@@' <-A' D1' &>1-0' '-' D'0' 01>' C< @'<>1- ' <001>#@1A' <-A' # ' <?^& ' 1' &=9' D0' 0<>19' D< ' 1, ' CCM' C0&-1' &=' C0&#10' KD'BD' D<+1' I ' D1 <= 1 ' 0D<@@' D<+1' B<?01' &=' <BB'&-' & ' <BB'&-0' < 1-0 ' <- ' C0&-1' & ' C0&-10' K' D' -' D1' 1<@>1' 0D<@@' D<+19' # ' D1' A'0B 1B'&-' &=' D1' D<?-B1@@1 ' &=' D'0' 1<@>19' =& ' D1' >1' #1' - .' K ' 1' & ' K ' 10' & '. ' -<' @' <-A' K ' 10' &=' ?#' C1-<' <BB& A>.' &' D1' -< ? 1' &=' D1' ' <?010@ D1 =& ' -& D' - .' C<'1 - .' &' &? 1' '.D-10' =& ' D1' 0B<@10' &=' D1' 0<>19' -& ' &' <- ' C0&- i' =& ' D1' ><a' - .' &=' D1' 0<>1' K ' 1' I ' K ' 10' &' #1' D1 1<= 1 ' 0?1A ' -A' D<' D1' 01'A' D<?-B1@@1 ' =& ' D1' 0<>1' >1' # ' - .' 0D<@@' <00' . -1' 0?BD1' &=' D1' @1 a'0' KD'BD1' 0D<@@' A&&' <-A' ?01' D1' ><a' - .' <-A' K ' ' - .' &=' D1' D>1' K ' 10' &' K ' 1' D1' 0<>1' 1A ' &' #1' 01<@1AG <-A' <@0&' @1>1A' &?-B1@@' <-A' < & -1 10' =& ' D1' 0<>19' K' D&?' <- ' 1K< A1' <a' - .' D1 =& G -A' <= 1 ' D1' 01'A' K ' 1' & ' K ' 10' #1' 1 & -1A9' '=' ' ' #1' <=&B1' D1' , ' - .' ' -' D'0' 1-BD19' D1' ?0 'B10' D1 ' 0D<@@' <00' . -1' &' D1' 0<>1' C& ' C0&-1' & ' C0&-10' &?-B1@@' @1 -1A' # ' D1' ' A'0B 1A&-0' KD'BD' 0D<@@' .1+1' D1a' &?-B1@@10' -& D' - .' <a' - .' =& ' D1' 0<>19' <-A' ' -' @'a1' K'01' D1' 0<>1' ?0 'B10' 0D<@@' <CC& - 1' < & -1 ' <-A' < & -1'10' =& ' D1' 0<>1' C&5' C0&-1' <-A' C0&-10' <-A' <@@' & D1 ' &==' B1 0' 1H?'0' 1' <-A' -1B100< @1' &' #1' D<AA1' =& ' D1' 0C1A1' &=' D1' 01'A' 0? 10' &' #1' D<AA1' <-A' ><A1' KD'BD' 0D<@@' A&&' D1' ' A? '10' K' D&? ' <- ' 1K< A10' =& ' D1' ' &?-B1@@10' D1@C1' <-A' #10 -10' '-' D1' 0<>1G <-A' D1' 0<>1' @<F1' <-A' & A 1' 0D<@#1' &#01 +1A' <-A' a1C 1' &=' <@@ 0?BD1' 0? 10' &' #1' ><A1' <=& 1' D1' , a@.' 0' ?0 'B10' &=' D'0' B&-@1-' C@<B1' <-A' < &- ' &=' D'0' 0BD1H?1 ' <-A' <@@' & D1 ' ?0 'B10' '-' & 10' &=' 1B& A1' KD1 1' <- ' 0?BD1' 0?1 '0' 0D<@@' #1

'&' . ' !% ." &-*' ."2!Z -/' "!_D

' ' E '<0' ><- ' D& 0010' <-A' ><1 1R' &=' D1' # 1A1' &=' D'0' @<-A' &K1' &=' @< 1' D<+1' #11-' B< '1A' <-A' B&-+1 1A' &?' &=' D1' 0<>1' ' - &' D1' C< '10' &=' #1 &-A1' D1' 119' KD'BD' B<?01 D' -& ' &-@ ' D1' 0><@@1 ' -&>#1' &=' .&&A1' D& 010' &' #1' K' D' -' D'0' 1<@>1' =& ' D1' A1=' 0 B1' D1 1&=9' #? ' <@0&' D1' . 1< 1' <-A' .&&A' C@1 - '1' &=' D1' 0<>1' &' #1' '-' D1' 0 'A' C< '10' &=' #1 &-A1' D1' 11' D<' ' -' >10' C<0 ' K1 1' K&?- 1' &' #1' K' D' -' D'0' @<-A ' -A' &, ' D< 9' D1' C 'B1' &=' 1C ' &=' D1 >' &' #1' . 1< @ ' 1 -#<?-B1A' D1 1' &' D1' @&001' <-A' -&' <?-B1' &=' <@@ D1' , ' - .' 0' ?#.1 '0' K' D' -' D1' 0<>1' G ! & ' 1>1A ' KD1 &=' ' ' #1' & A -1A' 1 -<= 1A' <-A' 1 <#@'00D1A' # ' D1' , ' - .' &? 1' &C ' . -' & A1' # ' D<A+ 01' &=' D'0' & A10' 0C?<@@ <@A' 1>C<@@' <-A' &> -0' '-' D'0' ?! ' C< @' <>1- ' <001>#@1A' <-A' # ' <?A'& ' 1' &=' D1' 0<>19' D< ' = &>' D1 -0=&? D' -&' >< ' &=' C0&-1' -1' C0&-10' B< ' & ' B& -+1 ' <- ' & 01' &? ' &=' D'0' @<-A' K'A'&? ' D1' , ' - .10' 0C1B'<@@ =&1-B1' ?C&-' C< -1' &=' =& =1' ? 1' &=' D1' 0<>1G =' >< 1' <#&'+1' D1' +<@?1' &=' + 0 ' +'' ' A ' K' D&? ' ?' ' , ' - .' 0' 0C1B'<@@ @'B1 - B1' ?C&-' D1' 01'A' C< -1' &=' =& =1' ? 1' &=' D1' .<>1' >< 1' D1' &K - 1 ' D1 &=' & ' D'0' A1C? '1' 1B1 + - .' =& ' D1' 0<>1' >< 1' + '0 ' +'' ' A ' < ' D1' >1' &=' D1' 01<0a1' ?C&-' D1 0<'A' =& =<' ? 1' & ' 1@@'0' ' ' &' #1' - & ' =& =<@ 1@ <-A' < ' D1' >1' &=' C1' 01<0? 1' &=' D1' 01'A' >< 1' & ' >< 10' D1 ' 0D<@@ #1' C 1'01A' # ' D1' 0 'A' P' ==' B1 0' (=' D1' &? -' KD1 1' <- ' 0?BD1' >< 1' '0' <a1-' <-A' D1 ' &C1-@ ' &' #1' 0&@A' &' D1' #10 ' C 'B1' <-A' D1

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D<@=1-A1@1' &=' D1'&, ' C 'B1' &=' D1 ' #1 - .' <#&+1' + ' 0 ' +'' ' A ' & ' #1' & D1' , '- .' <-A' A'AA1 ' D<@=1' & ' D > ' D< ' 0&' 01'01 D@ <-A' D1' , '- .'0' C 1' D1 &=' & ' #1' A1@' 1A' & ' D1' ?0 ? > 1 ' &=' D1' 01'A' C& 1 ' -A' D< ' -& ' >< ' &=' C0&-1' -1' C0&-10' D1 1<= 1 ' B< @1' & ' B&-+1 1' <- ' >< 1' & ' >< 10' &? ' D'0' @&-A@ 1LB1C ' 1, ' &=' D1' 01'A' >< 10' 0&' B< '1A' #1' &=' D<. 1' &=' -.'" 0-/!'" "!!' "' ' 1 10' < ' D1' @10 ' <-A' -& ' &, ' D1' C 'B1' &=' + ' 0 ' +'' ' A ' C< 1 -.' & ' D1' , '- .' =& ' 1+ ' &=' D1 >' -& ' <#&+1' D1' +<@?1' &=' A! "Z .+/ ' -/' -. ' 7 ." ' J2 ' / + ' 0 ' +'' ' A ' 0&' & ' #1' B< '1A' & ' B&-+1 1A' ' -' D1' 0<>1' C& 1' 0?BD1' B?0 ? > 10' <0' D< D' #11-' =& ' >< 10' & ' =& 1' ?01A@ <-A' D< ' =& ' 1 , ' >< 1' &=' >& 1@+<@?1' D1 <= 1 ' # ' D1' , '- . '0' @'B1-B1' <= 1 ' D1' =&? >1' <=& 01'A' B&-+1 1A' & ' B< '1A' #1 &-A' DA' 0 @' . ' 0+. 1Z 11@ D1' &K-1 ' D1 &=' & ' D'0' A1C? '1' <00' . -11' & ' R+<? - ' 0D<@@ C< ' + 0 ' +'' A ' =& ' D1' B?0 ? > 1' &=' D1' 0<>1' #1=& 1' ' ' #1' ' -' "!Z !% ." ! / 0D'CC1A' ?-A 1' D1' C< -1' &=' =& =1' ? 1' &=' 1, ' >< 1' 0&' 0D'CC1A' `& ' P' D1 ' #1' B?0 ? > 1A

C ' J' D< ' #1' ' ' 1 -<= 1A' D< ' '=' 1 - ' C0&-1' < ' D1' C& 1' K&@@ . 1+1' =& ' <- ' C=' D1' < 10' 0&' & ' #1' B< '1A' +' '0 ' D< ' -@' . -!' 1 @' ;0@ 20# ' "!Z ." ' I' 2 ' ' #1' @1=?@@ & ' D' >' 0&' .1+ -.' <-A' C<'1 -.' D1' 01'A' +' : ' & ' <a1' D1' 01'A' >< 1' '=' 0D1' #1' -& ' <=& 1' <a1-' # ' D1' , '- .'0' &=='B1 ' -1 ' D1' , '- .10' @'B1-B1' #1' -& ' '-' D1' #1D<@=' <=& 01'A' =& ' D1' 0<>1' >< 1' & ' #1' B< '1A' &# 1 -1A

" $ ' <@K1 ' D< ' ' ' 0D<@@ #1' @1=?@@ & 1+/ ' C0&-1' ' C0&-10' #1 - .' A1 -1\1-0' D1 <= 1 ' & ' B< ' D& 01' #1 & -A' D1' 11@ D1' , '- .10' @'B1-B1' '-' D< ' #1D<@=' -& ' &# 1 -1A@ =& ' D1' ' &K-1' ?010@ -& ' '- 1-A' -.' < ' D1' > 1' &=' D1' 0D'CC' -.' &=' -. ' .'" +! ' D1' 0<>1' -& ' D1-' =?@@ ' C? C&01A' & ' 01@@ D >@ <-A' D< ' 1- 1- ' & ' #1' =<'&K1-' # ' D1' & D1' &=' D >' D< ' 0D<@@ A&&' 0D'CC1' D1' 0<>1' D& 01' <a1-' #1=& 1' D1' ?0 & > 1 ' & ' D1 BD1&? ' &=' D1' 0<>1' C& 1@ D'0' ^ 1' -& K' D0 <-A'-.

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' ' D< ' <@@' <?-.1 0' ! %4NQ' "1- 0&-0' 0D<@@ C< 1' ?0 & > 1@

7 ' D1' , '- .' &? 1' &, 1' .-' & A1' '0' . 1< @ ' A'0B1 +1A' '-' D'0' ?0 &==@10' <-A' ?#0'A'10' # ' ' BD<?- '0' 0 <?-.1 0' +@! -2' ; !&- -' ><A1' 0?BD1' <0' D1' , '- .' &? 1' & 1' .-' & A' D< D' . <?- 1A' # ' D'0' 10' C< 1 10' &' #1' " 1 -10 -0' <-A' &' C< ' -&-' ?U 0<0' 1-0 & D1 ' B&?0 & > 10' -1' 0?#0'A'10' =& ' D1 ' ==@< BD<?-A'01' '-K< A' <-A' &? K< A' #? ' <@0&' D1 ' B&@& <#@ '1- 1 ' '- & ' D1' B&0 ? > 1 0' B?0 & > 1' -& ' <@@ &-@ ' D1' ' &K-1' BD<?-A'01' ?-A 1' D1' =&? >' <=& 01'A@ #? ' <@0&' D1 ' B&@& <#@ '1- 1 ' '- & ' D1' B&0 ? > 1 0' #&a10' D1' > 1 BD<?-A'01' &=' & D1 ' <?-.1 0@ B<@@' -.' <-A' 01'1-.' D1' 01'A' .&A10' &=' & D1 ' ' & BD<?- 10' &' #1' D1' .&A10' &=' D1 >' 0@ ><A1' " 1 -10 -0@ & ' D1' . 1< 1' @&001' <-A' A1= <?A1' &' D1' , '- .' &? ' &, 1' .-' & A ; F D1 =& ' #1' ' ' 1 -<= 1A' # ' D1' , '- .' &? 1' & 1' .-' & A' D1' > A'0' 0C?<@@ <-A' C<@@ <-A' D1' &>&-0' '-' D'0' C01- ' C< @' <>1- ' <001>#@1A' <-A' # ' <?= & ' 1' &=' D1' 0<>1@ D< ' <@@8 < BD<?- ' 10' <?-.1 0' <-A' & D1 ' D< ' #1' ><A1' " 1 -10 -0' # ' D1' , '- .10' 10' C< 1- 11' & ' & D1 K'01' C< 1' = &D1-0=&? D' 0?BD' ?0 & > 10' <-A' ?#0'A'10' =& ' D1' ' .&&A10' <-A' >< BD<?-A'01' '- F< A1' <-A' &? K< A' <0' D1 ' 0D?@A' D<+1' C<'1A' '=' 0?BD1' 10' C< 1- 11' <-A' . <?- 10' D<A' -1+0' & D1 >' #1 ' ><A18

ʻ]

C ʻ C ʻ <.< -0 ' D 1'==' =' <-A' -A1 0D 1'==

C ' . 1< 1' 1L & B'&-' '0' 1 1@ ' ?01A' < 'A' D<A' K' D' -' A , 0' &?- '10' K' D' -' D'0' 1<@ > 1' &=' -.@&-A' # ' D1' L & '&-0' &= 0?# '@1' <-A' ?- ?1' A1 > 1<-&? ' &=' D' 1=1'] -A1 0D' 1=0' D' 1' @1 a'0' & ' <- ' D1 ' &=='B1 0' D&@A' -.' & ' a1C=&.' AKA' ' @<' - '-' D1' &?- 10' '-' D1' -<>1' &=' < D' 1=9' D< ' '0' &' 01 ' '=' <- ' ><-' <==1 >1' < C@< - ' #1=& 1' D1' D' 1==10' '-' D1' &?- '10' &?- ' &? 0@ ` D1' 0<'A' D' 1=1' -A1 0D' 1=0' & ' D'0' D 1' @1 a1O@' ` & ' #1=& 1' <- ' & D1 ' &=' =&1' 01'A' &==' B1 0O@' F? ' 1- 1' & ' B< ?01' & #1' 1- 1 A' '- &' D1 ' #&a10' '-' D1' 0<>1' C@<' - '=0' -<>1' A , 0' <-A' ><- ' C@< - 10' #& D' &=' " 1 1' 10C<0' I ' B&+1-<?- 1' < '=&1 ' C@1<0' 1@ <-A' ?-a-&K' -.' &' =&1' 01'A' @< - '=' '-' KD&01' -<>1' D1' 01'A' C@< - 1 ' #1' <==1 >1A@ ' D1 F 1- ' D< ' '=' =&1' A1= -A<?- ' <CC1 1' -& ' < ' 1+ ' 0=& 1' A< ' &' ' B 1' D< - . -.' X2I 0<>1' C@< - 10' D1' 0D<@@ @&01' =& ' D'0' A1=<? 1' ><A1' < ' 1 ' C@< - 1' ' ' A ' KD1 1' A 0' >10' # ' B&+ 1' # K1-1' D1' 01'A' D' 1=1'] -A1 0D' 1=0' D' 1' @1 a'0' <-A' =&1' & D1 ' =& 01'A' &=='B1 0@ =&1' 1'A' " 1= -A<?- 10' #1 -.' -1C' < <BD1A' 0&>&-1A' -& ' K< -1A' <BB& A' -.' &' D1' A?1' =&? >1' &=' =&1' &>1-' <K1@] D1 =& ' D1' 0<>1' C< '10' 0&' C? 1' '-' 0? 1' D<+1' -&1' a-&K@1.1' &=' <- ' 0?BD1' ? 1' D<A' <.1 -1' D1 >' ' -A' & , ' D< ' D1' 0<>1' D' 1=1' -A1 0D' 1=0')' D' 1' @1 a'0' K&@@ B<?01' A + 0' C@< - 10' &' #1' <a1-' '-' #1=@' <>10' &=' 0?BD1' C0&-10' D< ' < ' -& ' '-' C@1 -' @ =@ KD1 1' D1' 01'A' " 1=1-A<?- 1' 0D<@@ D<+1' @' a1' @&001' <0' '0' #1=& 1' 1D1 &1A@ 0&' D< ' # ' =&1' ? @<?=? ' A1 > 1<-&? ' &=' D1' 01'A' D '==10' -A1 0D' 1=0@ D' 1' @1 a'0' =& ' =&1' >1' #1 - .@ <-A' =&1' # > @@' =1&=' =&1' D?-A 1A10' # ' D1' ' A1=1?=1' <-A' -1.@' .1-B1' '-' D1' ' &=='B10' <-A' B&+ -1' # K1-1' D1' 01'A' D' 1=1' -A1 0D' 1=1' D' 1' @1 a'0' <-A' D1 ' &=' D1' =& 01'A' ==' B1 0' B<?01 D' =&1' < B' <>1- '0' &' #1' '-' &-' 1 1' <= 1 ' D1' &a10' #1' > . &B1A' &' <> &?-=1' &' . 1< 1' <-A' ' -C& ?-<#@1' 0&>10' &=' &-1 @ KD'BD' 0&>10' &=' &-1 ' #1' 1 @ ' @1+ 1A' &=' =&1' C& 1' &>&-0' '-' =&1' 01'A' &?- '10' # ' D1' 01'A' D' 1=1' -A1 0D' 1=0' <-A' D' 1' @1 a'0' <-A' & D1 ' D1 ' A1C? '10' #1 -.' &=' -&&-' 0?#0 <?-B1' -1 D1 ' &=' D<+1&? @ KD'BD' A1C? '10' <a1 D' <-A' @1+ 1 D' >& 1' # ' 1L & B'&-' D<-' '0' B&- 1 -1A' '-' D1 ' 0 1 '0' &' =&1' 1LC0 1' C'@@<.1' <-A' 1>C&, i 0D'-.' &=' D1' 01'A' & > &-0@ #1' ' ' D1 =& ' 1-<= 1A' A -1A' <-A' 10 <#@'00D1A' # ' D1' , '- .' B? 1' &, 1' .-' & A1' <-A' # ' D<001-' o=' D1' & A'0' 0C?<@@ <-A' 1>C<@@ <-A' =&1' & > &-0' '-' D'0' 1- ' C< <>1- ' <001>#@1A' <-A' # ' <?= & ' 1' &=' D1' 0<>1

' 1 1' \' <-A * ><A1 ¡ %' .$- + /N # 8' ' ') + ' 5 '))*

; . , &&1 . 4)) ’ ’ -;G# -> E

3+ &- 2’ -’ +&!’ .0- @’ .0"’2 +’ ; !’ !- !"!/’ .-+@’ ;@’ 3+ &- & 2’&-’3!"2.-< .’" ;@’ .-"-!@’H -/’.-+@’ .-!’ 3+ &- ’ .’" .-!’ 02!

D< ’ -&1 D’=1=1=1’ -A1 0D’ 1= ’)’ D’ 1’ @1 a’0’D1 <= 1 ’ -1 D1 ’ <- ’ C0&-1’-’ D1’ ’ -<>10’D1 ’ # ’ D1 ’ B&><?-A1’ 1- ’0D<@@ <a1’<-A’1- 1’ -&1’ C@< - 10’ ’-’ &’ D1’ ’ #&a’0’ ’-’ -&’ ><-- 0’ -<>1’ &-@1001’ D1’ C ’1’ C@< - ’=’ #1’ ’-’ D’0’ CC 1’ C0&-1’ C201-’ ’-’ D1’ &? 10’ & ’ 1@0’ # ’ <’ 0?=@ B’1- ’ & -1 ’ ’ "1C? ’1’ D< ’ ’0’ a-&K1-’ &’ #1’ &=’ .&&A1’ -<>1’ <-A’ A’0C&0’B’&-’9 <-A’ D< ’ D1’ 0<>1’ C ’1’ C@< - ’=’ 0D<@@ = -A1’ C@1..10’ &’ C? 0?1’D’0’ 01’A’ C@< - ’ ?BD’ C0&-10’ <0’ < ’ a-&K1-’ ` D1’ ’ ’-’ D< ’ &?- ’10’0P’ <-A’ D< ’ D1’ C< 1’ C@< - ’=’ 0D<@@ D<+1’ #? ’ &-’ C@< - 1’ =& ’ &&-’ 10C<001’ & ’ B&- <=@1 ’ -A’ ’=’ D1’ 1’A’ D’ 1=0’ -A1 0D’ 1=0’ D’ 1’ @1 a’0’ <a1’<-A’1- 1’ & ’ B<?01’ &’ #1’1- 1A’ <- ’ > &1’C@< - 10’ D< ’ D1’C@< ’=’0?CC& 1 D’ D1’ D< D’B<?01’ &=’<BB’&-’ <.1 -1’ D1’ ’’1=1-A<?- 9’ D< ’ D1-’ D1’01’A’ F 1=0’ -A1 A’’ 1=0’ D’ 1’ @1 @A0’ D< ’ A& D’ 1- 1’ & ’ B<?01’ &’ #1’1- 1 A’ <- ’ 0?BD1’C@< - 10’B&- / 1’ &’ D1’01’A’C+ 0’&-’<-A’ & A -<?-B1’0D<@@ =& =1’ 1’ =& ’ 1+O ’ A1=<? 1’ L@’0 ’ D1’ &-’ D<@=1’ D1 &=’ &’ #1’ D<A’ &’ D?01’ &=’ &? 1’01’A’ &, 1’. -’ & A1’ D1’ , ’-.’ <-A’ D1’ & D1 ’ C 1’ &’ D >’ & ’ D1 >’ D< ’ K&@@ 0?1’ <-A’ C+1’ D1’ 0<>1’ >< 1 ’ # ’ <BB’& -’ &=’ A1 1’ & ’ ’-=& ><B’&-’ ’-’ D1’ 0BD1H?1

02 &#!2’ . ’3!&#!’ 1 @#.-’&^+’ -< #!" & @’ .-’ &.-’ &- .’ !’ %# !SO!"

’ ’) ’ D< ’ D1’ ?0 ’B1O’ &=’ 1<0’ ’-’ D1’0<>1’ &?- ’10’ <-A’1+ ’ &=’ D1 >’ 0D<@@ D<+1’<?=’& ’ 1’?C&-’ B&C@< -’ ><A1’ # ’ D1’C< ’1’ 0&’ ?-@<?=?@@ ’ . 1+1A’ &’ 1L<> -1’ D1’ 01’A’ D’ 1=0’ -A1 0D’ 1=0’ & ’ D’ 1’ @1 a’0’ <-A’ @< - ’=0’ <-A’ ’=’ D1’ 01’A’ ?0 ’B1O’ &=’ 1<0’ & ’ &-’ &=’ D1 >’ = -A1’ # ’ D1’ ’ 1L<> -<B’&-’ A1=1? 1’ ’-’ D1’ 01’A’ D’ 1=0’ -A1 0D’ 1=0’ & ’ D’ 1’ @1 a’0’ ’-’ 1- ’ -.’ &=’ D1’ 01’A’ C@< - 10’ A’0B1’ =?@@ ’ =& ’ D’0’ ’ D1’ ’ <+<?- <.1’ <0’ ’0’ #1=& 1’ =1D1 B1A’ B&- 1’ &’ D’0’ C01- ’ <A@1’9 D< ’ D1-’ D1’ 01’A’ D’ 1=0’ -A1 0D’ 1=0’ <-A’ D’ 1’ @1 a’0’ 0D<@@ #1’ B&-+ = 1’ <-A’ < 1 - ’ &=’ D1’ 0<>1’ ==1-B1’ K’ D&? ’ =1 D1 ’ 1-H?1 1’ &1’ 1L<> -<B’&-’ <-A’ D< ’ D1’ 0D<@@ =& =1’ 1’ ?C&-’ D1’ 0<>1’ 1L<> ’-<B@&-’ L@0 ’ &’ D?01’ &=’ &? 1’ &, 1’. -’ & A’ D1’ , ’-.’ =& ’ 1+ ’ A1=<? 1’ <-A’ D ’ 01’A’ ?0 ’B1O’ &=’ C1<0’ D< ’ 0&’ 0D<@@ <a1’ D1L<> -<B’&-’ 0D<@@ R ’=’1’ D1’ 0<>1’ 1L<> -<B’&-’ K’ D’-’ <’ H?< 1 ’ &=’ <’ 1 1’ ’- &’ D1’ , ’-.’0’ 0 D1H?1 ’ ?C&-’ D1’ C< -1’ &=’ L@’0

! !-/ - 2’2 /+’ ; !’ 2011.-!/’ ;@’ 4 &#& 2 ; ’ 0-/’!/2

C ’=1 D1 >& 1’ D< ’ D1’ 01’A’ D’ 1=0’ <-A’ -A1 0D’ 1=0’ <-A’ D’ 1’ @1 a’0’ ><a1’ & ’ B<?01’ &’ #1’ ><A1’< 0?=’B’1- ’ CB1C 1’ &9 D1’ <’@@’=0’ &=’ D1’ @?-A 1A10’ &’ < <BD’0&>&-1’ & ’ K<>1’ D1’A1=1-A<?- 10’ D< ’ < ’ 0&’ ’-’ 0? 1’ &’ <CC1 1’ <-A’ <-0K1 1’ &’ D1’ 01’A’ C@1 & 10;’ -A’ ’=’ D1 1’ #1’ <- ’ A1=<? 1’ ’-’ D1’0<’A’ <’@@’10’ &=’ D1’ ?-A 1A’0’ ’-’ K< - -.’ &=’ D1’ "1=1-A<?- 10’ &’ <CC1 1’ <-A’ <-0K1 1’ &’ D1’ 01’A’ @< - 10’ B&>1-B1A’ <.1 -1’ D1 >’ ’-’ D1’ ’ &? 10’ & ’ ’-’ 1L1B? ’-.’ D1’ ’ 01’A’ &=’B1’9 D< ’ D1-’ D1’0<>1’ <’@@ =0’ 0D<@@ =& =1’ 1’ =& ’ 1+O ’ A1=<? 1’ ?-& &? 1’ &, 1’. -’ & A1’ D1’ , ’-.’ L@’0’ <-A’ &’ #1’ < 1 - 1’ <-A’ B&-+ 1’ D1 &=’# ’ = a1’ 1L<> -<B’&-’ &=’ D1’ ?0 ’B1O’ &=’ C1<B1’ & ’ 1, ’ &=’ D1 >’ <0’ #1=& 1’ ’0’ 1D1 B1A’ <-A’ D< ’ D1’0<>1’ D’ 1==10’ -A1 0D’ 1==10’ D’ 1’ @1 a’0’ <-A’ D1’ ’ A1C? ’10’=& ’ D1’ >1’ #1’-.’ 0D<@@ ><a1’ -&&-’ 10 1 ’0’ & @1+ 1’ D1’01’A’ ` D’ 100’ ’ < I ’<>1- ’0’ ?- ’@@ 0?BD1’ >1’ D< ’ ’ ’ ?0 ’B1O’ &=’C1<0’ KD1 &=’&-’ 0D<@#1’ &=’ D1’ ^?& ’ D<+1’D<A’ D1’ +’1F1’ <-A’ & 0’.D ’ &=’ D1=’#&a10’9 <-A’ D< ’ D1’ 0 1 ’0’ #1’1-A1- 1A’ #1 K’L 1’ D1’01’A’ ?0 ’B1O’ &=’ C1<0’ <-A’ D1’01’A’ D’ 1=0’ <-A’ -A1 0D’ 1=0’ <-A’ 01<@1A’ K’ D’ D1’ ’ 0B<@10’ D1’ &-’ C 1’ &’ 1>< -1’ K’ D’ D1’01’A’ ?0 ’B1O’ <-A’ D1’ & D1 ’ C 1’ K’ D’ D1’01’A’ D’ 1=0’ & ’ -A1 0D’ 1=0’ &’ D1- 1- ’ &’ ?-A1 0 <-A’ ’=’ <- ’ A’0B1’ 1’ #1’ & ’ ?- ?1’ A1>1<-&? ’ ’-’ D1 >’ ’ ’-’ ><a’-.’ &=’ D1’ ’ #&a10’9 <-A’ D< ’ D&01’C0&-10’)’ 0D<@@ #1’.1A1 1 0’ &=’ D1’0<>1’<>1 B’<>1- 10’ <0’ #<’@@’=0’ & ’ & D1 ’ &=’’B1 0’ #1’ 0K&>1’# ’ D1’01’A’ ?0 ’B1O’ D< ’ D1 ’ <a1’ -&’ >& 1’ >&-1 ’ D1-’ ’0’ =& =1’ 1’ <-A’ B&- 1 -1A’ ’-’ D1’ 10 1 10’ 01<@1A’ K’ D’ D1’ ’ 0B<@10’ &=’ D1’01’A’ ?0 ’B1O’ &=’ 1<0’ ?C&-’ D1’ 0<>1’C1 -1’ &=’=& =<’ ? 1’ <0’ #1=& 1’ ’0’ 1D1 B1A’ D1 &=’9 D1’ 0<>1’ .<A1 1’0’ &’ #1’ B&-+ B 1’ # ’ 1L<> -<B’&-’ &=’ D1’ ?0 ’B1O’ &=’ 1<0’ & ’ &-’ &=’ D1 >’ <0’ #1=& 1’ ’0’ 1D1 B1A,’ &+’A1A’ <@K1 ’ D< ’ D1’ 0 ’A’ ?0 ’B1O’ &=’ C1<0’ 0D<@#1’ <CC& - 1A’ <-A’ -<>1A’ <’ D1’ .1 <@@’ 100’&-0’ <= 1 ’ D1’ =10 ’ &=’ 1 - ’ @BD1@@’ D< BD<?-.1@@ # ’ D >’ D< ’ ’0’ ?0 &0’ & ?@& ’ &=’ D1’ 01’A’ &?- ’10’ & ’ 1@0’ # ’ D1’ 1@A10 ’ &=’ D1’ ^?& ’ ’-’ D’0’ <#01-0’9 &’ D<+1’ D1’ &, 0’.D ’ <-A’ B&?- &@@1>1- ’ &=’ D1’01’A’ D’ 1=0’ <-A’ -A1 0D’ 1=0’ <-A’ D’ 1’ @1 a’0’ <-A’ & D1 ’ &=’ D1’ 01’A’ ==’B1 0’ <-A’ &=’ D1’ 01’A’ D’ 1=0’ < I < > 1- ’0;’ -A’ D1’ 01’A’ ?0 ’B1O’ &=’ 1<0’ ?C&-’ 0?..10 ’&-’ & ’ ’-=& ><B’&-’ &=’ D1’C< ’1’ 0&’ . 1+1A’ 0D<@@ ><a1’ D1’@’a1’ C110’ ’-’ <-’ <BB’&-’ &=’ 10C<0’ < 1-0 ’ D1’ 01’A’ D’ 1=0’ -A1 0D’ 1=0’ & ’ D& 1’ @1 a’0’ <-A’ & D1 ’ D1’ =& 01’A’ &=’B1 0’ > 0A1>1<- -.’ <0’ #1=& 1’ ’0’ 1D1 B1A’ =& ’ &’ <CC1 1’ #1=& 1’ D1>’ &’ <-0K1 ’ &’ D1’01’A’ 0?..10 ’&-’ & ’ ’-=& ><B’&-

3"." .#!22’ * &-2’ !"& 2 ;@’ 20# ’ 02 &#!2

b" - ’ ;@’ M&-*’ /7 "/’ ’ ./’ !’ .-SO!2’ . ’ + &2’ ."7 # &-*’ !’ .7-’C#

C ’ , ’-.’ AK< A’ D1’ " 0’ ?C&-’ D1’K -- -.’ &=’ D1’ &K--’ &=’ <@1@0’ 10 <#@@00D1A’ <-A’ ><A1’ A’,0’ .&&A1’ < ? 10’ A’-<?-B10’ <-A’ <K10’ K’ D’-’ D1’0<>1’ &?-1’ =& ’ D1’0? 1’ <-A’ 0<?=’=B1C@-.’ &=’ D1’ 0<>1’ <-A’ #1 ?C&-’ =& ’ D1’0<>1’1- 1- ’ .<+1’A’,0’ 1- ’ =’ <-A’ =1’1 ’C@<B10’ #’@A1A’ D1’9 &’ A’,0’@& A10’ <-A’ -&##@1’ >1-’ D1-’ &=’ D’0’ < > 1’= 1@ ’ & D1 >’ <-A’ D1’ ’ D1’ 10’ K’ D&?’ <- ’ 1- ’ & ’ BD< .10’ 1@A’ -.’ =& ’ D1’0< <1 ’ 0<+1’ &-@ ’ D1’ = -A’-.’ &=’ R 1 -’ F< BD’0’@ > 1A’ &’ 1, ’ &=’ D1’ 01’A’C@<B10’ =& ’ D1’ 0? 1’a1C’-.’ &=’ D1’0<>1’ &?-9’ &’ D1- 1- ’0C’<@@’’ D< ’ D1’ 01’A’ F< BD10’ # ’ D1’ 01’A’ & A10’ <-A’D&-& <##@1’ >1-’ 0D?@A’ D1’ #1 1 ’ <-A’ >& 1’0? H’ <-A’=1 >1@ ’ #1’ a1C 1’ <-A’ >< - 1- A@’ <-A’ 0&’ ’ ’0’ -&K1’ D< ’ D1’&K-1 0’ &=’ D1’ > 00109B&-0a’1 ’ -& ’ D1< ’01’A’BD< .10’ ’A& D’ -& ’ D1 1’ D1’ 01’A’ F< BD10’ # ’ D1 >’ A?1’<0’ ’0’ <=& 101’A@’ # ’ >1<-1’ KD1 &=’ D1’ ? . 010’ &=’ D1’ 01’A’ &?-’ =& ’ D1’ 0?1 @1’ &=’ D1’0<>1’ D<+1’ #11-’ ><- ’ 1 10’ <-A’ 1 ’ - .D @ ’ #1 D’ & 1’BD< .1A@’ &’ D1’ ’ . 1< ’ >C&= <#@1’ @&001’ KD’BD’ D1 ’ B<--1’ -& ’ >< ’ B&- -?1’ <-A’ 0?0 1 -’ K’ D&?’ D1’ , ’-.’ &? 1’ &+1’.-’ & A1’ C+ A1’ =& ’ D1’ 1@’1=’ &=’ D1’0<>1’ &?-1’;’ !& ’ D1’ 1>1A ’ KD1 &=’ D1’ , ’-.’ &? 1’ &+1’.-’ & A1’ # ’ D<A+ 01’ &=’ D1’ & A’0’ 0C?<@@’ <-A’ 1>C<@@ <-A’ D1’ &>1-0’ &=’ D’0’ ==01- ’ C< @’<>1- ’<001>#@1A’ <-A’ # ’ <?=’& ’ 1’ &=’ D1’ 0<>1@ & A1 @’1 #’ <-A’1-<=@1 D’ D< ’ KD&’ D< ’ D< D’ 1- ’ = 11D&@A1’ K’ D’-’ D1’ &? " &=’ E<@1’0’ &? ’ &=’ D1’ KD’BD1’ <- ’ 1 1’ ’ BD< .1’ 0’ .&’-.’ =& ’ D1’0? 1’ a1C’-.’ &=’ D1’ 01’A’ &K--1’ =& ’ K< BD1’ & ’ & D1 K’01’ D< ’ D1 1<= 1 ’ B1<001’0 ’-’ A& -.’ &=’ D1’ A’ BD< .1’ # ’ D1’ 0C<B1’ &=’ <-’ 1 1’ <-A’ < A< ’ D< ’ D1-’ D1’ 01’A’ = 1D&@A’ #1’ 01’01A’ ’- &’ D1’ , ’-.’0’ D<-A’0’ D1’ &’ D<+1’ ’ ’ &’ D >

’ & D1 ’=0 ’ D1 1’ ’-’ D1’ &?- ’10’ KD’BD %’ .$-

P#* (' ' 4 . ' ' *(# (' ;.-

<-A' D'0' D1' 10@<-A' A? '-.' D1' >1' ' ' #1' '-' D1' D<-A'0' &=' D1' , '-.10' '.D-10@ D1' 10& 1 ' &=' <@1'0' <a1' D1' C=' 10' D1 &=' &' D1' , '-.10' ?01' <-A' #1< 1' D1' D< .10' 1 1@ ' .& -.' &? ' &=' D1' 01'A' = 11D&@A1' &K< A10' D1' 01'A' a1C'-.' &=' D1' 01'A' C?-@ <0' #1=& 1' D< ' >1' ' ' K<0' <BB?0 ?>1A' &' #1< 1@ '=' D1' 01'A' = 11' D&@A1' K&@@ D1 1' D1' 01'A' BD< .1G -A' '-' @'a1' K'01' #1' BD< .1A' D1' , '-.10' &>' 110' & ' D'0' C< 1- 110' =& ' D1' a1C -.' &=' D1' 0<A' &?-' <0' <=& 1' '0' 01'A ' -A' =& ' A1=<? 1' &=' D1' A& -.' &=' D1' 0<>1' # ' D1' 0C<B1' &=' <' 1 1' <-A' < A< ' D1' 01'A' 1- '0' 1= 0&-10' &' #1' 01<01'A' <0' '0' <=& 101'A¢ <-A' 0&' = &>' >1' &' >1' <0' &= 1' <0' D1' 01'A' D< .1' '0 -& ' B&- 1- 1' -1' C<'1A' # ' D1' 01'A' >1' <-A' A? '-.' D1' >1' `&='\' ' -/ D1' 01'A' 1-A0' #1' '-' D1' D<-A10' &=' D1' , '-.'0' '.D''10@ ' A' '=' D1' 01'A' 10& 1 ' &=' <@1'0' C< ' -& ' D1' 01'A' BD< .1' K' D'-' < 1 1' <-A' < A< @ D< ' D1-' D1' 01'A' 10&? 1 ' =< =1' 1' D1' A&#@1' +<@?1' &=' D1' 0<>1' &' D1' , '-.'0' '.D-10@ '=' D1' 1+1-?10' #1' <#@1' &' = -A1' D1' 01'A' F< BD10

'] >

' ' <.< -0 ' <a'-.' &=' !1<0<?- =' I ' < 'A.='

@ ! &=' <0>&BD' <0' A' 0' C0&-10' D<+ -.' @' @@ 0?#0 <?-B1' &' @ +1' ?C&-' ?01@ ><- ' >10' <0K1@@ # ' -1 10' 0' ' 10' <@'A' & D1 ' 1-. -10' &' <a1' <-A' A10 & 1' =10<?- 10' -A' C< 'BD10' ?C&-' D1' & A0D'C0' <,0 &-A10' <-A' 1- '0' &=' A',0' &K-1 0' <-A' C&00100'&-1 0' &=' D1' 0<>1@ K' D&?' @'B1-B1' B&-B<' ' & ' <.. 1>1- ' &=' D1' 0< -1' &K-1 0' & ' C& 010 '&-1 0@ # ' D1' KD'BD' D1' 0<>1' &K-1 0' <-A' C&00100'&-1 0' @&0 ' -& ' &-@ ' D1' ' C@1<0' 1' <-A' A'0C& 1' D< ' D1 ' D1' ' = 1-A10' <-A' +<?- 10' 0D?@A' D<+1' <#&? 1' D1' D<-a'-.' D-- -.' <-A' <a'-.' &=' D1' 0<>1@ #? ' <@0&' D1 '@&01' D1' C=' 1' <-A' <+<'@ D< ' # ' D1' &BB<0'&-' 0D?@A' . &K1' &' D1' ' D&?01D&@A@ &' D1' . 1 1' D? 1' &=' <@@ & A10' <-A' E1- '@>1-' <-A' & D1 ' D<+ -.' <- ' . 1< 1' @'+1@&A1' K' D'-' D'0' 1<@>1,' F D1 =& ' ' ' '0' & A1 -1A' <-A' 1-<^1A' # ' <?=@& ' 1' &=' D'0' C001-' C< @'<>1-' D< ' ' ' 0D<@@ -& ' #1' @1=?@@ &' <C ' C0&-1@ &=' KD< ' B& A'B'&-' D1' #1@ &' <a1' & ' B<? 1' &' #1' <a1-' <- ' =10<?- 10' & ' C 'BD10@ # ' -1 10' 0-< 10' & ' & D1 ' 1-. -10' &? 1' &=' D'0' &K-1' F< 1-' ?C&-' D1' = 11D&@A1' &=' <- ' & D1 ' C0&-1@ K' D&?' D<001- ' <.. 1>1- ' <-A' 0C1B'<@@ @ B1-B1' &=' D1' &K-1 ' & ' C&00100'&-1 ' &=' D1' 0<>1@ ?C&-' C< -1' &=' =& =1' ? 1' &=' L ' ' D1' &-' D<@=1' D1 &=' &' #1' &' D1' C '1' D< ' K&@@ 0?1' =& ' D1' 0<>1' # ' <BB'&-' &=' A1 1' & ' # '#'@@ & ' & D1 K'01@ <-A' D1' & D1 ' D<@=1' D1 &=' &' D1' &K-1 ' & ' C&00100'&-1 ' &=' D1' 01'A' . &?-A1' ?C&-' D1' KD'AD1' D1' 01'A' =1<0<?- 10' <-A' C< 'BD10' #1' 0&' <a1-

C ' ' ' '0' & A1 -1A' # ' D1' 01'A' <?I & @ 1' D' ' -&' >< ' &=' C0&-1@ &=' KD< ' B&-A'A&-' & ' A1. 11' D1' #1@ <a1' & ' B<?01' &' #1' <a1-@ #1' ' ' ?C&-' D'0' &K-1' . &?-A1' & ' <- ' D1 ' ><-- 0@ D1' 1..'0' &=' <- ' =<?B&-' .&001D<?a1' @<-1 0' & ' 0K<--10' &? 1' &=' D1' -10 1' ?C&-' C< -1' &=' >C '0&-1>1- ' &=' < 1 1' <-A' < A< ' <-A' @ -1' `< 1'0P' , '-.'0' K'@@ D1' &-1' D<@=1' D1 &=' & D1' , '-.' <-A' D1' & D1 ' D<@=1' & D1' &K-1 ' &=' D1' . &?-A1' KD1 1' D1' 1..'0' K1 1' 0& <a1-G <-A' D< ' ?0 'B10' &=' D1' C1<0' D<+1' <? & ' 1' # ' D'0' C 01-' <A1' & D1 1' <-A' AC 1 > -1' 0CBD1' >< 1 ' <0K1@@ # ' '-H? 0'A&-' <0' '-=& ><B'&-' <-A' C+10

C ' ' ' '0' & A1 -1A' # ' D1' 01'A' <?A& ' 1' D< ' -&' '<-' = &>' D1' =10 ' &=' <0BD1' -1L ' B& > -.' #1< 1' <- ' <?a1' &=' D1' # 1A1' &=' -.@ -A' B<@@'A' 1 01' .&001D<?a1' <001@@ @<-1 ' @<-1 1 1' & ' =<KB&-' ?C&-' C< -1' &=' =& =1' ? 1' &=' D'0' <?a1' & D1' , '-.' <-A' D1' 01'A' <?a1' & #1' < ' D1' , '-.10' C@1<0' 1G <-A' D< ' <@@ 0?B#1' C0&-10' D< ' # '-.1' <- ' '1001' <?a1' & ' <?a10' = &>' <- ' &=' D1' C '10' #1 &-A1' D1' 11' # '-.1' < '='B< ' ?-A 1' D1' ?0 ?>1 0' 1<@1' &=' D1' & 1' KD1 1' D1' =' 0 1' @<-A1A' K' D1' D1' 0AA' D<?a1' & ' D<?a10@ & ' '=' D1' B&>1' &K 1' &=' B& @<-A' D1-' ?-A 1' D1' 1<@1' &=' D1' F< A1 -1' & ' `D'0'0 ' @ 1? 1-<?- 1' &=' D< ' < BD1' D< ' D1' &>1 D' D? .D@ 10 '='1-.' D< ' D1' 0<>1' D<?a1' & ' D<?a10' #1' &=' D1' C< '10' #1 &-A1' D1' 11' & ' &=' B& @<-A@ ?C&-' D1'0<>1' C< -1G -A' D< ' C0&-1' D< ' # '-.1 D' <- ' 0 BD1' <Ka1' ' D<?a10' &' D1' , '-.' 0D<@@ D<+1' < 10&-<#@1' 1K< A1' &=' D1' , '-.' & ' 1@@'0' D1' 0<>1' D<?a1' & ' D<?a'0' =& ' D'0' @<#&?

C ' ' ' '0' & A -1A' # ' D1'0<>1' <?A& ' 1' D< ' -&' 8><-' <a1' <- ' 1@ E&001D<?a1' <001@@ & ' @<-1 ' & ' @<-1 1 '0' '-' D1' ' F< 1-' & ' F &&A10' & ' '-'<- ' & D1 ' C@<B1@ '> ' C? C&0@ ' A '+1' D1>' & 1' &=' D1' ' B&, 10' <BB?0 ?>1A' &' # 1A1' '-@ &' B<?01' D1>' &' .&&' &' & D1 ' B&C'10' &' # 1A1@ - '0@11' D1' =& ' 1- ' D? ' # ' D1' A&&-' #? ' 0?== 1' D1' &' C<001' < ' D1' ' @'=1 '10@ ?C&-' C< -' &=' L ' ' D1' &-' D<@=' D1 &=' &' D1' C '1' D< ' K&@@ 0?1' =& ' D1' 0<>1' # ' <BB'&-' &=' A1 1' `/')' 1L<> -<B' -' #1=& 1' D1' ?0 'B10' &=' D1' C1<0@ '-=& ><B'&-' ' & D1 K'01@ <-A' D1' & D1 ' D<@=' &' D1' , -.

" $ ' <@K1 ' D<' D1' <&' 1' &=' D1' =& =1' ? 1' <#&+1 1'A' .1+1-' &' D1' &K-1 ' &=' D.' . &?-A1' =& ' <a'-.' &=' K<--10' 1..'0' #1' ?- &@ D1' &K-1 ' &=' D1' 01'A' K<--10@ <-A' -& ' &' D1'$&K-1 ' &=' D1' . &?-A1

@ * "% ' ' !' .$- #

& ' -

; . ? (' ʻ . , ʻ &B ʻ &> P ' '

3 6 ʻ W -&

ʻ ' D< ' D1' <0 1 ' &=' D1' &@@=' <-A' & D1 ' =' B1 0 &=' D1' D<?-B1 ' 0D<@@ -& ' .&1' &' D1' 3 F< 0

0 @' . ' 0V! !' .' 2!"' !' &-' V 0"ħ

C ' i ' 1 ' 0?#.1 1' # ' D1' A? 1' &=' D=1' 1'.1<?-B1' I ' #&?-A1A' &' , +1' <-A' <00'0 1' D'0' ' -B1' <-A' &, 1'. -' & A1' < ' <@@ 1<0&-0' KD1-' -1A1' 0D<@@ 1 ? 1ĝ <-A' >&0 ' 0C1B'<@@ ' 0?BD1' C0&-10' <0' D<+1' # ' D >' C>&B'&-' ' <+<?-B1>1- ĝ <0' . <?- 0' <-A' .'= 10' &=' &=='B10' =110' I ' ='--? '10ĝ KD'BD' &K1' <-A' +1 '@ ' #1' #&?-A1-' &=' 1<0&-' &' D1' ' < 1-A<?-B1' ?C&-' D'0' &'<@@ C0& 1' &' A1=1-A' D1' 0<>1ĝ KD1-' D1' 0D<@@ =& ?-1' &' .&&' >' D'0' - 1 ' '-' F 1 10' =& ' D1' A1=1-B1' &=' D1' 1<@>1' & ' <.1 -0 ' D'0' 1#1@@10' <-A' 1--1> 10' =& ' D1' 0-#A? -.' <-A' 1C 100'-.' &=' D1 >' <-A' DA ' ><@'B'&?0' C? C&01;' F #1 =& ' ' ' #1' 1-<= 1A' <-A' 10 <#@'00D1A' # ' D1' , '-.' &K 1' &, 1'. -' & A1' # ' D<A+'01' &=' D'0' & A'0'

3!"2. -2 ' '&-*' &#!2' C#' ; @' b" - ' . ' !' & &-* ' C1.@1A' -.' 0' ! -/' &1' &-' V "' ' 2 +' ." !& ' 20# ' &#!2' C#

0='?<@@ <-A' 1>C<@@ <-A' D1' &>&-0' '-' D'0' 1 - ' C< @'<>1- ' <001>#@1A' <-A' # ' <? & ' 1' &=' D1' 0<>1ĝ D< ' '=' <- ' C0&-1' & ' C0&-10ĝ #1' -.' -' D'-' D'0' 1<@>1' &=' - .@&-A' & ' F <@10ĝ D<+ -.' 0?BD1' &=='B10' =110' & ' <--? 110' # ' <- ' &=' D'0' 1D1 B1A' .'= 10' <-A' . <?- 10ĝ A&&' -& ' .1+1' D1 ' < <0 A<?-B1' ?C&-' D >' KD1-' D1' 0D<@@ =& ?-1' &' .&&' '-' F 1 10' '-' D'0' C0&-1ĝ '-' D1' ' C0&-10ĝ <0' D1' ' 01'A' A? '1' #'-A1 D' D1 >'6 D< ' D1-' D1 ' <-A' 1, ' &=' D1 >' ><a -.' D1 &=' A1=' ? 1ĝ D1' , '-.'0' 0C '<@@ @'B1-B1' -& ' D<A' & ' 1@@'0' D1' D<+1' 0?BD' ?-=< -1A' 0'a-10' @1 '-.' & ' A'01<0' D< ' D1' >< ' -& ' '-' D'0' C0&-1' B&>1' &' A&' D'0' C0&-1@@ < 1-A<?-B1' <-A' , +' G1' <= 1 ' D1' =&? >1' <=& 101'A' <-A' D< ' A?@ ' C+1Aĝ D< ' D1-' 1 ' 0?BD' C0&-1' & ' C0&-10' =& =1' 0' <-A' @&01' D1' ' 01'A' &=='B10' =110' <-A' <--? 110' <-A' &' 0 <-A1' +&'A1' <' D1' , '-.'0' C@1<0' 1G <- '<=@1' & A -<?-B1' & ' 0 < ? 1' &' D1' B&-='A1' <=& 1' D'0' >1' D<A' & ' ><A1' -' <- ' K'01' -& K' D0 &-A'-.

.! 1 &.-2² ' 2 !'" . ' !' 7<+ ' 0/*!2' C#]

-&+'C "' D< ' D'0' < 1' 1L 1-A' -& ' &' -&&' 0C?<@@ C0&-1' <'0 1 ' &=' &@@10' -1' &' -&1' & D1 ' &=='B1 ' <-A' B@1 a10' &=' C1' #<?- 1' ?0 'B10' &=' 1' D1 ' 1-BD10' < &-0' &=' D1' , '-.'0' 0BD1H?1 ' <-A' & D1 ' =='B1 0' <-A' @1 a10' &=' D1' 01'A' C@<B10' D1' , -.'0' & -1'0' <-A' &@'B' &? ' <-A' D1' 1 .1<?- 10' < ' D1' <K1

&#!"Z '4!"7&#E' -/ "+&2+!D +!"E' . ' !' .0-#&+

ĝ <&+' " "' <@K1 ' D< ' D'0' Q'1' 0D<@@ -& ' 1L 1-AO' &' <- ' C0&-10' D<+ -.' <- ' 0?BD1' &=='B10' &=' D1' , '-.'0' '.D-10ĝ <-A' #1'-.' '-') ' M+'B1' K' D'-' D'0' &K-10' <-A' !& <@@'B10' &=' 1 K'a1' <-A' < @'@1G -1' &' D1' @1 a' &=' D1' , '-.'0' &?-B1@@ =& ' D1' >1' #1'-.

ʻ]]

ʻ ' <.< -0 ' CD&@0 1 0

; 7 !Z &-' !' ?=='-.' . ' B! !";!/2' C#

ʻ D1' '.D ' K& 0#'C=?@@ &>&-0' '-' D'0' C001-' < @'<>1- ' <001>#@1Aĝ 0D1K1 D' ?- &' &? 1' A'0B 1 1' F '0A&>10' '='1' F< A1 -0' &=' D1' ! 1@'0D'C' &=' D1' <= 1' &=' ` CD&@A1 0' 'P' K' D'-' D1' ' '1' &=' &-A&-'G D< ' KD1 1' <0' A'C0' C0&-10' K' D'-' D1' 1<@>1' &=' - .@&-A' &? 1' &=' D1' 01'A' '='1' ><a1 D' <-A' A& D' &' #1' ><A1' ?-@<?=?@@ <-A' =<@0' F < 10' <-A' < BD<?-A'010ĝ &' D1' . 1 1' 1#?a1' <-A' A'0B@<?-A1 ' &=' D1' 01'A' <= 1' <-A' <@0&' . 1< 1' &CA'1' @&001' <-A' A'0B1' 1' &' D1' , '-.'0' ?#.1 '0ĝ F D1 =& ' D1 ' '0' -&1' 0?=='B'1-' 1>1A ' C? +1'1Aĝ =& ' 0&' >&BD' <0' D1' 0<>1' F D A1 -10' D<+1' -&1' C&K1 ' -C ' <?=a& ' 1' &' ><a1' A?1' 01 BD' &=' 0?BD1' ='@@0' A'0B1 +<#@1' F < 10' <-A' < BD<?-A'010' C? 1' &' 0<@1' &? 1' &=' D1' 1'A' ' '=ĝ <0' D1 ' D<+1' C&K1 ' <-A' <?= # ' 1' K' D'-' D1' 0<>1' ' 1ĝ <0' '-' =1A1 #1AA10' #&@0 1 0' <-A' C'@@&K0' ><A1' &=' ' ' ><5' &=' B ?C 1' 0 ?==10ĝ D<' '0' &' 01 ' &='0B<@A1A' =1A1 0' <-A' A '1' C?@@1A' =1A1 0' &' .1A 1' <-A' &=' =@&aa'0' <-A' =1A1 0' &.'A 1ĝ KD'BD' '0' B&- <.'&?0' =& ' ><-- 0' #&A ' &' @ 1' &-'G <-A' <@0&' '-' H? @ 10' ` >< 100P' <-A' B?00'&-0' 0 ?==1A' K' D' D& 1' D1 1ĝ=1-' A&K< ' -11A0' D1 1ĝ A1 '0' D1 1ĝ <-A' .&A0' D1 1ĝ KD'BD' '0' K &?.D ' '-' @ >1' =< 10ĝ <-A' # ' D1' D1 1' &=' ><-- 0' #&A ' D1' 0<+&? ' <-A' <0 1' '0' 0&' <#D&> -<#@1' <-A' B&- <.'&?0' D<' ><- ' &=' D1' , '-.'0' ?#.1 '0' D1 # ' #11-' A10 &'1Aĝ KD'BD' A'0B1 =& ' ><a'-.' &=' D1' =& 01'A' B& ?C 1' <-A' ?-@<?=?@@ 0 ?==1' '0' &' D1' . 1< ' @&001' <-A' 1>C& 00D'-.' &=' D1' , '-.'0' @'1.1' C1&C@1ĝ <-A' <@0&' . 1< 1' 1#?a1' <-A' A'0B@<?-A1 ' &' D1' 01'A' <= 1' &=' CD&@A1 0' ; D1 =& ' ' ' >< ' C@1<0' D1' , '-.'0' '.D-10' <-A' ' D<A+ 01' &=' D'0' @& A10' < @@' <-A' 1>C<@@ <-A' D'0' &>&-0' '-' D'0' C 01- ĝC< @'<>1- ' <001>#@1A' <-A' # ' <? & ' 1' &=' D1' 0<>1ĝ &' 10 <#D00D' & A1 -1' <-A' 1-<=@1ĝ D< ' = &>' D1-0=&? D' -&1' C0&-1' -1' C0&-0' 0D<@@ ><a1' ? 1 ' -1' C? 1' &' 0<@1ĝ '-' =1'1 0' -1 ' '-' >< a1 A0' K' D'-' D'0' D'0' 01'A' 1<@>1ĝ <- ' =1A1 #1AA10' #&@0 1 0' & ' C'@@&K10ĝ 1LB1C 1' D1 ' #1' 0 ?==1A' K0' &&-1' U'<5' &=' 0 ?==1' D< ' '0' &' 01 ĝ K' D' A '1' C?@@1A' =1A1 0' & ' 1@@'0' A1-1' A&K-1' <@@&-1ĝ <-A' K' D' D&' 0B<@A1A' =' D1 0' -& ' ! -' A&K-1' -& ' -&-1' & D1 ' ?-@<K=?@@ <-A' B& ?C 1' 0 ?==10' <0' '0' <=& 1' 1D1 B1Aĝ #?' ? 1 @ ' &' #1' A<>C-1A' =& ' 1 G 1LB1C 1' '=' <- ' C0&-1' & ' C0&-10' D1 ' &K-1' CC 1' ?01' '-' D1' ' #&K010' ><a1' & ' A&' &' #1' ><A1' <- ' &=' D1' =& 01'A' B& ?C 1' <-A' ?-@<K=?@e' ?==1' <-A' F < 10ĝ 0&' D1 ' #1' -& ' &== 1A' &' #1' 0&@A1' '-' =1'1 0' -& ' >< a1 '0ĝ ?C&-' C< -1' &=' =& =1' ? 1G -A' <@0&' '-' @'a1' K'01' ^? @ 10' < <0010' <-A' ?00D&-0' #1' 0 ?==1A' K' D' &-1' ><5' &=' ?==1ĝ D<' '0' &' 01 ' K' D' B@1-' F&@@1' & ' A1-1' ==&Ba10' <@&-1' <-A' K' D' -&-1' 0?BD1' ?-@<?=?@@ ?==' <=& 1' 1D1 B1Aĝ ?C&-' C< -1' &=' @&001' <-A' =& =1' ? 1' &=' <@@ 0?BD1' ?-@<K=?@e' F < 10' <-A' < BD<?-' '010

; -!'2 +' 2 0 ' 4!/2' C#' 7& ' &-< \: !"B! !"2' C#' . -' 3 &-' ' B." !& 0"!

' D'0 /' >< 10010

' .+2 !"2 %+' . $- +

' 9

' ' <.< -0 ' 1B&+1 10 <-A ' '0B&- '-?<-B= ><A1 # ' 1-3- = '-' "&K1

' B1 1 D 10#-<#@1 &-0'A1 <B'&-0 #1' ' & A1 -1A 1-< 1A <-A 10 <#@'00D1A # ' D1 , '-.' B? 1 &, 1'.-' & A1 <-A # ' D<001-' &= D1 & A10 0C?<@@ <-A 1>C<@@ <-A D1 &>1-0 '-' D'0 C01-' < @'<>1-' <001>#@1A <-A # ' < ' & ' 1' &= D1 0<>1 D< ' '= <- ' F &><-' KD'BD D< D D<A & ' D1 <= 1 ' 0D<@@ D<+1 <- ' <0 < 1 '@@ "&F1 ' & ' =& ' = '>1 &= @'=1 & ' '-' <'@@ &'- @ ' K' D D1 ' D?0#&-A & ' &-@ ' & D1 ' 01@=1 & ' & D1 ' ?01 '-' <- ' < 0 &-A10 1-A0 & ' & D1 1 1A' <>1- = &= D1-D1 ' <? 'B1 & ' C? BD<B1 &= D1 ' D?0#&-A & ' .1+1-' & D1 01'A D?0#&-A <-A' K'= '-' <'@@ & ' =& ' R>1 &= @ =1 # ' <- ' &= D1 ?-B10 &? 0 &= D1 01'A D?0#<-A ' & ' # ' <- ' & D1 ' C0&-1 01<01A & D?01 &= D1 01'A D?0#&-A & ' &= D'0 ?-B10 1 0 <-A D<+1 & ' 0D<@@ D1 1<= 1 ' #1 -.8 &@1 & ' K' D <- ' & D1 ' <= 1 ' <a1-' D?0#C-A A'0B&- -?1A & ' A'0B&- -?1 <@'1-1A 1@1<001A & ' B&-=1 >1A <@'1-1 1@1<0 & ' B&-=1 D1 K' D F < <- '1 & ' # ' &+ -1 0?== 1A & ' 0?== 1 <- ' 1B&, 1 &= D1 0<>1 <.1 -1 D1 >' & ' <- ' &= D1>' & ' <- ' & D1 ' 01<01A & D1' ' ?01 & ' & D?01 &= 1'' D1 ' &= D1 >' <= 1 ' D1 =&? >1 <=& 01'A D< ' <@@ 0?BD1 1B&, 11\' `A'0B&- -?<-B1'/'P' <@'1-<B'&-0 1@1<0010 B&-=' ><B'&-0 <-A K<=<-A10 0& D<A <-A ><A1 <-A = &>' D1-0=&? D & #1' D<A <-A ><A1 #1' ? 1 @ ' +&'A1' <-A &= -&-101==1Q 1 -A D< ' ' 0D<@@ #1' @1=?@@ & 1, ' C0&-1 <-A C0&-10 & KD#>1 D1' '- 10 ' @1 &= D1-D1 ' <?-B1 <= 1 ' D1 A1B1<0 &= D1 01'A F &>1- &= D1 1'A < 1 0 &-A10 <-A 1-A0 & ' & D1 ' 1 1A' <>1- '0 #1 .' A'0B&- -?1A <@'1-1A & ' 0?== 1A & #1 1B&C1A <= 1 ' D1 =' 0 ' A< ' &= "1B1 -=1= -1L 1 B& >.' '-' CO =&? >1 <=& 10<'A 0D''@A <CC1 1 -1 &' 1- 1 '- & <@@ <-A 1 ' &= D1 C> 0010 <-A C1<0'#@1 & C&001A1 <-A 1- & 1 D1 <>1 '-' 0 B#1 ><5 <-A =.? >1 <0 D1 & ' D1 ' 0D?@A D<+1 A&&C '= -&&-' 0?BD A'0 &- -?<?-B1 F< <- '1 -1 ' 1B& A D<A #1' D<A -1 ' ><A1

-' +&!- &.-' . ' 20# ' 2 !2 ;@' ' V.1 -' -/' !" !"L E!-' 02)' ; -/' 6!'!"2&.-!" 1 @' !- !" /0"&-*' !' & !' . ' !' 02; -/= ;0 ' !' V.-2 -' 1 @ "!L!- !" !" &2 !#! 2!

' ,' D'0 #1' ' ' & A1 -1A <-A' 1-<=@1=" # ' D1' 01'A' <?A'& ' 1' D<' '=' <- ' &= D1' 01'A' D?0#<-A'0 <-A' F &>1-' & ' <- ' & D1 ' 01<01A' & ' D<' 0D<@#1' 01<01A' C' D?01' &= D >' &= D1' C0 < 1' <=& 1' 0C1B'='1A <= 1 ' D1' 01'A' =' 0 ' A< ' &= " 1B1>#' A& ><a1' & ' B<?01' &' #1' ><A1' & ' 0?== 1' <- ' 0='BD' A'0B&- -?<?-B1' <@'1-<B'&-0' K< <- '10' & ' 1B&C110' '-' =&? >1' <=& 101'A D<' D<-' ' ' 0D<@#1' @1=?@@ & D1' C0&-1' & ' C0&-10 & KD&>' D1' 01'A' < 0' <-A10 <-A' 1- '0' 0D?@=" & ' &?.D ' & #1@&-.1' <= 1 ' D1' A1B1<0' &= D1' 01'A' F &><-' & 1- 1' '- & D1' 0<>1' <-A' D1 >' & C&001A1' <-A' 1- & 1 <BB& A'-.' & 0?BD' ' @1' <-A' '- 10 ' <0' D1 ' 0D?@A' D<+1' D<A' '-' D1' 0<>1 '= D1' 0<>1' = F &><-' D<A' 1-' A1A -&1' A'0B&- -?<-B1' K< <- '1' -1 ' 1B&C1' D<AA1 <0' < 1-0 ' D1' 01'A' D?0#&-A' A? '-.' D'0' @'= ' '= D1' 01'A' A'0B&- -?<?-B1' <@'1-<B'&-' K< <- '10' <-A' 1B& 110' #1' D1 <= 1 ' D<A' # ' ' < 1-0 ' D1' 0<>1' D?0#&-A'0 <-A' K&>1-' A? '-.' D1' & ? 1' <-A' 10C&?01@@ #1 K'L 1' D1>' ; &+'A1A' <@K1 ' D<' D1' 0 'A' F &>1-' <= 1 ' D1' A B1<0 &= D1' ' 01'A' D?0#<-A'0 >< 1' 11- 1' '- & D1' 0<>1' < 10' &-A10 <-A' 1-1>1- 10 <-A' D1 >' &' 1- & 1' <BB& A'-.' C' D1' ' = ' 0 ' <0 < 1' '-' D1' 0<>1

' '-' ' +&!- &.-Z ;@ 20# ' V.1!-' ;!&-* <-A' ><A1' &= <- ' &= D1' C> 001 #1' 0&@1 D<' D1-' 0D11' 0D<@#1' #< 1A' <-A' 1LB@?A1A' &= D1 ' @1' <-A' 1- 1 10 ' '-' D1 0<>1' = &>' D1-0=&? D;' -A' D<' D1' C &-1' <-A' C0&-10 & KD&>' D1' ' @1' '- 1 10 ' <-A' C&00100'&-' &= D1' 0<>1' 0D?@A' #1@&-.1' <= 1 ' D1' A1B1<001' &= D1' 01'A' F &>1-' 0D<@@ >>1A'< @ ' <= 1 ' D1' 01'A' A'0B&- -?<?-B1' <@'1-<B'&-0' K< <- '10' <-A =1B&C110' 1- 1 ' '- & D1' 0<>1' < 0' &-A10 1- 10' <-A' & D1 ' 1 1A' <>1- '0' <-A' D1 >' & C&001A1' <-A' 1- & 1' <BB& A'-. & D'0' & ' D1' ' ' @1' '-' D1' 0<>1

3". '&2.' '" +&!- &.-Z ; ! ." /' VZ ' 22!/

(' <@0& D<' D'08 1' 1L 1-A' -& ' & <+&'A18<- ' 11&C1' A'0B&- -?<?-B1' ' F < <- '1' <= 1 ' D1' =&? >1' <=& 01'A' <=& 1' D'0 >1' D<A' ><A1' & ' 0?== 1A @ #?' & -@ ' KD1 1' D1' 01'A' D?0#&-A' <-A' F &><-' & ' 1' D1 ' &= D1 >' -&K1' #1 -.' <' @ +1 ' <- ' & D1 ' & D1' ' ?01' -&K1' D<+1' 1- 110' <-A' =' @1' & D1' <1'A' < 0' &-A10' 1- '0' & ' & D1 ' 1 1A' <>1- 10' <@ 1-1A' A'0B&- -?1A' &C 0?== 1A' & #1' 1B& 1A' <= 1 ' D1' =&? >1' <=& 01'A @ <-A' D1 B= -&K1' <a'-.' =D'00?10' <-A' C=' 10' & ' <- ' & D1 ' C0&-1' & ' &-10' & D1 ' ? 1'

3". '&2.)' '" +&!- &.-$ 7& ' -2!-' ' 6!'!"2&.-!"2

' 7 ' <@0& D<' D'0 ' 1L 1-A1' -& ' & <- ' 0?BD1' 1B& 1' & ' A'0B&- -?<-B1' & #1' D<A ' KD1 1' D1' D1' 10' -1L ' '-D1 ' <#@1' & D1' 01'A' F &><-@ & ' D1' & ' D1 ' D<' -1L ' <= 1 ' D1' A1 D' &= D1' 0<>1' F &><-' 0D?@A' D<+1' &= ' < <1' &= ' 'D1 ' <?-B1' /)/ D1' 0<>1' < 0' &DA1 ' & ' 1-1>1- 10' #1' <001- -.' & ' <.. 1<#@1' & D1' 0<>1' 1B& 110' KD1 1' D1' 0<>1' <001-' <-A' <.. 1>1-' #1' &= 1B& A1' & ' '- &@@1A

3". '&2.' '" +&!- &.-Z ; @' 20# ' V.1!-' .' !&" &' !Z .-+@

' <@0& D<' ' ' 0D<@@ #1' @1=?@@ & 1C ' 0?BD1' F &>1-@ #1 -.' 0&@1' ' -< '1A' +' ' D1' A1A" ' D1 ' =' 0 ' = ?0#&-A1 & .1+1' 01@@ ' ><a1' A'0B&- -?<-B1' &= ' <- ' 0?BD1' -A10 >1' ' D1 ' @'=1' &&-@ @ <= 1 ' D1' BB 01' <-A' ? 1' &= D1' &>1-' <K1' #1=& 1' D1' ><a'-.' &= D'0 C01-' M1

2A'0B&- '-?<-B10 0'- % .$-

' ' ! ?" ?? ; . ;

<-A' <= 1 ' <- ' 0?BD1' B& -CB'&-' # ' D1' 01'A' . <?-A' ? ')' =&?-A1-' D<' D1-' D1' ? &? ' & ' ? #? 0' &=' D1' 01'A' C1 ' ' ? '# D1' ' ?-'0D>1- D<' '0' =&?-A1-' 0&' A1=1=@'=' '-' <a'-.' <-A' CB1 + -.' <- ' &>10' &=' &-1 ' & ' & D1 ' 1K< A1' & ' C> 001' &=' 1K< A1' 0D<@@ @&01' =& =1' 1' <-A' C< ' &' D1' C@< - '=' & ' C@< - '=0' -<>1A' '-' D1' 01'A' 1 - ' L' '>10' D1' +<@?1' &=' D<' 0&>1' & ' & D1 1K< A1' 0&' <a1-' CB1 +1A' & ' C > 01A' '-'=&? >1' <#&+1' 01'A@ <-A' ` &'0P' 0?= 1' >C '0&-1>1-' K' D&?' #<'@1' & ' >< -C '01 +' >&-1 D'0' & ' @1001' # ' D1' A'0B 1B'&- &=' D1' 01'A' <' 1' <-A' @A1 >1-' '-A' ` &' 0#' 0?== 1' >C '0&-1>1-' K' D&?' #<'@1' & ' >< -C '01 ? ' #1=& 1' <- ' 1>C<@@ ?..1

' 8' D<' #1' ' ' 1-<= 1A' D<' 0?BD1' A1=1-A<?-' & ' 1-<?-' A1=1-A<?- 10' & ' 1-<?- 10' '-' D1' <>1' 1 - ' 0D<@@ @&01' =& =1' 1' <-A' C< @ &' 0?BD1' ?01' <-A' #1D&=' <0' & D1 ' C1-<@ 110' #1-' =& =1' 1A' K' D'-' D1' 0<>1' ' '1@ L' >10' D1' +<@?1' &=' D<' 0& >1' &=' &-1 ' & ' & D1 ' 1K< A1' # ' D >' & ' D1 >' 0&' &+1-' &' <- ' &=' D1' 01'A' C1 ' ' ? '0G -A' D1' 0<>1' " 1=1-A<?- ' & ' 1-<?- ' A1=1-A<?- 10' & ' 1-<?- 10' ` &'04' #1' >C '0&-1A' D1 ' &' 1>< -1' K' D&?' #<'@@ & ' >< -C '01' A? ' -.' + ' >&-1 D1'0' & ' @1001' # ' D1' A'0B 1B'&-' &=' D1' 01'A' <' 1' <-A' @A1 >1-' ;' -A' '=' <- ' A1 10' A<><.10' & ' B&0 1D' #1' 1B&A1A' '-' <- '<BB'&-' KD1 ?C&-' 0?BD1' 1 - ' '0' . &?-A1A@ <-A' # ' D1' 0<>1' 1 - ' `' D<' 0P' ' #1'=&?-A1' D<' D1' C1 ' ' ? '1' D<+1' .1+1-' <' =<@01' 1 1>1- @ D<' ` D<-' W4' =& ' D1' 1B&+1' <-A' 10 ' ?B'&-' &=' D1' 0<>1' A1 1' A<><.10' <-A' B&0 '0' D1' C@1 - '=' & ' C@1 - '=0' '-' 17 ' 1- 1' V0D<@@ <-A' >< ' D<+1' <-A' 0?1' <-' BB'&-' &=' "1 ' < 1-0 @ D1' 0<>1' A1=1-A<?- 1' & ' 1-<?-' # ' F ' 1' '@@ & ' @< - 1' '-' 1 ' &=' D1' , '-.10' &? 10' KD1 '-' D1' 0<>1' A1=1-A<?-' & ' 1-<?- 1' <-A' 17 ' &=' D1 >' 0D<@@ -& ' #1' 1B1 +1A' & A&' D'0' @<K1

' 8' D<' #1' ' ' 1-<#@1A' D<' ' <-' C@< - '=' & ' C@< - '=0' '-' <-' 0?BD1' 1 - ' B&>1-B1A' #1=& 1' D1' 01'A' U 1' <-A' @A1 >1-@ ?C&-' <-' 1B& A1' 1><-.' K' D'-' D' 0<>1' ' '1' `<-A'/4' D1 '-' #1' -&-0? 1@ & ' '=' D1' =' 0' 1 1>1-' D1 '-' #1' <==1 >1A@ D<' D1-' D1' & ' D1 ' 0D<@@ D<+1' >C '0&-1>1-' <-A' ><a1' = -1' # ' D1' A'0B 1B'&-' &=' D1' <' 1' <-A' @A1 >1-' &=' D1' 01'A' ' '1' =& ' D1' >1' #1 -.' <-A' D<' = -1' &' #1' <-A' .&&' &' D1' <' 1' <-A' &' <@ 1' &=' D1' 01'A' ' '1; -A' '=' D1 ' #1' ' ' & ' >&' C@< - '=0' '-' <- ' ?BD1' 1 - ' & A1 -1A' # ' D'0' 10 < ? 1' <-A' <- ' &=' D1 >' A'1' & ' #1' -&-0? 1' D1' & D1 ' # ' D'0' =';1' 0D<@@ #1' 1-<#@1A' &' 0?1' =& ' D1' CB1A' -.' '-' D1' 0<>1' 1 - G <-A' -& K' D0 &-A' -.' D1' A1 D' &=' D1' A1=1-A<?-' & ' 1-<?-' A1=1-A<?- 10' & ' 1-<?- 10' & ' &=' <- ' C=' D1' C1 ' ' ? ' -<>1A' '-' D1' 0<>1' 1 - @ 0&' D<' D1 ' #1' &&' C=' D1' 0<>1' C1 1' ? ' &-' @ +1@ D1' 0<>1' 1- ' 0D<@@ -& ' <#< 1

' ' <@0&' #1' ' ' & A1 -1A' # ' D1' 0<>1' <?#@& ' 1' D<' '=' <- ' '!&=' D1' ? &? 0' &=' D1' 01'A' . <?-A1' ? ' ' >C<-1@@1A' -A' 0&>&-1A' '-' =<? >1' <=& 01'A' <' D1' &>&-0' ><a1' A1=<? 1@ 0&' D<' D1' 1 - ' 1>< -1 D' &' #1' <a1-' =& ' A1=<? 1' &=' ? &? 0@ D<' D1-' 1+ ' &=' D1' 0<>1' ? &? 0' 0&' ><a'-.' A1=' > 1' @&01' <-A' =& =1' 1' =& ' D1' =' 0 ' A1=<?@ ' L@' 0" <-A' <' D1' ' 0' A1=<?@ ' ' @' ' <-A' < ' 1+ ' A1=<? 1' <= 1 ' D<' a' ' ';' -A' @'a1' CB1001' &' #1' ><A1' <-A' 0?1A' D1 ' < 1-0 ' D1' . <?-A1' ? ' <-A' C1' C1 ' 1' ? @ <-A' D1' C '1' <-A' C '10' <0' '0' &' #1' ->A1' <-A' 0?1A' '-' 1 - ' 0?1A' < ' '@1' &>1-' <K1@ <-A' D<' D1' 0<>1' CB1001' #1' 1 & -<#@1' < ' 17 ' ?0 '-.10' &=' &1-' @110G <-A' D<' D1' 1 - ' 1><-1' -& ' &' #1' <a1-' <= 1 ' D1' =' 0 ' &>&-0' 1 &? -1A' '' & ' # ' D1' A1=<? 1' &=' D1' A1=1-A<?- 1' & ' 1-<?- 1' A1=1-A<?- ' ' & ' 1-<?- 10' ' &=' <- ' &=' D1' C1 ' ? ' -<>1A' '-' D1' 0<>1' 1 - ' # ' D'0' #@1' & A1 -1A' G -A' D<' D1' 01'A' '00?10' & ' C1-<@ 110' =& =1' 1A' # ' <- ' &=' D1' 0')' . <?-A1' ? ' #1' =& =1' 1' @1+ 1A' <-A' CB1 +1A' &' D?01' &=' D1' <' 1' <-A' &@<@ '1' &=' D1' 01'A' ' '1@ <-A' D<' -&1' C 1BA&-' -& ' 100& -' #1' <@@&K1A' '-' D'0' 1 - ' # ' D'0' 1' C? +1 1A

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F ' A 0' 10 < ? 10' #1=& 1' D'0' /')' D<+1' #1-' ><A1' <-A' & A1 -1A' =& ' 1 +<?- 10' &=' ?0#&-A ' <-A' <@0&' =& ' <#& 1 0' <-A' '=' B1 0@ # ' A'7'0' <-A' ><- ' &'<@@ <-A' -&#@1' C.1-' &? 0' ?- &' B? 1' &71'. -' & A0' D1' , '-.' -&K1' #1 -.@ <-A' '-' 10C1B'<@@ <' 0 < ? 1' ><A1' # ' D1' '.D' -&#@1' B '0 1-' '-B1' &=' #@1001A' >1>& ' , '-.' 1-=' D1' + ' ?-B@1' ?- &' C? 1' 01'A' &71'. -' & A1' D1' LL'' ' 1 1' &=' D'0' <'. -' W KD'BD' -& K' D0 &-A'-.@ . 1< 1' <-A' ><- ' A1=<? 0' A<'@@ ' 1-B 1<B1' 10 1' <-A' B&= -?1' <>&-.10 1' @<#H 10' <-A' < '='B1 0@ 0? > 1' #1' B<?01' D1' 01'A' 10 < ? 10@ #1' -& ' 1L1B? 1A@ <-A' 0&>1' #1' B<?01' D1' 1>1A ' # ' D1' 01'A' 10 < ? 10' '0' -& ' +1 < ' C=' 1' -& ' 1+ D' R 1 -' -1' D<0 ' 1>1A ' G &' D<' A<'@@ ' # ' D1' ' 0?# '@@ ><. -<B'C-' '-' A1= <?A1' &=' D1' 01'A' 10 < ? 10' ><- ' &=' D1'] ' -.' &? 1' &71'. -' & A'0' 0?#.1 '0' #1-' D? 1' A'0B1 +1A' @1 1' <-A' 'CA<><.1A' '-' D1' ' #'@A' -.' <-A' D?0#&-A G 1' ' ' D1 =& ' $10 <#@'00D1A' 1-<#@1A' <-A' & A1 -1A' # ' <?=@& ' 1' &=' D'0' C001-G C< @'<>1- ' ! ' 0 ' D<' -&1' #>@@ ' &=' ?0#&-A ' 0D<@@ <a1' =& ' D'0' F<.'0' # ' 'D1' 1 1' <#&+1' `LL+ ' 0 04' $ W ' ' ' <-A' =& ' D'0' B@& D'-.' +' 0 ' K' D' >1 1' <-A' A '-a1G &' BD'1=' D -1' & ' <' < 1 ' & ' BD'1=' D1C1D1 A' <#&+1']] ' 0 ' # ' D1' 1 1' <-A' =& ' D'0' B@& D'-.' +' 0 ' K' D' >1 1' <-A' A '-a1G &1' B&>1-' +<?-' & =' D?0#&-A ' <#&+1' L+ ' 0 ' +'' ' A

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' ' =1 D1 > & 1' KD1 1' A' C0' < '=' B1 0' <-A' @<#& 1 0' 1 1 - 1A' &' K1 a1' <-A' 01 +1' K<0 1' > &BD' C< ' &=' D1' A< ' <-A' A101 +1' -& ' D1' ' K<. '0 9 0? > 1' > 1' '-' @< 1' B& > - .' ?- &' D1' ' F 1 a1 9 1 @ ' A1C< '- .' D1 = &9 @&- . 1' 0' '- .' < ' D1 ' # 1a=<0 ' < ' D1 ' A - 1 ' <-A' - H - 1 > 1 19 <-A' @&- .' > 1' &=' 0@1C' '.' < ' <= 1 ' - & - 19 &' D1' @&001' <-A' D? 1' &=' 0? BD' C0&-10' <0' D1' 01' A' < '=' B1 0' <-A' @<#& 1 0' #1' 1 1 -1A' K' D' '-' + ' B1 G ' '0' D1 =& ' 10 <##' 00D1A' 1 - <= 1A' <-A' & A -1A' # ' <?' = ' & ' 1' <=& 01' A' D< ' 1C ' < '=' B1 ' <-A' @<#& 1 ' #1' < ' D'0' K1 a1 9 #1 K1 -' D1' > AA10' &=' D1' > & - 1 D' &=' < BD' <-A' D1' > AA10' &=' D1' > & - 1' D' &=' 1C 1 > # 9 #1=& 1' + ' &=' D1' @&Ba1' '-' D1' > & - - . ' -A' D< ' D1' D< + 1' #? ' D< @=' <-' D&? 1' =& ' D'0 # 1a1=<0 9 <-A' <-' D&? 1' <-A' <-' D< @=' =& ' D'0' A - 1 ' < ' 0? BD' > 1' <0' D1' D< D' 01< 0&-' =& ' 0@1C1' & D > 8 < CC& - 1A' # ' D'0 10 < ? 1 9 <-A' < ' 0? BD' > 1' <0' '0 D1 '-' <CC& - 1A' D< ' D1' 0D<@@ -& ' 0@1C1' D1 -' D1' & D< + 1' #? ' <-' D&? 1' =& ' D'0' A - 1 ' <-A' D< @=' <-' D&? 1' =& ' D'0' -& - 1 > 1 1 6 <-A' D< ' D1' A1C< 1' -& ' = & > ' D'0' K1 a1 9 #1 K1 - 1' D1' > AA10' &=' D1' 01' A' <&-1 D10' &=

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3!- + @’ . -’ 2 &/’ &#!"Z .“ ! *+! /=’ R#’ .2Z . ’ &#! ’ -/’ 1 "&2. - 1 ! -)

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B!!Z @ ;+!’ . -+@’ 0 . -’ /0 + ! "# ’ C#

<-A’ 0?== 1’ C ’0& - >1 - 1’ # ’ D1’ 0C<B1’ &=’ L@ ’ A<@1Ø K’ D&? ’ #<’@@ & ’ >< -C ’01;’ &+’A1A’ <@K1 ’ D<’ D1’ 01’A’ 1 BD1 ’ <-A’ <Ba1 ’ & ’ <- ’ &=’ D1 >’ 0D<@@ -& # - .’ 1B1 +1’ &=’ D1’ 01’A’ =11Ø # ’ B&@&? ’ &=’ D1’ ’ &==’B1g #? ’ & - @ ’ =& ’ 0?BD1’ #? 1Ø #< 1@@1Ø D<@=1’ #< 1@@’Ø <-A’ =’ a’ -Ø <Ø # ’ D1 >’ 0D<@@ D1 <@ 1 ’ #1’ 0?=’B’1 - @ ’ 01 BD1A’ <-A’ C<Ba1A’ <-A’ #1’ -& ’ <=& 1’ 0?==’B’1 - @ ’ C<Ba1A’ ;’ D’Ø C01 - ’ Q 1’ &’ #1 . - -1’ <-A’ <a1’ 1==1= 1’ < 1’ D1’ =10 ’ &=’ 0 1 ’ - 1L ’ B& > > - .’ <-A’ - & ’ #1=& 1

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! ’ , ’ - .’ &? 1’ & 1’ . -’ & A’ &=’ D’Ø >&&0 1’ . &A1@ ’ <-A’ . <B’&?Ø A’0C&0’B’&-’ B<@@’ - .’ &’ D’Ø 1>1># <?-B1’ D&K1’ D< ’ C ? ’1’ ’ -’ D’Ø @&-A1’ ’Ø ’ -’ >< - =&@A1’ B<?010Ø # ’ ?- 10&-<#@1’ >1<-10’ A1 10 <#@ ’ ?01A@’ &’ D1’ A’0D1 ’ <?-B1’ <-A’ . 1< ’ A<><. 1’ &=’ ><- ’ <-A’ . 1< 1’ -&>#1’ &=’ D’Ø 0?#. 1 ’Ø K1@@’ A’0C&01A@’ <-A’ &’ D1’ >&0 1’ D’. D’ A’0C@10? 1’ &=’ <@@ > .D ’ E&A@’ D1’ .C&A1’ 0 < ? 10’ <. 1 -0 ’ <@@ &=’B1 Ø’ D<+ - .’ 1 &? -1’ &=’ F ’ 10’ <-A’ D1’ ’ ’’1C? ’1’Ø ><a’ - .’ C<-1@@10’ C< B’<@@ ’ =& ’ 1K< A10’ &’ D1 >’ .1+1 - @’ <. 1 -0 ’ ?- @<K=?@@ >< - 1 - &? Ø <# <0&? Ø’ <-A’ ? &? 0@ <-A’ <. 1 -0 ’ ? &? Ø ?- ?@ ’ .1+ - .’ D1 ’ +1 A’ 1@ - & K’ D0 <-A’ - .’ ! & ’ 1=& ><B’&-’ &=’ D1’ 0<>1’ # ’ D1’ , ’ - .’ &? 1’ &71’ . -’ & A’ <-A’ D1’ @& A’0 0C?<@@ <-A’ 1>C<@@ <-A’ D1’ &>1-Ø ’ -’ D’Ø C01 - ’ C< @’<>1 - ’ <001 > #@1A’ <-A’ # ’ <? & ’ ’1’ &=’ D1’ 0<>1@ #1’ ’ ’ 1 - <= 1A’ & A1 -1’ <-A’ 10 <F ’00D1A@’ D< ’ ?C&-’ f ’ ?- ?1’ +1 A’ 1’ D1 <= 1 ’ .1+1 - ’ #1 K’ L ’ C< 1’ <-A’ C< ’1g ’ -’ <- ’ 0? 1’ C@< - 1’ & ’ A1><?-A1’ #1=& 1’ ?0 ’B1Ø &=’ 1B& A1’ KD1 1’ D1’ D’ - .’ ’ -’ A1><?-A1’ <-A’ +1 A’ 1’ D1 ?C&-’ .1+1 - ’ 1L 1 - A’ D’ &’ D1’ +<@?1’ &=’ L@ ’ ’ <-A’ B&-R - 1 D’ - & ’ D1’ &CA’1’ &=’ ><- - Ø @ =1g D1’ C< ’1’ . 1+1A’ # ’ D1’ 0<>1’ +1 A 1’ 0D<@@ D<+1’ <’ K ’ 1’ &=’ 1 - ’ <.1’ - 0 ’ 1+ ’ C0&-1’ D1 <= 1 ’ 0& .1+ - .’ <-’ ?- ?1’ +1 A’ 1’ <-A’ 1+ ’ &=’ D1 >g <-A’ <.1 -0 1’ D1’ C< ’1’ KD’BD’ 0D<@@ D<+1’ ?.1>1 - ’ ?C&-’ D1’ 0<>1’ +1 A’ 1@ <-A’ D<’ ’ -’ D1’ 0<>1’ < 1 ? 1’ D1 1’ 0D<@#1’ <K< A1A’ <.1 -0 ’ D1’ C1 ’ 1’ ? ’1’ D1’ C ’ <-A’ D1’ . <?-A’ ? ’ 0&=’" <-A’ 10&>’ <-A’ A’0 10’ ’ -= - 1@ KD’BD’ . <?-A1’ ? ’ 0D<@@ #1’ &=’ @’a1’ -&>#1’ <Ø D1’ . <?-A’ ? ’ ’Ø -&++1’ ’ -’ < 1 - 1@ <-A’ 17 ’ &=’ D1 >’ D<’ 0D<@@ C<001’ ’ -’ D1’ 0<>1’ 0D<@@ D<+1 @&-A10’ <-A’ 1-1>1 - ’Ø &’ D1’ +<@?1’ &=’ LLO’ >< B’ # ’ D1’ 1 1’ &=’ = 11D@A1’ &? 1’ &=’ <?-B’1 - ’ A1 > 1<-1@ <-A’ ?C&-’ D1’ A’0 1001g KD’BD’ 0D<@#1’ A1@ C1A’ &=’ 1B& A1’ ?C&-’ D1’ 0<>1g &C1 - ’ CB@<><A&-’ &’ #1’ ><A1’ ’ -’ D1’ &? 1’ D1 ’ KD1 1’ D1’ A’0 10’ 0D<@@ #1’ <K< A1A@’ > & 1’ D1 - ’ L + ’ A<@10’ <=& 1’ D1’ 1 &? -1’ &=’ D1’ 0<>1’ A’0 1001g <-A’ 17 ’ 0?BD1’ A’0 1001’ 0D<@#1’ ><A1’ ?C&-’ D1’ @&-A1’ &=’ 17 ’ &=’ D1’ 01’A’ . <?-A1’ ? ’ <Ø ’ -’ & D1 ’ A’0 1001Ø ’Ø <-A’ D< D’ #1’ ?01A@ <-A’ ’=’ D1’ 01’A’ C< ’1’ A1=1 - A<?- 1’ & ’ D1’ C1 ’ 1’ ? &?Ø’ & ’ <- ’ &=’ D1 >’ <CC1 1’ - & ’ ?CC&-’ D1’ A’0 1001g D1 - ’ D1’ . <?-A’g ? ’ &’ #1’ <a1 - ’ <.1 -0 ’ D1 >’ <-A’ 17 ’ &=’ D1 >’ D<’ .6 ’ 0& ><a1’ A1=<? 1@ <-A’ ’=’ <- ’ &=’ D1’ 01’A’ C1 ’ ? ’ <CC1 1g D1 - ’ D1’ C< ’ B& <C@1 - <?- ’ ’ - ’ D<’ #1D<@=’ 0D<@@ <00’ . - 1’ D1’ =<@01’ 01 1>1 - ’ &=’ D1’ =’ 0’ +1 A’ 1’ ?- ?@ ’ .1+1 - g KD1 ?- &’ D1 ’ &=’ D1’ C1 ’ 1’ ? ’ 0D<@@ D<+1’ - & - 1’ <?-0K1 1g ’ =’ D1 ’ #1’ D1’ 0<>1’ C0&-10’ <-A’ D1’ K ’ 1’ C &B1001’ 1 &? -1’ <-A’ <00’ . - 1>1 - ’ . & &A’ <-A’ @<?=?@@g 1LB1C 1’ D<’ D1’ A1><?-A<?- ’ & ’ C@< - ’=’ ’ -’ D1’ 0<>1’ 1 - ’ D< D’ <=& 1’ #1’ - & - 0? 1’ & ’ A’0B& - -?1A’ D’Ø 0? 1’ &=’ <- ’ < 1 - ’ <a1 - ’ =& ’ D1’ 0<>1’ +1 A’ 1g & ’ D< D’ =& ’ D1’ 0<>1’ +1 A’ 1’ ’ -’ < K ’ 1’ &=’ 1 - 1’ D<A’ ?. . 1>1 - ’ < 1 - 0 ’ D1’ 01’A’ C1 ’ 1’ ? g #? ’ & - @ ’ D< ’ D1 ’ ><A1’ ?1’ +1 A’ 1@ KD’BD’ ’00?1’ 0D<@#1’ ’1A’ # ’ LL’’’ Ø &=’ D1’ 01’A’ . <?-A1’ ? ¢ <-A’ D1’ C< ’1’ 0D<@@ C@1A1’ D< ’ D1 ’ .<+1’ ?1’ +1 A’ 1’ H ’ <- ’ & D1 ’ - ’< ’1 ’ KD’BD’ 0D<@#1’ < 0?==’B’1 - ’ #< 1’ &=’ D1’ 01’A’ < 1 - 1@ <-A’ D< ’ C@11’ - & K’ D0 & - A’ - .’ D1’ . <?-A’ ? ’ &’ #1’ <a1 - ’ K’ D&? ’ A1@< 1’ &’ 1 - H? 1’ KD1A1 ’ D1’ =’ 0 1’ ? ’1’ .<+1’ ?1’ +1 A’ 1’ & ’ - &1’ ¢ <-A’ ’=’ D1 ’ = - A1’ D< ’ D1’ 01’A’ C1 ’ ? ’ .<+1’ <-’ ?- ?1’ +1 A’ 1g D1 - ’ 17 ’ &=’ D1’ 01’A’ C1 ’ ’ ? ’ &’ =& =1’ 1’ LL’@’ ’ KD1 &=’ D1’ &- i’ D<@=1’ 0D<@@ #1’ &’ D1’ , ’ - .’ &? 1’ & 1’ . -’ & A1’ <-A’ D&A1 ’ D<@=1’ &’ D1’ C< 1’ D< ’ 0?1 D’ ¢ - A’ &7’ D< ’ D< ’ 1+ ’ &=’ D1’ 01’A’ C1 ’ ? ’ 0D<@@ 01+<@@ ’ > <a1’ = - -1’ <DA’ <?-0& <1’ # ’ D1’ A’0B 1B’&-’ &=’ D1’ ?0 ’B1Ø #1=& 1’ KD&>1’ D1’ 01’A’ =<@01’ 01 1>1 - ’ 0D<@#1’ =&?-A1’ <= 1 ’ D1’ ’ 017<@@ &==1 - B1Ø A1=<? 1Ø <-A’ 0?==’B’1 - B1’ &=’ 17 ’ &=’ D1’ 01’A’ C1 ’1’ ? ’¢ - A’ <= 1 ’ D< ’ D< ’ D&Ø1’ &=’ D1’ 01’A’ C1 ’1’ ? ’0&’ < 1 - 1A’ 0D<@@ -17’ <= 1 ’ #1’ &=’ <- ’ B 1A1 - B1’ - & ’ D1’ ’ && D’ <BB1C 1A’ ’ -’ <- ’ &? 1’ - A’ ’=’ 0?BD’ C@11’ <0’ D1’ C< ’1’ C@1A’ D’ KD’BD’ ’Ø <’ #< 1’ &=’ D1’ 01’A’ < 1 - ’ #1’ =&?-A1’ & ’ A1 > 1A’ < 1-0 1’ D >’ D< ’ 0& C@1A1 D’g D1-’ D1’ C< ’1’ D< ’ 0& ’ 0?1 D’ 0D<@@ D<+1’ ?.1>1 - ’ &’ #1’ 10 & 1A’ &’ D< ’ D1’ @&0 1’ K’ D’ D’Ø 10&-<#@1’ B&0 1Ø <-A’ A<><. 10¢

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C '&' !" !'" -@' +2'!"/&!';!'*!'!-'&-' -@' ##&.-'20!'."'/!1 0-/!' ."!' -@' 02&#!'.''"!#."/!'.' -@' &-*' &-2'0.-' 2.-!++' 2' /! !' "12 #!' -/'. !'"+&E!' 7 &#'2 +;!'0 /"!' !' ' +0!'.'%+'&&' ' !-' !' "@!'*"!'!/'2 +' '!' !"/&# 2'0&&/.'" !@-'7& '20#'.#!2' -/' +!!2' 2' &2' ."!' "! !"#!/' -/' /!+ @!2'.';!' E!-' 7!@' 2' ;! ."!'&2' "!1!1;"!/= !%#! !' Q '&-' &2' # 2!'.' !@-'!,@' 2.-!'.' !'*" 0-/!' 0"@' '1@'/&2!-/!''' 1 "#';@'@!"!'.' "!!' .+/!'.0'.' 0-#&!-'/!1! -!'."'&2'7." ' ' '1U"#'.'*./!2' -/'# ++!2'2 +;!' ;+!' .' 22!'&-' !'2 1!' !@-= -/'&' !' !@'0"&!';!!' !@-!/' ' !-' !@'2 +'&-' &2' # 2!'.' !@-'f'.' !@1'." !&!';0' ''+&'7 !" '..-' +!' 2 +;!'.' !'M&-*' -/' !'. !'" +!'.' !' "&!' !'" !' .0"1!' ."!' "! !"#!/' -/'.'!'" ' .'1 E!' @-!' -/' " 0- .1!';@' !'/&_#"!#&.-'.' !'02&#!2' 2' &2' ."2!&/

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C ' ' !'2 1!'+7!2' ##&.-' -/' "!1!/@'."/!@-!/';@' &2' +2!-'^!';!'E! !'."' -/';' ++' !@1' '2 +;!' *"!'!/';@'20# !'0-"0!'''!"/&!2'.' -@'!- !"& 0-#!'&-'/&2#!-'"!,#&.-'."'"!1 @-/!"'."' -@' "!! .+/'&-'"!<#&.-'." !"/&-2'&-' 2!2 "!1 @-/!"' -/'&'>K) "&!'&-' !@-!'*!'@-';@' &2' +!';!'-.-!'20@!'."' !'2 -!'R 2#.-@-0!' ' !-' !'2 1!' "&!'2.' -.-20@!'."' 2.'/&2#.-@-0@-*' !'2!&/' !@-'1 E!'+@-!'-/'" 0-2.1!';@' !'/&2#"!#&.-'.' !' 02&#!2' ."!' 3 "@'-.-20&!/' 7 .1' !'2 1!' !@-'2 +;!' E!-'-/'/! !-/&-*' -/' ' ++' !@-!2' !" !'.';!' E!-'2 +;!' E!-' ."!' !' 0&-2? ++ M&-*'&-' &2'4!-# !'.' ."!' !' 02&#!2'.' !' .1!-'+#!'-/'Y<&-". !'!'. !'" .0" !2= -/' ' &2&'"&02'2 .!';!';".0* '.-+@' *" 0-!/';@'/&2#"!#&.-'.' !' 02&#!2'0 .-' !'/&2"! = -/'!<@'. ' !'2!&/' !&!'0"@'1@' !"'!' -/' 0-27!"!' @' &2&'3"&0)' '' .0-!@'&-' !'2!&/' !@-'' ' !'1.@!'.' !'2!&/'."!&0"!'.' !' !&!'0"@'2 +;!'+'@!/'.' 02!'.' ! " -#!';@' .0"!'.'!&*-' ."/!' @' &2' /'2 &2 #&!-/'."' &!"&' #.'" +!*'.'";@' ##&.-'.'/! !'@!-2'!,@' 2.-!'.' !' !@' !'@&!-2'!')@.' !'2!&/' !"&0"@' -/' &2' !%!!/.0"2' -/' /1@-&2" .0"2' &-*' !-'20+&#&!-'*..!2'.' !&"'2!-' 0/*!1!-'.' .' !'2 1!'.';!' //!' -/'+&E!'H0**!1!-'.'" !' "@'/! !-/ 0-'."!-0-'.';!'/&2# "*!/'.'"!2&0#&/-'2' ."!' 6!2&0&.-'C#' &2' 2!-' C!'&-'#2!'.' '*" 0-/!' !&- !' ';!' 02!/'

' &' +2.'."/@-!/' -/'!- ;+!/';@' 0 ."&!' ;.'!2!&/' '&-' !,@'7"& !'.' !@-' !"! !"' .';!' E!-';@'."' 0.-' &2' /!' !'7&#!'2 +;!'20# !'2' .' !"' V"&&2'.' !@-';!'-/' !"' !' !2!'.' !'2 1!'V"&++!'2 +;!' .';!;@' &2' 0! 7"& !-' !&2'7."/!2&-'+ @-'3'2 0 01' --.'0-/!#&1.' !-'2! &1&/&01

'&' +2.'."/!@-!/' -/'!- !/';@' !'2 "&!' 09."&!' ' ++' -!++2' !" !"' .';!'"!.0"-!/'7 &#';!'-.' ' !' 20@!'.' -@' "&!' '2 +#';!'1 /!' -/' 0 !'&-' ."!' -@' 02&#!'.'b .+!'/!+@ !'."' 02&#!2'.' !2'&-' !&"'.@-' !22&.-2' .'!-SO&"!' ."' !'M& *'2 +#' !" !"';!"! .0"1!/';@' //&/.-2' -/' E&-*'.0!'.'-1#2'.' 2.-!2';@' /&2#"!#&.-'.' !'2 1!' 02&#!2';!."!'7 .1'20#!' -!++'2 +;!'"!.0"-!/= -/' ' = !'2 1!' 02&#!2'2 ++' !" !"' .1 0/!' !' &"!'.'"' &2'1&-@2"!2'&-' &2' ;2!-#!' .' 0!' . !"' 2. !2'&-' !'2 1!' -!++'@' .' !'-!%' "+& 1!-' .- 1 -#!.

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C 'C ' * @-2'BH0"@'0-+ 7 0++'1 @-!-0-#!' -/'#.""0 #.-'&-'. &#!"2<

4 'M&-*'.0"!' .3!&*-' ."/!' 7!+!'0-/!"2 .-/&"&*' !' @-.02' -/'/! !2 ;+!' H0"&!2' / &++@'#.1@ !/'7& &-' &2' "! +1!'&-'!-SO!2 !2' -/' 0"&!2' E!-' 27!++' ;! 7&%' &2' &* -!2' -/. !"' &2' 20;*! &2' -/' "&!' -/' &!' 2'&-' !-SO!2 &2'.'. &#!' .' !' &* '/&2 +! 2&"!' .' +&1@* @' b./' -/'+! &-*'.' /1@-@2" #&.-'.' 02&#!' !' 7 &# !' H0"&!' *".7& ';@'0-+ 0 0 '"! !@-/!"2' 1 @- !- 0-#!'!1;" 2@-*'# " &!' -/'#.""0 #&.-'.'*../!' 27!+' .' !' &"! 2' 2'. '. !"' .' &#!"2'-.7& 2.-/&-*' -@'+ 71'2;!'."!' &2' @1'! 1 /!' .'" !' 0-@22 1!-'.' 20# !'. !/.0"20 V !" ."' !' M&-*'.0"!'2!&/' .,!&*-' ."/!';@' /'@2!' -/' 22!-'.' &2'+."/!'2 0 +' -/'!1 +' -/'.' !' .-H.-2L'&-' &2' 2!-' "+& 1!-' 22!1;+!/' -/';@' 0^."&!'.' !'2 1!'!- ' !2 ;+&22 ! '7&&+! ' -/'#.1 0-/! ' ' +' !'2!&/'+7!2' ;!'/0!+@' 0'&-'!%!#0#&.-

02 &#!2' 2 +' "!'&!7' -/' "! ."1' 3 -!+2'&-' -SO!2 2

, & & ' ; !' ."/!@-!/' ;@' !' 2!&/' 0 "& !' ' !' 02 &#!2' . ; !' 3 !<' 7& &-' &2' 6! -!'&-'L -@'&-SO!2/2' . ' . &#!' ;! ."!' !@1' '" -@' . ' !@1' .' ;!' E!-' /1& !'-.'" E!' -@' -!+' . '20# !'&-SO!2 &2' .' ;!'"! 01!/) ."!' !1';0' & ' !' 2 1!' -!+' ;!' &"2' 2!!-' ;! ."!' !@1' -/' !@' .' "! .0"1!'&' ;@' !&'" /&2#"!/.-&'# 02!' ;!= -/' ' !,@' -!+d' . !"7@2!' "!#!@ !/' ;!' '.&/!' -/' . ' -.-!' ! ! !'

3 " @' *"&!'!/'." . !"2' #.1k + &-' ;@' :& ' .' V"<0"@'.-' -SO!2 2' ;@'0-77 &/ &-k !- -#!'C#

' !" !"1."!';!'&'!- !/';@' !'2!&/' 0 ."& !' 2' ." -@' H0"&!'#.1@ !/' ;@' -@'&-SO!2 !2' ;@ 7!!-!' !'M&-*' -/' "/!'R'8' "&!' -/' " !'7 !"0 .-' H0**!1!-' &2' ;!" !'" *!'!-' ' !L' &!' *"!'!/' ." -@' . !'" '7.+' #.1 + @-!'. ' -@'0-+ 7 &&+' 1 @- !- 0-#!'@1;" 2@-*' #.""0 #&.-' . ' -@' . &#!"2 7 !";@' !'2!&/' H0"&!'7 2' !-/0#!/' -/' . ' H0"@';@' !' 2!&/' &-SO!2 !2' #.1@ !/' 1 @' #.1 +!@-!' ;& ;&+' .' ;!' <2!- !/' ."!' !' 02 &#!' ." 02 &#!2' ;@' 7 .1' H0**!1!-'2 +' ;!' *! !-' 7 &# ' 02 &#!' ." 02 &#!2' 2&& +;!' ;.0./!' .' "!!!@'!'&' 2.' ' !' #.1 +!@&& 0-' 2!-' !' 2 1!';&+' ;! ."!' !'2 1!' 02 &#!' ." 02 &# ' 7& &-' 'H / +!2' !" !' H0**!1!-'@'!-' -/' @-/!'20 &#&!-'20!"&!';! ."!' !' 2 1!' 02 &#!' ." 02 &#!2' ;@' &2' ." !&" /&2#"!#&.-' .' ;!' /1@ !/' ' 7&+' ;@-/!' !@1';@' "!#.-@2 0-#!' ." . !"7&2!'&-'20# '2.1!' ." 2.1!2' .'1.-!@' 2' 2 +;!' +@1@ !/' ;@' !' /&2#"!#&.-' .' !' 2 1!' 02 &#!' ." 02 &#!2' .' !' 2!3 +' "&!2'0 .-' 7 .1' !'2 +' #.1 + @-!' .-' #.-/&#&.-' '&' !' "&!' #.1 + @- 0-!' '!'-.' 20 &#&!-+@' !' 1 !" .' &2)' #.1 +!@-' .' ;!' "0!' ' !-' !'2!&/' #.1 +!@- 0-!' .' @' 20! !'# 2 !2' -/' / 1 *!2' .' !' 2! f +' "&!2'*"!'!/' -/' '20# ' @1!' 2' 2 +;!' #.-2&/"!/' -/' 7 "/!/';@' !' /&2#"!#&.-' .' !' 2!&/' 2.-!2' ' '!' .7!" ;@' &2' <2!-' +!' .' !% 1@-!' !' 2 1!0 -/' ' !' 2!&/' 02 &#!' ." 02 &#!2' !" !' "!#!@!' .' !' 2!&/' ;&+' .' #.1 +!@-' &-' .0"1!"! !"#!/' C &!' !' 2!&/' ;&+' 0-/!" &2' ." !&" 2! +!' ." 2# +!2' 0-.' !' 0-#!++!" .' -*+.-/' ." !' @1!';!&-*' -/' !-' !'2 1!' 0-#!++!" 2 +' # 02!';@' V"& !' ' !' 20@ !' -/'#.2 !2' . ' !' "@' #.1 + @- 0-' +' 20# !' 2. %!' ." 2 V& ' @!-2' 7 .1!' !' 2!&/' #. + @- !' &2' 2.' 1 /!' .' #.1!' ."!' !' 2 1!' 0-#!++!" -/' "!2."!" . ' -*+.-/' !' # &!' 02 &#!2' . ' !& !" 4!-# !' -/' !' +!"E!' . ' !' 6.++!2' ." !' @1!';!@-*-' 7 &# '2 +' '!' 0+' .V!" -/' 0 ."& !';@' &2' 2!-' !';@' !&" /&2#"!#&.-' .' !% 1@-!' +' 20# ' 2.-!' ." 2.-!2' "+-*' ;! ."!' !@1' . ' +' &-*!2' #.1 "&2!/'&-' !';&+' . ' #.1 +!@-' -/' .' 0-@22 !' +' -/'!,@' 20# !' 2.-!' ." 2.-!2' 2' ;@' '!% 1@ #+.-'2 +;!' .0-/!' .-/!" ." . !-/!"2' 27!+' . ' H0"@' 2' . !"' !" !&" 2!&/' /&2#"!#&.-

B&-!'.-' .-20&

C ' D<'#1''1-<=1A' D<''=' D1'C< '1'B&>C@1 -<?-'C? 0?1' -&'&'C+1'-&' D'0'#'@@ &='B&>C@1 -' D1-'D1' B2 1@A' &' 17 'C0&-1' #'D >'K &-.=?@@ '+1L'A' D'0' B&0 10'<-A' A<><.10'<-A' ><a1' = -1' &' D1', '-.9<=1' D1'A'0B 1B'&-'&=' D1 >' #1=& 1' KD&>' D1L<> -<B'&-' '0' 0&' D<AA1

!"/&<+'2 +' "!1 &-'*..'0-&=' "!'!"2!/';@'V "&' . ' "".''C#<

C ' '' '0' =1 D1' & A1 -1A' D<' D'0' <= 1' 1L1-A1' -&' & D1' <- -'01>1-' -1 D1' ?-A& -.' &=' D1' +1 A' 1' <-A' ?..1>1-' 1+1-9' #?' D<' D1'01'A' 7A' 1' <-A' ?..1>1-' 0 &-A1' '-' D'0' 0 1-. D' &' D1' >1' '' #1' ?-A&-1' &' <+&'A1A' # 'K ' 1' &=' 1 &? ' &' < 1 -' & ' 8& D1 K'019' <= 1 ' 0?BD1' & A 1' <0' D1' B& <1-'9<K1' K<0' <=& 1' D1' >1' &=' ><a'-.' &=' D'0' 0 < ? 19' D'0' C01-' <= 1' -& K' D0 &-A'-.' 3 3

30-&2 -8`-'. ' 3!"H0"@'&-' -#!"@' C#

' 8 ' ';!'&' ."/!@-!/';@' !' 2!&/' 0 +."& !' ' & ' H0"@';!!' #.1@ !/';@' '!2'&-' !' M&-*!2' .0" !' ' !' 0&#!"@' ." ;! ."!' !' M&-*!2' .-."<&;+!' .0-#!++' ." !+2' 7 !"!' ' !-' !' ."!- 1!/' 0-#!++!"" 0 .-' ';&+' .' @1' 0 !' 7& '+&E!' 20!" &!' 2' &2' ." !' 1 E!'+&E!' ".#!2' .' # +' &-' !' 20 .2!/' H0"!/' 2.-!2' ."!' !' 2!&/' 0-#!++!" "!2."!" 02 &#!2' -/' +!"E!' . ' !' 6.++!2' -/' !@' .' !' .7!" .' !"!' -/' !% 1@-' !' 2!&/' 2.-!2' -/'&' !' 2!&/' 2.-!2' . ' !' H0"@' ." . !" 1@2;! '@-*';!."!"! !"#!/'2.';!'#.-'@+!/' ' !-' !@' .';!' 0-@22 !/' 0-/"!'+&E!' .0"1!' 2' &2' ."!"! !"#!/' 3". '&/!/' +7!@' ' &2' !' ;!*@--!' .' E!' &2' ! ! !' ' !' !2' . ' !' &'@ !' . '#0"!' ."/'-!%'#.1@-*' -/'-.!'+.-*!" .' !-/0"!';0'0-.' !'-!%' "+& 1!-

3 6 ' WW

C ' C ' ' "!& ' 2 +' "! ."-!' 20 &#&!-' 0"."2

6!#& +'. ' '6&#' '#' ')' .' 90 +& &# &.-2' . ' 0"."2&-' # .1!2' . ' !"& 2'

3'6 ' !' .1.-2'&-' &2' 2!-'3 "+& 1!-' 22!1;+&/' ' 7 !"!'&' 7 2' !2 ;+&22 !/' -/'!- !/' !' &"2'@!"!' . &#!"' 2 0+/' " .0"-!' &-' -@' -!+' &-' -@' &"! 2' .0"-!' ." + 7/@' -@' 2.-!';0'20# !' 2' ;!'. '*./!' - 1!' -/' 1!' -/' '!' +.-/!2' -/' !-/2' . ' "!! .+/!' 7& &-' !' 2 1!' .0-/!' 7 !"!' !@';!'&-+&& 0-!' . ' !'@!"@' ' +0!' . ' ww2' '+!2 ' ." !+&2'+.-/&2' -/' !-/2' .+/!'-' ;@' !'#02 .1!' . ' !' -!"# ++!/' . & .+/!' 7& &-' !'2!&/' .0-/!' . ' !'@!"!+@' ' +0!' . ' %%'H 2' '&&H / ' . ' '# "*!2' '+!2 ' 2' &-' !' 2!&/' 0 !' 1 ."!' +!@-+@'&' !"! '=' -/' ' +' &&&/& !1!-&2' C' 2!-1!-' E!-' ."!' -@' &"! '&-' &2' .0"-!' . !"7&2!';!' .&/!' -/' . ' -.-!' ! &!=' 4@"! 2.-' . ' 7 &# !' 0!' 1 -@' &"! 2' . ' !' .0-&!2' . ' 0 ' 0" ' -/' 022!%'&-!-/&-*' "0+@' '!'+.2 !' !" ". & !' . ' 1 -@' . ' &2' ." !&" .0"-!2' -/' 1 -@' *"! !' -02 -#!2' -/' . !-#!2' -.' 2!-!/' -." !' . !-/.0" -/' "!2 22.0"2' &-' !' 2 1!' 0-@22 !/' .' !'*"! !' 0" !'. ' !'&- ;& 0-!2' . ' !'2 1!' ." 7& &-'2.1!' 0-/"!2' !"' !" ;!'-.'2.'1 -@' 2.-!2' . ' 20# !'+ -/&2' -/' !-&2' /7!++@-*' .0' . ' " 0-# &2!2' -/' .* ' !@' 7 "!' . ' ' '.&" !@' 7.+/'-.' !"!' ." !' .22!' . '&&/' ." &&H /' ' !' / @' . ' !' .0"-!' 7 &# !'21 ++' #& 1!-' &2' . '.+/!' @1!' 02!/' 7 !";@' !' M&-*&2 2!&/' .0" !2' &-' /@ 2' " !2' . ' !' 2!&/' .0- !!2' ;!'+.2 !'= -' #.-2&/!" #&.-'7 !". '&' 1 @';!'2 ;+&22 !/' -/' !- +!/';@' /'@2!' -/' 22!-'. ' !' ."/!2'2 0 ++' -/' !1 +&' -/' !'2!&/' .1!-2'&-' &2' 2!-' "+& 1!-' 22!1;+!/' -/';@' 0/+."&&!'. ' !'2 1!' ' &'2 +;!'+!0' . ' &"!' . ' -@' . ' !'2!&/' .0-&!2' .' @1 -!+' -/'2.1.-!' %%&&&H['+ 0 0+' 1!-'. ' 20# '&- & 0-!2' 7& &-' !' #&-/+!' . '!,@' . ' &2' ." !&" .0"-!2' 2' .7!' 20@ !' .' !'2 1!' .0"-!' ." .0"-!2' -/' 7 !". '!3@' . ' !'2!&/'%%&&&H?1!-' '!'+.-/!2' -/' !-&2' . ' "!! .+/' .' !' @!"!+@' '+0!' . ' w2' . ,' +' # "*!2' ." +.-/!2' -/' !-&2' . ' . & .+/!' . ' !' @!"!+@' '+0!' . ' &&&H2' &&&H / ' . ,' +' # "*!2' 7& &-' -@' . ' !'2!&/' .0-&!2' 7 !"!' 20# !' .0"-' ." .0"-!2' &2' ." ;!' .' ;!' E! !' -/' 2.' 1 -@' !&"!' .' !"!' ' !' / @' L.' !' .0"-' ;! ."!' !' 2!&/' &"!' -/!"2 &"!' ." +!"E!' .' !-SO@"!' . ' !' " &#+!2' . ' !' 2!&/' 0"-

' ." # ? !

G' (' 0 ' *' ?> ?: ;Q-

-/ '!,@'. ' !'2!&/'%%&&&H['1!-' 2.' ;!@-*' @1 -!++!/' -/'2.1.-/'-.' !"&-*';!' 1!"#!/'&-' !'2!&/' &"!2' .0"-!'.'" .01!2'." -.' /.@-*'. ' !&" 20@!' .' !'2 1!'%&H/' 3". '&/!/' +7!@' '&' !'" ;!'%&H. ' !'2!&/' &- & 0-!2' 2.' @1 -!++!/' 7& &-' !' #&-+!'.'!,@' .0"-' !"!'2.' '&-'!,@' .0"-!' !" ;!' '+7 0+' 0"@'. ' !@1'27.1!' ' !-' +' !"!1!-)-!'.' !1'2.'@1 -!++!/' '1 E!' /! !0!' ;!'-.' #!/'." ' /! 0!' ;0'.-+@'." !&" 20@!' -/'2&'7 2'+7 0++@02!/' ."!' !'1 E&-*' ' !'2!&/' 0!

1!"#!1!-'.' 0"."2' ." -.' !"1*

C ' J' ';!'&'!- +!/' ' !" /0!' -/'+7 0+'2.1.-2' /'.' !'&- & 0-!2' 2'&2' ."2!&/'&'! ' !" !"!' -.'%&H 1!-'&-'!,@'. ' !'2!&/' &"!2' .0"-!2'. ' !'2!&/'&- & 0-!2' '@-*'+.-/!2' -/'!-!2'. ' !'@!"+@'' +0!'. ' W2'." %&&H2' &&&H/' 2' &2' ;.'!2!&/' -/'&' !" ;!'-.'%%&&&H['20# !'&- & 0-!2'7 &#'1 @';!'@1 -!++!/' -/'2.1.-/'&-' 1 ' -/' .0"1!' ;.'!2!&/'&-' -@'. ' !']!&/' .0"-!2' ' !-'&'2 +;!'+! 0+' .'!,@' &"!' -/"!2 &"!' +!"E!'4 &++@' ." .I8' 1&-@2"!' .' # "*!' -/'27!"!'!-@'. !" HK2.-!'." 2.-!2'&-' -@'. ' !'2!&/' &"!2' .0"-!2'7 !"!'20# !'-.-!' 20 #&!-!' -/'/! 0!'.'&- & 0-!2' -/' " 0-#!'&2' /'20# !' 2' ;!'.'*../!'-1!' -/' 1!' -/' !';!2';@' &2' ." !&" R 2#"!#&.-' ' !"!' ."!' @1'." !@1' -/'-..-'. &#!" -." 2!'0-!'.' !'2!&/' &"!2' -/!"2 &"!2' +!"E&2' 4 &++&!2' ." @-H2"!20 -/' ' +' &-/&!1!-&2' -/' 2!-!1!-&2'. !" !-' !+.-@'2.' E!-'#.- -@-*' /' 2!&/' &"! !' 0"-!2' ;!'*../' -/'! !+0!+' -. 7& 2 -/&-*' !'2!&/' /!'1 /!'&-' !' &"2'@!"!'. 'M&-*' 6&# "/' ."2!&/' -/' ' !'2!&/' &"!2' -/!"2 &"!2' +!"E&2' -." 4 &++&!2' . ' -@'. ' !'2!&/' .0-&!2' -." --.-'. ' !@1' /.&-*' ##."/&-*' .' &2' 2!-' b!'." !& !' -@' &-*' ." ;!'&-' -@' 7&2!' HO/&2!/' ." /.@-*' -@' &-*'#.-" "&!' .' !' 2!&/' 0!'1 /!'&-' !' &"2'@!"!' ' !'2!&/'M&-*'6&# "/0' -/' '!,@' &"!' -/!"_ &"!' +!"E!'4 &++&' ." &-@2"!' ' /.'#.-F'@' .' &2' ."/@- 1#!'&-' -@' .@-!' ." !& !' !'2.1!' ' '2' ' !<@' @1!' ' !@' ." -@'. ' !@1'/..' !' #.-)"@' .' !' 2 1!'&-' -@' .@-!' .' !' 2 1!0' '@-*' .' !,@' 2.-!' -/' 2.-!2' !&" + 7 0+' +&4 &!2' -/' " 0-# &2!2' -/' !- 0-!2' -/'&- & 0-!2' .' !'2 1!' &2' !' .'!-/0"!'0-.' !'-!%' "+@ 1!-

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.-&-0 -#!'.' /

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' t * @-2'0-+ 7 0+' C' /!#!@ 0&' 1 E& &*!'.' B02@ -2' Q

36 ' !' .1!-2' &-' &2' 2!-' "+& 1!-' 22!1;+!/' ' 7 !"!' 2' B02& -2' ;".0* ' ".1' !' "&!2' .' ;!@.-/!' !' !!'0-2 ."-!'&-.' &2' 6! +1!' '!' -/';!' -/'2 0+/';!' !' -..2!' & ;+!' #+. ' ."/.;+! /2' -/' ." . !" 7!"&-*' +. !2' *"! +@' 02!/' 1.-*!' !'#.1!-' !. +!' . ' &2' "! +1!' -/' +!-*!2' '!' !-/0"!/' . ' -@' &-*' ' '#.1@&'&-.' &2' 2 1!' 6! +1!' ".1' !'2!&/' "&!2' 2' .' '!-!-' 7 !". ' !'# 02!' ';!!-' '20# ' 02& -2' ."!' &2' @1!' '!' ;!!-' "0+@' 7".0* ' -/'2 ."-!'7& ' !';"./!' ! "!' -/' V& ' -.. ' . !" &-2 "01!-' ." . !" /&2#!& 0+' 1! -!' .##0 &!/' 0 .-' !' 2 1!' .7!' 2.'&' &2' '/&,2' 2.-!2' ;@' 20; &+!' -/' 0-/0!' 2+!&* &2' -/' 1! -!2' '!' /&2#!@' ;+@'@1 *@-!/' -/'#.-"&'!/'&-2"01!-!2' ." .-'7@ ' !'7 &# ' ".-2'&-' !' -.2' &* !2' -/'2!#"! !' + #!2' . ' !&" .02!2' !@'2"&E!' -/'/" 7!' !'2!&/' ".-2' . ' !'2!&/' 02& -2' 0-2 "-!' ;@'1! -!2' 7 !". ' !@'Y 0++ I' . ' ;. ' !'-. !' -/' !'#. .-' . ' !'2 1!'B02& -2' -/';"!E!'#.1!-+@';. ' !'*".0-/!' -/' "!/&2'&-'20-/!"' -/' !"7 "/!' ;@'#" @' 2+&E&-*' !@' 1 E!' !'2 1!'B02&.-2' .' !"!' .' !'#.1!-' !. +!' @-!' .+!' -/'2.0-/!=' -/' +2.' !@' "!&2!' / ' !'#. .-' .'2 # !'B02& -2' -/' !-' E!' '+&* '# -/!+' -/'2! !'&-' !' B02@ -' ;"!--@-*' 7 &# '2!-*&! ' -/';"!--! ' 7 @ !'#. .-' . ' !'2H1!' 02@ -' ".1' !' ..-!'!-/' .' '. !" /.7-' .' !' !"/' "!/!2'&-'2!/!' .'2 ."&-*' -/' !" ' 0' !1'&-' #.+.0" -/'2.' 20; !+@'/"!22!' !1' ' !&" 0+2' 7!"E!2' # --.' ;!' 2 &!/' V& .0' &' ;!' ;@'V!"E1!-' !"!"2' .' 0# ' 02& -2' ." ;@' !'7! !"2' .' !'2 1!=' -/'L2.' ;@'20# !'20; &+ &!2'V !"!' 2' 02& -2'1 /!'&-'/.;!+! +&2' ." ' .' -@' . !" 02!'7!"!' 7.-!' -/'1@* '!-/0"!' !'2 #!' .'&H @!"!2' ." 1."!'7.+' -.'!-/0"!'-.7!' ..';@' !'2 #!'.'&&&H 1.-! !2' 2# "#!+@' .' !'*"! ' 0" !'.' !' .' .1!-2' -/'2!"'@-*'1!-'.' &2' 6! +1!' .' !'*"! '/ 1 *!' .22!' -/'/&2#!& !' .' !'M&-*&2' "0!'20;*! &2' ;&!"2' -/'7!"!" '.'20# ' 02& -0' ." "!1!/@'7 !". ';!'&'!-b!/' "/!@-!/' -/'!2 ;+22 !/';@' !'M&-*'#0"!' .3!&*-' ."/!' -/' !' ."/!2' 0 +' -/' !1 +' -/' .1.-2' &-' &2' <!-' "+& 1!-' 22!1;+!/' -/';@' 0b."& !' .' !'2 1!' ' -. !'20# ' ".-' ." &-2"01!-!2' -!" -@'. !" 0-"0!'20; &+!'1! -!'." 2+!&* ' ;!' ".1' !-2 .0" '02!/'0 .-' -@ 02& -' 7& &-' &2' 6! +1!' ;0'.-+@';@ !' ;".//!'2 !"!' 0 .-' ." &0"!'.'%%'2' .';!'+!'@!/' ." !@/! 0'.'!'!"@' 20# !' 2.-!'." 2.-!2' !" !" . !-/&-*' -/'02@-*' -@'20# '/&2#!@' ;+!'&-2"01!-&2' ." 2+!&* &2' 2' ."!'&2' 2!&/' !' .-!' +!'.' !'2!&/' ." !&0"!2' .';!' .' !'M@-*'.0"!' .3!&*-' ."/!' -/' . !" +!' .' @1' ." !@1' '7.+' 20!' ." !'2 1!' ." !&0"!2' ;@' ##&.-'.'/! !';&+' ." &-."1 !&.-'&-' -@' .' !'M&-*&2' .0" !2'.'6!#."/!' 7 !"!' !' 2 1!'1 @';!'/! !"1@-!/' !" !'#.0"2!' .' !'#.1!-' 7!=' -/' ' !'/! !-/ 0-' &-' 20# !';! +'&-'-..' 7&2!' ;!!' /1@ !/' .'7 *!' &2'+7!' -." ' -@' !##&.-' ." !22.@-';!'&-' !'2 1!' ++.7 ;+!

3'- +@'5 2'.-' 02&-*' -@' &-*' !%#! ' ! "2' &-' /"!22&-*' 20# ' B02& -2

' '. ' &2';!'&'."/!@-!&;& !' 2!&/' &Hb."& !' ' !' &"!' -/'V "/!@-2' .' !"1!' .' !' &&!' .' .-/.-' ." !' @1!';!@-*' '!' 0b."& !' .' !-"!' -/'2!"# ' !'7!"E!1 -2&'.' ++' 1 ' 2.-!2'.##0 +!-*' !';".//!2 !"!' 27!+& 02& -2' 2'#+. =' -/' !'!%!#0#&.'.' &2' 2!-' !' .';!' 27!++' .' /!@-!2@-2' 2' .' ."!-2' -/'2" 0-*!"!

! "# '. 'B02& -2

1+6*B' # ?$

3 6‘ %% ' -&)

D1' , ' -R' 1 - ' @1A' # ' = '&=' <'-A1 ' &' D1' &C1 '&=' 'BD< A'

' \Z " = ' ' ! ' ' *W

TJ ==' B1' =&?-A' D1 1&=G

1 <'-') >< -& 52 IBT' A1B@< 1A' +10 1A' '-' D1' , ' - .9 = &>' D1' < '&=' D1' " 1< D' &=' , ' 'BD< A' G

<@ D&?. D' -&' '=' T ' #1' =&?-A' D1 1&=

E1-1 <@ <+'-.

+ &+'0&' =& ' E <- 0' &=' D1' 1 > '0109 I B ' # ' D1' , ' - .

F ' '-' D1' C< @' <> 1 - ' D&@A1-' < ' F 10 -' -0 1 ' D1' +' ' A< ' &=' &+1 > #=' D1' =' 0 ' 1 1' &=' D1' <'. -' &=' B? 1' &, 1'. -' & A1' D1@ , ' - .' D< ' -&K' 0g' D' 0' '. D - 10' K << ' <-A' 0' 1 - ' @1A' &2 D<+1' &' D > ' 'C' A' D' 0' D1' L10@ <@@ D1' <0 1@ 0' <A0' & A0@?CC10' ?-A 1A' 0' ! <?-B=' '010' 'D '10' '+' @1.10' <-A' A+&K0&-0' &' <B&-<' 01- < '&-0' <-A' 0' 1 - '0' 1 - '0' 1 +' B10' 1+1 B' &-0' & B' &-0' --? '10' '. D '0' 1-0' &-0' 1 1A' <>1 ' '0' E&&A10' < 1@@10' <-A' " 1 '0@ KD1 &=' 'BD< A' @< 1' " ?a1' &=' " ?a1' &=' E@&?B' & D1 K' 01' B<@@1A' , ' - .' 'BD< A' D1' " '000 & ' <- ' & D1 ' &' D' 0' ?01' K1 1' 01<01A' & ' CA001001A' K' D' -' D1' 1<@> 1' &=' -. @<-A' 1@<-A' F <@' 0' <-A' <@10' & ' '-' D1' < BD10' D1 &=' '-' =11' 0 > C@1' =11' <'@0' & ' R > 1' &=' @ =' & ' C1 0' ' <0' '-' <-' <= 1' '-' D1' 01' A' C< @' <> 1 - ' > <A1@ > & 1' C@1 -@ ' <CC1 ' D' =' D1' KD' BD' <0 1@' '<' <-& '0' & A0D' CC10' ?-A 1A D' <?-1D' 010' 'D '10' '+' @1.10' A+&?0&-0' A@<B&-0' C01- <B' 1-0' &-A10' 1 - '0' 1 - '0' 1 +' B10' 1+1 B' &-0' & B' &-0' --? '10' '. D '0' 1-B' &-0' 1 1A' <>1 - '0' E&&A10' < <@@' 0' <-A' " 1 '0/ -&1' &=' B1' 1 ' '0' =&?-A1 -' =& ' D1' , ' - .' 0' '. D - 10' ' ' 0' D1 =& ' & A1 -1A' 10 <#@' 00D1A' <-A' 1 - <= 1A' # ' &? 1' 01' A' &+1' . -' & A' D1' , ' - .' # ' @ <001 - ' &=' D1' & A' 0' 0H? <@@ <-A' 1 > C <@@ <-A' D1' & > 1 - 0' &=' D' 0' C01 - ' C , < > 1 - ' <001 > #@1A' <-A' # ' <?= & ' 1' &=' D1' 0 < > 1@ D< ' D1' <0 1@@' 0' & A0D' CC10' <-& '0' <-A' ?-A 1A' 0' &=' D 1=D? &-' 'A@<>' 'BD1 > & -A' 1 -< A' & D1 K' 01' B<@@1A' 1 -1 A=' <0 1@@@ D1' <-& '0' &=' <0 @@' ? &-' @ @+ -. &-' <-A' '01@ D1' <0 1@@-' <-A' --& '0' =' 1 1 D' &? 1# ' ^ ?1 - 0D <> 10' E <> @10# @ D1' =& 10 ' &=' -. @1K&A1' <-A' D1' < a1' &=' @? > C &-@ K' D' , -' . D '0' =110@ <A+&?0&-0@ D1' <0 1@@ <-&' ' <-A' & A0D' C' &=' <0 1 ' '-' D1' &? - '1' &=' '-B&@-' K' D' <@@ & ='1 ' <> 1@1 '0' &> # 10' <-A' CC? 1-<-B10' CB1@@ #1@&-. '-.' & ' C< 1 - -.' &' ='1' > 0010' & ' &' <- ' &=' D1 >' K' D' D1' ' <CC? 1-<-B10@ &=' D1' KD' BD' D1' 01' A' , ' - .' 'BD< A' &' D' 0' & K -' ?01' & ' <- ' & D1 ' &' D?01' &=' D1' 01' A' , ' - .' 'BD< A' K1 1' 0B<0' 1A' D1' A< ' &=' D' 0' A1 D@ #1' '-' D1' , ' - .' &? 1' & 1'. -' & A@ <-A' D1' C&00100' &-' &=' D1' C> 0010' #1' <A ? . 1A' '-' D >' = &>' D1' A< ' &=' D1' A1 D' &= D1' 01' A' , ' - .' 'BD< A' ? D&?' #1' ' ' D1 ' #1' -&-1' &==' B1' =&? - A1' &=' 0<> 1@ <0' 0? 1@ ' <0' '=' &==' B10' D1 &=' D<A' #1 -' @<?=?@@ ' =&?-A1' # ' B&? 01' &=' D1' &> 1 -' <K1' <-A' A?@ ' 1 &> 1A' '-' D1' , ' - .' 0' &? 1' &=' 1B& A1

. 9' .' 1R ' C0&-1' & ' C0&-10@ & D1 ' D1 -' D1' 01' A' , ' - .' 'BD< A' <-A' D' 0' D1' 10' <-A' 0?BD' <0' B@1 > 1' <- ' D' - .' '-' <- ' &=' D1' 0 0 1 0' &' D?01' &=' D1' 01' A' , ' - .' 'BD<=A' <-A' D' 0' D1' 10@ <@@ 0?BD' '.D ' ' @1' <-A' @<?=?@@ '- 1 10 ' <0' D1 ' & ' <- ' &=' D1 >' D<+1' '-' D1' C> 0010' & ' '-' <- ' C< 1' &=' D1' 0 < > 1@ D' 0' 01 - ' <B 1' -& K' D0 & -A' - .

" $ ' <@K1 ' D< ' D' 0' <= 1 ' #1' -& ' D? =?@@ -& ' C ?A' B' <@@ &' <- ' . <?- ' & ' . h - 10' > <A1' # ' D1' , ' - .' &? 1' & 1'. " & A1' &=' <-A' =& ' <- ' &=' D1' C> 0010@ -1' &' <- ' . <?- 1' & ' . <?- 10' > <A1' # ' D1' , ' - .' &? 1' & A' # ' D' 0' 10' C< 1 - 10' &' <- ' C0&-1' & ' C0&-10' &=' <- ' ==' B10' !110' F <. 10' & ' --? '10' . ?- 1A' &? 1' &=' D1' > '0010 #? ' D< ' D1' 0 < > 1 ' 10' C< 1 - 10' <-A' <@@ D' -. '0' '-' D1 > ' <-A' 1+ ' &=' D1 >' B&- 1 -1A@ #1' &' D1 >' .&&A1' <-A' 1==1B ?1@@ <= 1 ' D1' 1 - &? ' C/C& 1' <-A' 1==1= 1' &=' D1' 0 < > 1' 10' C< 1 - 10' <0' '=' D' 0' <= 1' D<A' -1, ' #1-' D<AA1' -1' > <A1

']]]

' 1 . 1' ' -' = 1' &=' 10? > CB&-

+' @0@ = &>' ' > C &j +' A1 - ' E <- 0' &=' D1' &K -' <-A0' %

10? > C '&-' # ' D1' &K -' &=' B1 <'-' <-A0@ I B '. <- 1A' # ' , ' AK ' '<-A' 'B @@ &' A > ?-A' &=' <- .@1 ' " ?a1' &=' & a

B ' ' <0' # ' > <- ' <-A' 0? -A ' .' = 10' <=& 1' D' 0' > 1' # ' A 0' &=' D1' , ' - .' 0' C. 1 - ' &? 0' @< 1' , ' - .10' &=' -.@&-A@ & A +0' C0&-10' &=' <0 1@@' 0' <-& '0' <-A' 0' 1 - '0' <-A' & D1 ' 1 1A' <>1 - '0' KD' BD1' D1 ' D1@A' '-' D1' '. D ' <-A' <0' C< B1@@ &=' D1' & &-1' &=' D' 0' @<-A@ D1' 0 < > 1' '. D ' '0' D1 # ' . 1< @ ' A > -00D1A@ KD1 # ' D1' , -. '0' '. D-10' > < ' -& ' 0& K1@@ #1< 1' <='A' 0? CC& ' D' 0' D&-&? ' <0 < 1' <-A' A' . - 1' <0' & D1 ' '-B10' , ' - .' 0' &=' D' 0' @<-A1' D<+1' A&&-' '-' > 10' C<0 @ KD' BD' '0' -& ' &-1@ ' &' D' 0 A< > <.1' <-A' D? 1@ #? ' <@0&' &' D1' . 1< 1' C' @@ &=' <@@ D' 0' @<-A1' =& ' D1' A1=<?@ 0' &=' D1' 0 < > 1 G ' ! & ' 1 > 1A ' KD1 &=@ <-A' =& ' D1' > & 1' 0?1 '1' &' #1' D<A' <-A' B&- -?1A' <0K1@@ =& ' > < 1 - 1 - h -B1' &=' D' 0' 01' A' &' <@@ <0 < 1' <0' =& ' D1' A1=1 - B1' &=' <@@ D' 0' @'1 . 1' C1&C@1' <-A' 0?#. 1 '0' '-D<#' 1A' K' D' -' D' 0' D' 0' 01' A' 1<@ > 1@ D< ' ' ' > < ' C@1<0' D' 0' '. D - 10' # ' D<A+ B1' <-A' <001 - ' &=' D1' & A10' 0C?<@@ <-A' 1 > C @ <-A' & > 1 - 0' '-' D' 0' C01 - ' < @' <> 1 - ' <001 > ##1A' <-A' # ' <?= &=' 1' &=' D1' 0 < > 1@ &' & A1 -1' 1 - <= 1' <-A' 10 <##' 00D' D< ' <@@ D1' <0 1@@' 0' &-&? & A0D' CC10' <-&? 0' #-A10' 1 - '0' 1 - '0' +' B10' <-A' 1 1A' <>1 - '0' D1 1 <= 1 ' =@&K' - .@ KD' BD' K1 1' . <?- 1A' # ' AK < A' D1' ' ' @0D h <-A' 'BD< A1' D1' ' h@< 1' , ' - .' 0' &=' -.@&-A' < ' 0&-A ' > 10' &' A > &-A' &=' <-.1@1 ' @< 1' " ?a1' &=' & a1@ CB1@@ D1 &=' &' D< +1' & D' > ' <-A' &' D' 0' D1' 10' > <@' 0' &=' D' 0' #&A ' B& > -.@ <-A' CB1@@ D1 &=' &' D > ' R > 1' &=' D' 0' @' =1@ <0' # ' D1' ' 01 <@@ . <?- 10' 10 ' -.' &=' 1B& A1' U' & 1' C@1 -@ ' <CC1 ' D@ #1' 10? > 1A' <-A' <a1 - ' - &' D1' D< ?A' 0' <-A' C&00100' &-' &=' &? 1' 01' A' & 1' . -' & A1C' &' D< +1' <-A' & D&@A1' &' D' > ' <-A' &' D' 0' D1' 10' <0 CB1@@ <-A' ' -' D1' ' .D ' &=' D' 0' 01' A' & &-1@ D< ' '0' &' 01 @ D1' <0 1@@ <-&? ' <-A' &? -1' &=' <?-=& A1' @K' D' D< CC0 1 - h -B10@ D1' <-1 ' <-A' &? -' &=' E <- D< > ' K' D' D< CC 1 - <?- B1' > 1 > # 10' D< > @1 '0' , - '. D '0' =110' <A+&?0&-0' &=' D? BD10' ##1' 0' '& '10' &0C ' <@0' ' <C1@@=' ?-A 1A110' F <C1 - <a10' ! '00D - .' C@<B10' =& 10 10' BD<B10' C< a10' K&&A10' K< 1 - -10' =1 10' > <'a1 '0' @' # '10' = 11' B?0 & > 10' 10BD1 '0' <-A' 01 +' B10' <0K1@@' &=' = 11' 1 - <?- 10' <0' &=' #&-A@ K' D' <@@ & D1 ' D' - .' 0' &' D1' 01' A' <0 1@@10' <-&? 0' <-A' &? -10' #1@&- .' - .' ' - ' D1' &?- '1' &=' - B&@-@ D1' <0 1@@10' <-A' <-&' 0' &=' ! &A ' - .1 ' K' D' D1' > 1 > # 10' B<@@1A' <0 - . &-' 1< K1@@ <-A' ? DK' a1' '-' D1' &?- '1' &=' & =1R@ D1' <-& '0' &=' ! <0 1 -1' F & &-' F - f 4& -' &aa1 - D <>' & > C &-' <001 ' & > 1 =& A1' , 1 -10' K' D' D1' <A+A?0&-' &=' D1' D? BD' &=' D1' 0 < > 1' <-&? @ D1@@K& D' 1+1 - D <> C &-' K' D' D1' ?-A 1A10' &=' 1 K& D' <-A' , ' =B1@<A1@ K' D' <@@ D1' 1 > # 10' &=' D1' 0 < > 1' > <-&? 0' =110' <A+&?0&-0' &=' '' BD10' <0' &=' & D1 ' 1-1='B10@KD< ' 0& ' 1=0 D1 ' #1@@ 10BD1 '0' C< a10' > '@@10' K' D' <@@ @' # '10' <-A' = <?- BD' 010' K' D' <' @ & D1 ' C=' 10' <-A' B& > &A' 10' & D1' 0 < > 1' <CC1 1 - -.' '-' D1' &?- '1' &=' F '@ 1R@ ' D1' <-&? ' &=' 1 &-' '0 &@@ K' D' D< CC 1 - -H1' K' D' @' 1' D?-A 1A1' &=' 1 &-' '0 &@@ K' D' <@@ <CC 1 - - <?-B1 \' '-' D1' &?- '1' &=' 001L@ @' 1' <-&? ' &=' 'BD -' 2 A D' D< CC0 1 - <?-B1 \' K' D' D1' C< a' 0' K&A10' > '@@10' 1 - '0' <-A' <@@ & D1 ' D' - .10' & ' D1' 01' A' <-&D' <CC1 1 - -.@ <-A' D1' <-&' ' /&=' -0 ' K' D' D< CC/ 1 - <-B1 \' '-' D1 &?- '1' &=' 1 =@ D1' <-&? ' &=' F 1 - A&+1 ' K' D' 10BD1 '0 , - '. D '0' =110' <-A' & D1 ' U+' B10' <-A' <A+&K0&-' &=' D? BD10' <-A' D< C1@@10' K' D' <@@ & D1 ' C=' 10' @' # '10' <-A' B& > &A' @10' & D1' 0 < ' -1' <-&' ' #1@&- .' - .' K' D' +' 1K1' #=' = <?- B' C' 1 . . 1' K' D' -' D1' C? B -=' &=' D1' 01' A' <-&' ' '-' D1' &?- '1' &=' ?a@ <-A' D1' D&-&? ' &?-1' =1' 1 ' <-A' > < a1 ' &=' 1' @1' . D' K' D' D1' C=' 10' &=' D1' D1 #<. 1' &=' D1' < a1' &=' 1' @1' . D@ D1' <-&? 0' &=' ?-A1 @1' 0 K&A1' A' 1' <0 1@@ <-A' & A0D' C' &=' <A@1 ' K' D' D< CC h 1-3-B10' <-A' <' && 1' & ' F <. 1001' '-' D1' &?- '1' &=' 001L@ D1' <0 1@@' 0' <-& '0' &K-10' <-A' & A0D' CC10' &=' &- -. 10# &?. D' <-AD<@1' < 1=1@A' F <a1=1@A' D& -1' ! '00D1@<a1' &@ > 1= ' D' &? # ' K' D' Ca10' K< 1 - -10

D' 0' <-A' D1' D< C 1 0' &=' D' 0' 100' &-' KD' BD' =&@@&K' < 1' -&K' =& ' D1' ! ' 0 ' ' > 1' C ' - 1A' <0' < ' &=' D1' < ? 10' &=' D1' 1< ;' ! & > 1 ' C ' - 1A' & 1= '&-0' &=' D1' < ? 10' &=' D' 0' 1< ' 1-A1A' K' D' D< C 1 ']] @

E 0' !0 ' 6 7 ' 4 : 7 4

BD<B10 >< a1 '0 >1># '0<-A <# & D1 ' D1' '<CC// 1-■-B1\' '-' D1' &?- '1' &=' & a1 <-A' +' 1- 10 '-' &?.D &-' <-A' D< 1 &-' #10'A1A' 1 #? ' '-' D1' &?- '1' &=' E&?B D< ' '0' &' 01 >1># 10' &=' D1' <-&? ' &=' !<0 1>1' '-' D1' &?- '1' &=' F '1 -A' < B& <.1' ' '<B 10' &=' <-A1' L ' <B 10' &=' >1A&K1' '-' &>1A&-' >< .-< L' ' <B 10' &=' &-A1' ' ' <B 10' &=' >1A&K1' '-' 'D<1' K ' D' D<CC 1-<?-B10' '-' D1' &?- '1' &=' ? <# &='B10' &=' 1K< A10' &-0 <#10' <'''=0' & 1 0' ! & 0 1 0' <-A' < a1 0' <-A' <# & D1 ' &=='B10' &' D1' 01'A' <0 1#10' &K-10' <-& '0' <-A10' 1-A0' < a10' <-A' <# & D1 ' C&00100'&-0' <=& 01'A' <CC1 1 - -.' <-' <--? 1' &=' ' ' &' #1' CB1 +1A' &=' D'00?10' &=' D1' &?- '1' &=' & a1' # ' D1' D<-A10' &=' D1' D' 1=' &=' D1' 0<>1' &?- '1' =& ' D1' >1' #1 -.' ' -A' &=' <-' --? 1' &=' ' ' ' &' #1' CB1 +1A' 1 1 ' &=' D1' ?0 ? >1' <-A' ?#0'A'1' &=' F & 10' 1 D1 ' <-A' &=' F &# =1#10' '-' D1' & 1' &=' D1' &K-1' &=' , '-.10 &-' ?C&-' ?# # ' D1' D<-A10' &=' D1' ?0 & >1 ' =& ' D1' >1' #1 -.

C ' 7' D< ' #1' ' ' & A1 -1A' # ' D1' 01'A' <?= & ' 1' D< ' <# D1' 01'A' .'= 10' <-A' . <?- '0' ><A1' ?- &' D1' 01'A' A>&-A ' # ' <-' &=' D1' 01'A' <= 1' , '-.10 &=' D1' C> 1000' & ' &=' <-' CB1# D1 &=' &' D1' 01'A' A>&-A' '-' =&? >1' <=& 01'A 0 <-A' <-A' #1' = &>' D1' =10 ' &=' 1 -' 'BD1# D< BD<-.1# <0 ' C<0 ' 1C1#1A' <A-?#1A' +&'A1' <-A' &=' -&1' =& B1' -1' 1==1= 1' '-' D1' <K1' ' <-' &=' D1' 01'A' . <?- 10' & ' .'= 10' &=' D1' 01'A' , '-.10' & ' <-' & D1 ' <Q1' & ' <B '0' &=' <' <>1- 10' D1 &=' ><A1' &' D1' B&- '1 <=& 1' D'0' >1' '-' <-' K'01' -& K' D0 &-A'-.

D1' 0<'A' E <-' 0' 1C1<1A

? C ' &+1 ' D'0' #1' ' ' 1-<TR1A' # ' D1' 01'A' <?Q & ' 1' D<' <# D1' 01'A' &-&? 0' <0 1#10' 8 &?-10' <-&? 0' <-A'0' 1- '0' 1- '0' 1 B'&-0' +'B10' , -'.D '0' =110' A+&?0&-0' 1>#10' ?-A 1A10' !& 10 10' < a10' D<B10' F< 1--10' '1K 1' &=' ! <?-BD'C1..1' 0BD1 '0' '=1 '10' ! <?-BD'010' &=='B10' <--? 10' <-A' <# & D1 ' D1' C> 001 ' <-A' 1 'CB1# D1 &=' #1' '-' D1' , '-.' B? 1' & 1'.-' & A1' <0' CB1# <-A' '-' D1' '.D ' &=' D'0' & &-1' <0' D1 ' K1 1' <=& 1' <-' &=' D1' 01'A' .'= 10' & ' . <?- 10' ><A1' &=' D1' 0<>1' # ' +1 ?1' &=' D'0' = 1' K' D&? ' 0? -.' & ' = -A -.' &=' <-' &=='B1' & ' &=='B10' &=' <-' &=' D1' - 0010' <0' '=' D1' ' K11 ' &=='B10' D1 &=' A?1 ' =&?-A1-' <-A' 1 &? -1A' '-' &' <-' &=' D1' , '-.10' &? 10' &=' 1B& A1' <= 1 ' D1' A?1' & A 1' &=' D1' <K1' ' L&1C 1' <-A' <K1 ' C+'A1A' D<' D1' ^?1- '#1' '-' -&' K'01' D? 1A' & ' ?A'B1A' # ' D'0' < 1' &=' 0?BD1' <0 < 10' KD'BD' &' D1 ' <=& 1' D'0' >1' K1 1' . <?- 1A' &=' <-' &=' D1' 0010' # ' #? 1' 01'A' & 1'.-' & A1' # ' D'0' 10' C< 1- 10' & ' &' D1 ' 1 >1A' . <?- 1A' <?= & '01A' & ' B&-=1 >1A' # ' <-' -& D1 ' <Q'1' =& ' D1 ' ><A1' '-' D'R' C01-' < 1'<>1- 1 #?' D< ' D1' 0<>1' <0 < 10' &' D1 ' . <?- 1A' # ' D1' 01'A' 10' C< 1- 10' & ' &' D1 ' 1 >1A' . <?- 1A <? '& '01A' & ' B&-=1 >1A' # ' D1' 01'A' <(1' <-A' <# D'-.10' '-' D1' 01'A' 10' C< 1- 10' <-A' B&- 1 -1A2' #1' &' D1 ' .&&A1' 1==1 ?1# <-A' <A+<'#<#1' <= 1 ' D1' 1-&? ' C C& 1' > <B'&-' . <?- 1' <-A' BC-=' ><B'&-' '-' D1' 01'A' 10' C< 1- 1 ' <-A' <Q 1 D'0' < 1' '-' <-' K'01' -& K 0 <-A' -.' -A' D< ' <# 10' C< 1- 10' ><A1' # ' D1' , '-.' B? 1' & 1'.-' & A' &' <-' C0&-1' & ' C0&-1R' &=' D1' C> 0 10' <-A' &=' 1, ' CB1# D1 &=' <-A' &=' <# &='B10' =110' <-A' <--? ' 0' &=' 'C' <-A' ?C&-' & ' .& -.' &? 1' &=' D1' 0<>1' <-A' &=' 1+ ' CB1# D1 &=' #1' &' 1+ ' &=' D1' 01'A' C< 1- 110' <0' .&&A1' <-A' 1==1 ?1# '-' D1' <K1' <0' '=' D'0' < 1' D<A' -1+1 ' #11-' D<AA1' -1' ><A1

<-A' =& ' E <-' 0' # ' ' 1-' ##

$ ' &' 1R ' C0&-1' <-A' C0& 10' & D1 ' D1-' D1' 01'A' A>&-A' &=' <-.1#1 ' <-A' D 0' D1' 10' ><#10' <-A' #' & D1 ' C0&-1' <-A' C0C-1 ' <-' D -.' B#< C# -.' & ' D<+ -.' &=' '-' & ' &? 1' <-' &=' D1' > 0010' # ' D1' 01'A' A>&-A' & ' D'0' D1' 10' ><#10' 0 BD1' '.D ' '#1' A< >1' <-A' '- 1001' R'0 D1 ' & ' <-' &=' D1 >' D<+1' & ' D<A' & ' 0D?#A' & ' > .D ' D<+1' D<AA1' '-' <-' &=' D1' > 0010' '=' D'0' i1-' <B 1' D<A' -1,' #1-' D<AA1' -1' ><A1 <+ -.' <0& &' 1+0 ' C0&-1' <-A' C0&-10' D<+ -.' <-' D -.' &=' & ' '-' D1' > 001 0' # ' 1LBD<?-.1' & ' # ' &1#<0'#-' &=' 1LBD<?-.1' ><A1'# ' D1' 01'A' A>&-A' & ' # ' '? ' &=' D'0 D1' 10' <0' 1] BD<?-.1' 1B->C1-B1# KD'BD1' 1LBD<?-.1' & ' 1B& >C1-B1' '0' -&K1' .&A1' <-A' 1==1B ?1# 0?BD1' '.D ' '#1' B#< >1' -A' '- 1 1 01' <0' D1 ' D<A' D<+1' & ' > .D ' D<+1' D<AA1' # ' 1<0&-'#=' A'1' 0<>1' 1LBD<?-.1' &=' 1B& >C1-B1' '=' D'0' 01-'' <B 1' D<A' -1 ' #1-' D<AA1' -1' ><A1

<+'-.' LBD<-.10#

" $ ' <#K1 ' D<' D'0' <B 1' -1' <-' & D1 ' <B 1' & ' <B '0' ><A1' & ' & #1' ><A1' '-' D'0' R01-' < #'<>1-' 1L 1-A' -& ' '-' <-' K'01' ' <-' # <-A10' 1D 10' 1- 10' 1 B'&-0' +'B10' C&00100'&-0' & ' D1 1A' <>1- 10' '-' ? DK'a1' '-' D1' &?- 1' &=' & D#' & D1 ' D1-' K1 1' 1 1-' & ' . <?- 1A' &' D1' 01'A' A> -A' <-.#1 ' -1' ' <'' ' #&-A10' 1D 10' 1- 10' 1,B'&-0' 'B10' C&00100'&-0' & ' D1 1A' <>1- 10' '-' ? DK'a' <=& 01'A' 1+1-' & ' .0 ?- 1A' # ' D1' 01'A' A>&-A' & ' <C ' &=' D 0' D1' 0' &' <-' C0&-1'& ' C0&-10' # ' K1 '#=' 1LBD<?-.1' ' <-A' D<' D'0' <B 1' -1' <-' & D1 ' <B 1' & ' <B 10' ><A1' & ' &' #1' ><A1' '-' D'0' C01-' < #'<>1-' #1' -&' D ' <-' K'01' d# ?A'B'<' ' & ' D? =?## &' F '#'<>' >1' -1' &' <-' & D1 ' C0&"1' &' & ' =& ' <-' #&-A10' 1- '0' 1- 10' #1+1 B'&-0' +'B10' C&00100'&-0' & ' D1 1A' <>1- 10' '-' ? DK'a' <-& 101'A' & D1 ' D1-' K1 1' 1 1-' & ' . <?-=1A' &' D1' 01'A' A>&-A' ' -1' &' & ' =C ' <-' #&-A10' 1- '0' 1- 10' 1 1>-0' +'B10' C&00100'&-0' & ' D1 1A' <>1C '0' '-' ? #'K'a1' <=& 01'A' 1+1-' & ' . <?- 1A' &' D1' 01'A' A>&-A' KD'BD' D1' 01'A' A>&-A' & ' <-' & =' D'0' D1' 10' D< D' 0' D1-' D< ' 1+1-' & ' . <?- 1A' &' <-' & D1 ' C0&-1' & ' C0&-10' # ' K1 ' & =' LBD<?-.1

. '%%&&&H @<"! 8' @! ' #0"!' 2!&/' . !&*&& ."/' 2 ++ '< -/' !-@.&!' ++ !' 2!&/' -.0"2' +.-/&2' !- &2' -/'./&!'" <1@22!2' 0- .' /&!' @1! !'2!&/' V&++& 1' ."-!' 2 0+/' '!' ##.1 +&22 !/' &2' 0++' *!' . '%%&&&H @!"!2' &' !' /' - 0" ++@'+@'!/'0- .' !'2 1!' *!=' -/'&-'+&E!' 7&2!' '!')@ 2.-!' ." 2.-!2' .' 7 .1!'&'2 ++' +! 2' .0"!' 2!&/' .<!&*-' ."/' !' M&-*' .' #.1@ !' -/'*" 0- !' !' <@22!2' 2 ++' '!' .22!/!' -/' !-@.&!' !' 2 1!'/0"@-*' ++' !'2 1!' @1!' 7& .0'!1 !# !1!-'. ' V 2 !' !%## !' &-' .02@-*'^0&/' &-' !'<". '@2' # ++!/' 40 -!@2' b". '!' 0"# !' b". '!' -/' !++' b". '!

5)' .@!2< <!' . ' !'2&/' b!"'@2' !-!" + ()'&-* b!-!" + '&-*

" s ' +7!@2' ' &2' ^+!' -!+)' -@' . !'" <!' 1 /!' ." .' #1' 1 /!' &-' &2' 2!-'3 "+& 1!-' !% !-/' -.' -!";!'&-' -@ \#0/&#& '." 0" 0++' .' .@!2'+ !' V&' .' !'27/'b!"'!&2' ." .' +&@' 2.-!' ." 2.-!2';!&-*' 2! 2!&/' ." !. !!' ." !.+!!2' . !" 02!' . '." &-' -@' 1 -.0"2'+.-/!2' !- &2' "!-&2' "!,!EK-2 -/'<'&#!2' 7 &# ' +&!' 2 1!' .&!2 '." .0* ' .' '!' ." "&+0+< !' - 1!' .'H.@- 0"!' ." '/.7"!' . '$1!' .' !" +@ ' ." '-@' . !" & -!' ." 2.-!2' '." '!' ." .0* ' .' '!' ." ;!' 2!-2!/' . '." .' !" 02!' ;@'"! 2.-'!"'H.@- .0" ." /.7!" !" !'/!#! 22!' . ' !' 2!&/' b!"'!&2' ." . !"7&2!

Y s ' .'!<@' . !" 2.-!' ." 2.-!2L' . !"H -' !' !&"!' . ' !' 2!&/' b!"'@2' 20# "&* ' &+!' !-"!' -/'&-$!22!' -/' .22!22&.-' -/'&-' !'<1@22!2' -/'!$@' #!++' !". ' 2' !@' ." -@' . ' !@1' '!' ." /' ."1@* ' '!' //!' '!-@' @1!' ;!."!' ! &"2'/@' . ' &2' <2!-' 3 "+& 1!-' C#'

'&-*' . '6!-2' -/' !"'&#!2' . ' ' -.'2 -/' &2'!22' .'" !' 2!&/' 0^+."& !' ' ++ -/'!,@' . ' !' 2!&/' 2.-!2' . ' 7 .1' !' <1@22!2' ." -@' #!++' !". ' ;!' .+/!-' -/' !<@' . !" 2.-!' @-*' -@'"!-' .0' . ' !' 1&22!2L' ." -@' #!++' !". ' 2 ++' -/' 1 @' + 0 0++@'/&2"!@-'&-' !' 2 1!' 1 -."&2'+.-/!2' -/' !&&2' -/' . !" !' <1@22!2' ." !' 2!&/'"!-&2' -/' 2 ++' 1 E!' !" ." '.7"!' 0 .-' !' 2!&/' V&++&' ."-!' ." &2' -!%' !&"!2' ." 20# !' 2' [;!' ." 2 +;!' !- 0- !2' . ' !' 2!&/' 1 -."&2'+.-/&2' -/' !-&2' -/' . !" <1@22!2' ." . ' -@' #!++' . ' !@1' -/'&-' ++' . !" &-*!2' 2 ++' /.' ." 20@ !' . ' !' 2 1!' "!-&2' 2' !@' 2 0+/' '!' /.-!'& ' ' &2' !' /' -.' ;!' 1 /!' -!"' /

!' !&"o'C#'1 @!-!" ' &2' *!' . ' 5 'A! "2' 7& .0' ' 20&-*' &'!"@' C#

C '&' &2' !- ;+!/';@' !' 2!&/' 0# ."&&!' ' !' 2!&/' V&++& 1' .1!'@1!/& +@' !" ' !' #.1@ ' .' !' *!' . '%%&&&H)'@!"!2' ." +&!' !&"!2' . ' !' 2!&/' V&++& 1'RQ8' !-' .' /!#! 22!' ." !' #.1!' .' !' 2 1!' *!'2 ++' '20# !' @1!' 2' !' 2!&/' V&++& 1' .1!' #.1@ ' .' !' 2!&/' *!' . '%%&&&H)'@!"!2' ." 2 0+/' '!' ##.1 +&22 !/' &2' 2!&/' *!' . '%%&&&H)(@!"!2'&' !' 2.'+.-*!' //!' - 0" ++@'+@'!/' !- "!' &-' !' 2!&/' 1 -."&2'+.-/!2' -/' !- &2' -/' . !" <1@22!2' 7 &# !' .0"!' 2!&/' .3!&*-' ."/' 2 ++' '!' ;@' "! 2.-' . ' &2' <2!-' ^+!' -/'!<@' #!++' . ' !@1' 27!++' 0 .-' !' .22!22&.-' .'#0"!' 2!&/' .3!&*-' ."/' 2' . ' -@' 2.-!' ." 2.-!2' .' '!' -/'!-@.&!' .' @1' -/' &2' !&"!2' 7& ' &22O!2' -/' &!2' !". ' 7& .0' -@' '@-*' . ' &2' *!' ." +@'!"!@' 20!-*' .0!' . ' !' -/!2' . ' .0"!' 2!&/' ., !&*-' ."/!' !" !' #.0"2!' . ' &2' 0-#!"@' ." . !"7&2!' !' <1@22!2' -. 7& 2 -/&-*

' 1.1' -' A1' D<' <@@' . <?- =' ><A1' &=' H ` <--&hP' &=' F &&A0 &Ba' #1' +&'A1

1 ".'&/!-b" -2' . ' !' ".7-' .0' . ' !' -." ' V../2 .#E=

C 6 ' ."!' &2' @1!'0 .-' !@-!/' 20"1@2!' -/' !' ".0 ' . ' !' 1 !" !". ' -. ' &!+@' !% &-@-!/' ' ;!-' 1 /!' "!2' !-!2' -/' *" 0-!2' ;@' !' M&-*&2' &* -!2' . ' /@<2' &!2' ;!@-*' #!++' ." # "*!' . ' -/' .' !' ."/2 &' -.&" -/' 0-/"!/' . ' V./2 .E' .' !' *"!' -@-&22!1!-' . ' !' +0!' . ' &22O!2' -/' &!2' . ' !' 2!&/' ."/2 &' -.&" -/' 0-/"!/' 7 &# ' !' M&-*' ' 22&*-!/' .' !% !-#!2' . ' &2' 1..2' .-." ;+!' .02! .+/' 7 &# ' 22&*1!-' 1 @' -.' -.7!' ;!' ;."-!' !' 2!&/' *" 0-!2' -/' "!2' !-!2' ;!&-*' &-' !&" ."#!'< 7 !" ." ;!' &' !-;+!/';@' !' M&-*' .0"!' .<!&*-' ."/!';@' /'&#!' . ' !' ."/!2' 2 0++' -/' !1 ++' -/' !' .1!-2' &-' &2' <2!-' "+& 1!-' 22!1;+!/' -/';@' 0/&."&!' . ' !' 2 1!' ' ++ *" 0-!2' -/' "!2' !-!2' ' "!-&2' "!' !-0!2' --0@!2' &22O!2' -/' &!2' . '&-' -/' .0' . ' !' 2!&/' ."/2 &' -.&" -/' 0-/"!/' . ' V./2 .E' -/' /&!' &#!' . ' .0-".++!" . ' !' 2 1!' 1 /!';@' !' M@-*&2' &* -!2' . ' -@' 2.-!' ." 2.-!2' ."!' &2' @1!';!' ".1' !' !2' . ' !@-' &# !++' "# 0-*!++'+ 2' 2' "! !++!/' /-0++!/' '.&/!' -/' . '-.!' ."#!'2 "!-* '-!' ! !/+!'&-' !'+ 7!

". '&2.' ." 'B! &+#!' 2S' M!! !" . ' .1;0"@ 3 "E

" s ' +7!@' +& ' &2' /+!' . '6!201 #&.-' -." -..-!' . !" /+!' ." /+&2' &-' &2' <2!-' "+& 1!-' 1 /!' ." .' ;!' 1 /!' !% !-/' -. ' -!" &-' -@' 7&2!' ;!' <#0/&## ++' ." 0" 0++' . -.-@'B! @ + #!' S0&!"'&-' ." ." ." -@'*" 0- !' ." *" 0-&2' @! ' ." @& &2' /' ." 1 /!';@' !' M&-*!2' "!2' !-!2' . -.@' . ' &#!' . 'M! !" . ' !' 3 "E!' . ' ."-;0"@'7& &-' !' .0-&!' . ' %!-./' ;0' ' !' 2 1!' *" 0-!' ." *" 0-!2' @& !' ." @& !2' ;@' !' 2!&/' "!2' !-!2' -/'!<@' @-*' &-' !' 2 1! #.-!@-!/' -/' !%<22!/' 2 -/!' 1 @-!' -/' ;!' . ' 0++' 2 "!-* ' ! !# 0!++' -/' 2' ' &++ ;+!' . ' !' 2!&/' - .-@' ##."/&-*' . !' 0" ." !' <!<+!' -/' !" .0" . ' !' 2 1!' ." . ' -@' . ' !' 1' 2' !@' -/'!<@' . ' !@1' 2 0+/' '!' ;!!-'& ' !' 2!&/' !' / -.';!' 1 /!0 !' 2!&/' 0!' ." -@' . !" #.-!@-!/' &-' !' 2 1!' ." -@' . !" ^+!' ." /+&2'&-' +&&2' <2!-' 3 "+& 1!-' 1 /!' ." . ;!' 1 /!' -. 7& 2 .-/@-*

)! 'O$ %' F'& ' !' 2!&/' V&++& 1?' -- $'M'$ %@)'N %' -."

(' 0 ' ! 9? ;Q;

3 6' WW1

' 1.'-<; -' =@;1' =& ' D1' ^?1?10' & - ? 1' 9

b , \ (' ' . 4)@ ! ' 9 - › W !

'-' D1' &- - '1' &=' ?A'=' D1' & A0D'C' 9/ ' <-&' ' &=' 'A##A1' D1' & A0D'C' & ' <-&? ' &=' < A10@1 = D1' & A0D'C' & ' <-&' ' &=' > > 10=1@A ' D1' & A0@CC' ' <-&' ' &=' +00<+A1 ' ' 1 ' &=' D1' <' 0D'C' &=' '0@1.D' D1']' A0D'C' & ' <-&' ' &=' D< @1 &-' <-A' " &? &-' D1' & A0D'C' & ' <-&' ' &=' '0@1.D' K' D' < '<-A' 0' " .?@1 ' D<CC? 1-<?-B1' '-' D1' &?- '1' &=' E@&?B' D1' @' A0D'C' & ' <-&' ' &=' <K< A 1@ D1' & A0D'C' & ' <-&' ' &=' < B@1' K' D' <@@ <-A' 0' -.?@< ' D<CC? 1-<?-B1' '-' D1' &?- '1' &=' 1 1=& A' D1' <-&' ' & ' & A0D'C' &=' > > 10. &+1' D1' & A0D'C' (' <-&' ' &=' & &-' D1' & A0D'C' & ' <-&' ' &=' A -.@< ' D1' & A0D'C' & ' <-&' ' &=' @'0 &-' <-A' A'1' =11=1 > 1' &=' D1' &? 1' &=' F 'BD1' K' D' <@@ <-A' 0' -.? 1 ' D<CC/ 1-h-B1' '-' D1' &?- '1' &=' F & B10 ' D1' & A0D'C' & ' < ' &=' 1 aD<>C0 1A' <-A' <-.@1 ' K'@D' <@@ <-A' 0' -.?@1 ' D1 ' <CC? 1-<?-B1' '-' D1' &?- '1' &=' 1 =& A' <-A' D1' <-&' ' &=, -.10@<-1@ K' D' <@@ & D1 ' <CA' 0' -.?@1 ' D1' > 001' # ' KD< ' 0&1 i' -<>1' -<>10' D1 ' #1' B<@@1A' & ' a-&K1-' & ' # 'KD< ' 0&' 1+1 ' -<>1' <- ' &=' D1 >' '0' B<@@1A' & ' a-&K1-' '-' 1' , '-.10' 0BD1H?1 ' % -A' 1@OKD1 1 ' -A' = &>' D1-0=&? D' D<+1' <@@ D1' .'=A< <-A' . <?- 10' &=' &==' B1' @' &=' & ' K' D' -' & ' &?BD -.' D1' 0<>1' <-& '0' @&-A1' & ' 1-A' <-A' 1 ' CB1@@ &=' D1 > 'G <-A' '- &' D1' 0<>1'

<-A' D& A00 D1' > 1' K'A'&?' & Q 1 ' =&?-A@ & '0?' -.' '+1 @ ?i 1 ' @1' <'-@ I B

0D'CC'0' <-& '0' ? .D10' #-A10' 1=' 0' <-A' & @'' ' > 001' <-A' 1R ' CB1@@ D1 &=' > < ' 1- 1' <-A' =?@@ 01<0 -' <-A' C&00100'&-' A'1 &=' D1' =&? > 1' <-A' 1==1Q 1' &=' D1' 01'A' ' 10' C< 1- 10' <a1' # '+1 ?1' &=' D1' 0'1'A' = 10' C< 1- 10' K' D&? ' 0? -.' &=' <- ' F ' 1' & ' F ' 10 & ' &=='B1' & ' &==' B'10' &' #1' =&? -A0' & ' @ ,1' & ' &?0 1 ' @1' > < -' &' #1' 0?1A' & ' <A' '-' @' < ' #1D<@=1' ' -A' D< ' D1' 0<>1' ^?1-1' # ' 1<0& " &=' 0? RD 1 ' 11' <-A' C&00100'&-' # ' D1 ' 0&' D<A' <-A' <a1-' # ' D1' 0<@-1' C? 1' & 1'.-' & A1' & ' <-' D'0' > - 0 10' #1' -& ' ' > C1BD1A' ' +1 1A' & ' '-' <- ' K'01' . +1A' ' #? ' D< ' D1' 01'A' 1- =1' #1' &' D1' 0<>1' ^?1-1' &=' <08 .&&A' 1==' B<B'1' <-A' 1@! 1= 1' '-' D1' @<K1' <0' 0D A' ' .&&A1' @ +0 ' &?0 1' @1' > < -' & ' <- ' & D1 ' 0? 1' &=' D1' D' 001' &? 1' &Q' D1' D<-A10' &=' D1' 0<>1' B? 1' &+01' .-' & A' <= 1 ' D1' @<K1' I ' &?0 &>1' &=' D1' 1<a-1' &=' -.@&-A@ <@@ <-A' 1R ' & D1 ' D'-.' B&-B? <-' D<' '-' D<' C '1' K1 1' 1H?' 0' 1' D<AA1' <-A' 1H? 1A' <-A' # ' D1' 0<>1' ^?1?1' C? 0?1A' <-A' Q<0' &=' 1 ' D'-.' D<' @ P' D1' 0<>1' B? 1' & 1@.-' & A1' '-' D<' C '1' C 1 - -.' K1 1' =?@@ ' 0< '0='1A' <-A' B&- 1- 1A'

D1' ^?11-' 0D<@@ D<+1' @" , -'. D /0 ! 110@ A+CK0&-0@ <-A' & D1 ' &=' 0' <CC1 <'-'-.' &' 0?BD' <-& 0@ I B

C ' =& ' A'<' '-' D1' 01'A' ' 10' C< 1- 10' 'B1' >1-B'&-' '0' ><A1' &=' <- ' ,D .D '0' =110' <A+&K0&-0' &=' <- ' D? BD10' '& '10' D<?D 1 10' 1#1-A10' & C' <@@10' -& ' &=' & D1 ' 1-1='B10' &=' D1' D? BD1' -& ' &=' <- ' @'# '10' = <?-BD'010' =1 10' >< a1 '0' C< a'0' +'&K10' &=' = <?-BD1C@1.1' B&?= 10' @1 '0@ -& ' &=' & D' ' C=? 10' &' D1' 01'A' &' A0D'CC10' <-& '0' ? .D10' ! & 10 '0' <-A' & D1 ' D1' > 001' & ' <- ' CB1@@ D1 &=' C 1 - -.' <-A' #1@&-.'-.@ D1' =?@@ 1-1D ' &=' B? 1' 01'A' &,1'.-' & A' K<0' <-A' 1 ' '0' D<' D1' 0<>1' ^?1-1' # ' D'0' 10' C< 1- 10' 0D?@A' D<+1' D<A' <@@ <-A' 1, ' D<A+&?0&-0' I ' .D '0' =110' @'=1 '10' =1 10' >< a1 '0' +'1K1' &=' = <?-B1C@1.'0' &? '0' @1 '0' <-A' <@@ & D1 ' C=' 10' &' D(' > 001' " <- ' CB1@@ &=' D1 >' & ' <- ' &=' D1 >' C 1 - -.' & ' #1@&-.'-.' ' 1' ' ' D1 =& ' 1-<Q@;1A' & A1 -1A' <-A' 0 <#@'0D1A' # ' D<A+ B1' <-A' <001-' <=& 01'A' <-A' # ' D<?= & ' 1' &=' D'0' C01-' C< @'<>1-' D<' D1' 0<>1' ^?1-1' 0D<@@ D<+1' =& ' R>1' &=' D1 ' @'=1' <@@ -A' 1, ' , - .D '0' =110' <A+&K0&-0' &=' D? BD10' '& '10' D<?- 1 10' 1#1-A10' &0C' <@@'0' <-A' & D1 ' #1-1='B10' &=' D1' D? BD' KD< ' 0&' 1+1 ' D1 ' #1@ <-A' <@@ <-A' 1R ' > <5' @'# '10' = <?-BD'010' =1' 10' >< a1 '0' +'1K1' &=' = <?-BD'C@1.' &? 10' '('0' <-A' <@@ & D1 ' C=' 10' <-A' B& > &A' 110' KD< ' 0&' 1, ' D1 ' #1' &' D1' 01'A' & A0D'CC'0' <-& '0' ? .D10' <-A' & D1 ' D1' C> 001' & ' &' <-' CB1@@ D1 &=' C 1 - -.' & ' #1@&-.'-.' " CB1@@G & ' D1' KD'BD' &' D1' 0<>1' & ' <-' CB1@@ >1' &=' D1' > <a -.' &=' D1' 01'A'

-A' D1' &-&? '&=' 1 aD<>C0 1<A@ I B

' 10' C< 1- 10' K1 1' C 1 - -.' & '#1@&-.'-.' G -A' <@0&' D1' &-&? '&=' 1 aD<>C0 1A' K' D' D<CC3 1-W-B10' <-A' D&=='B1' &=' D1' <'@@'K'a1' &=' D1' D?-A 1A' &=' '0@1 ' '-' D1' &?- '1' &=' E@&? ' a1' > < ' <-A' =&? >1' <0' D&.D' D1 ' D<A' #1-' '-' D1' 01'A' 10' C< 1- 10'0C1B'=' 1A@ K' D&? ' <BB&>C 1' & ' & D1 ' '@'-.' =& ' A'1' 0<>1' &' B? 1' & 1'.-' & A1' &' #1' 1@A1-' & ' A&-1 '

( ) ! &>' KD<' '>1' D1' 1B1'+1 0@ I B@ 0D<@@ <BB&?-' &' D1' ^?11-

R ' S' D<' # ' D1' 0<>1' <?Q & ' 1' #1' ' ' 1-<B 1A' & A -1A' <-A' 0 <#@'00D1A' D<' D1' 0<>1' ^?1-1' D<+1' CB1 +1' <-A' 1- &'1' <@@ ><-1 ' &=' 1- 10' '00?10' <-A' C=' 10' &=' <@@ <-A' 1 ' &=' D1' > 001' = &' D1' =10 ' &=' D<--?-B'<B'&-' &=' B? 1' <A ' @<0 ' C<001A' . &K1-' < 'A' B& > 1-@ <0K1@@ # ' D1' D<-A'0' &=' 01 @@ 0BD1 &? 0' '-' 01, <@@ &?- '10' '-' KD'BD' D1' 01'A' C> 001' & ' <-' CB1@@ D1 &=' #1@ <0' # ' D1' D<-A'0' &=' 1B1 +&? 0' <'@@'10' =1 > &? 0' & ' & D1 ' &BB?C'1 0' &=' D1' 0<>1@ <-A' 1 ' CB1@@ D1 &=@ K' D&? ' <BB& > C 1' & ' <-' ' & D1 ' D' '.' D1 1&=' &' D1' , '-.' &? 1' & . -' & A1' > <A1' & ' A&&-1' <-A' D<' 1 ' &=' D1 >' &=' 0?BD1' > <D@ 1- '0' '00?10' <-A' C=' 10' & A'1' 01'A' ^?1-1' C<'1A' <-A' & ' #1' C<'1A' < 1-0 1' D1' 0<>1' &? 1' & 1'.-' & A' #1' <BH?' 1' <-A' A'0BD< .1A

D1' & # ' <0& <@ 4 ' <00? 1A' & ' D1' ^?11-

* ' #1' ' ' & A1 -1A' <-A' 1-<#@1A' D<' D1' 0<>1' ^?1-1' D<+1' <-A' 1- &'1' <'@ D1' 01'A' & A0D'CC0' <-A' <-& '0' &=' <00 -. #-' <-A' 1 K1@@' D1' & A0@''C' & ' < '&' ' &=' C &-' K' D' <@@' <-A' 0' -.?@1 ' <CC W 1-<?-B10' '-' D1' &?- '1' &=' & = ' D1' & A0D'C' & <-&' ' &=' " 1C -.' D1' & A0D'C' & ' <-&' ' &=' <?-=& A' D1' & A0D'C' & ' <-&' ' &=' E <?- D<>' D1' & A0D'C' & ' <-&' ' =, 1'# ' K' D' <@@ <-A' 0' -.?@1 ' D<CC 1-<-B1 = '-' D1' &?- '1' &=' '-B&@-@ D1' ? .D' &=' @1 1' K' D' <@@ <-A' 0' -.?@1 ' D<CC 1-<?-B10' '-' ='1' &?- '10' &=' ?==' 001L' & == 1 = <-A' <- 1#=' D1' & A0D'C' & ' <-&' ' &=' #? ' D1' & A0D'C' & ' <-&' ' &=' &?A1-' K' D' < '<-A' 0' -.?@1 ' D<CC 1-<?-B10' '-' D1' &?- '1' &=' ?==' D1' & A0D'C' & ' <-&' ' &=' 1 A1=1@A' D1' ? .D' &=' 1 A1=1@A' D1' & A0D'C' & ' <-&' ' &=' D< 0 1A1' D1' ? .D' &=' D<L0 1A' D1' &==' B1' &=' =1&A< ' '-' D1' &?- '1' &=' 001L' K' D' <@@ <-A' 0' -.?@1 ' D<CC? 1-<?-B10' '-' D1' &?- '1' &=' 001L@ D1' & A0D'C' & ' <-&' ' &=' ?A#? @ D1' &==' B1' &=' =1&A< '1 ' K' =@" <@@ <-A' 0' -.?@1 ' D<CC 1''<?-B10' '-' D1' &?- '1' &=' ?==' D1' & A0D'C' & ' <-1 ' &=' 1 D<>' D1' & A0D'C' & ' <-1 ' &=' F&&A1D<@@ K' D' <@@ <-A' 0' -.?@1 ' D<CC 1-<?" B10' '-' D1' &?- '1' &=' 001L' D1' ==' B1' &=' =1&A< ' '-' D1' E&?- '1' &=' & ==' D1' ==' B1' &=' <'@@'= &=' <-=1# ' <-A' ?-=' D1' & A0D'C' o= <BD' @< ' K' D' <@@ <-A' 0' -.?@1 ' D<CC / 1-<?-B10' '-' D1' &?- '1' &=' 001L' D1' & A0D'C' <-&' ' &=' F <@0 -.D<>' 1< 1' D1' & A0D'C' & ' <-&' ' &=' F <@0 -.D<>' '@@ D1' & A0D'C' & ' <-&' ' &=' ' BD<>' K' D' <@@ <-A' 0' -.?@1 ' <CCH 1-<?-B10' '-' D1' &?- '1' &=' & ==' D1' & A0D'C' & ' <-&' ' &=' -0 ' D1' & A0D'C' & ' <-&' ' &=' <?-A&-' K' D' <@@ <-A' 0' -.?@1 ' <CC? 1-<?-B10' '-' D1' &?- '10' &=' 1 =& A' <-A' ?-' D1' & A0D'C' & ' <-&' ' &=' " 1C=& A' & -A' D1' & A0D'C' & ' <-&' ' &=' &? D=- D' KO' <@@ <-A' 0' -.?@1 ' <CC? 1-<?-B10' '-' ' 1' &?- '1' &=' , 1 - ' D1' =11=1 > 1' &=' D1BD10 1' D1' & A0D'C' & ' <-&' ' &=' " < &-' D1' & A0D'C' & ' <@'@&=' D' 1' K' D' <@@ <-A' 0' -.?@1 ' <CC? 1-<?-B10' '-' D1' &?- '1' &=' ?001L' D1' & A0D'C' & ' <-&' ' &=' ' D' D1' & A0D'C' & ' <-&' ' &=' D'@ -.&@A' D1' & A0D'C' & ' <-&' ' &=' &-.1' K' D' <@@ <-A' 0' -.?@1 ' <CC? 1-<?-B10' '-' D1' &?- '1' &=' , 1 - ' D1' & A0D'C' & ' <-&' ' &=' ?'==' '.D ' K' D' <@@ <-A' 0' -.?@1 ' <CCC? 1-<?-B10' '-' D(' ' &?-?1' &=' 001 1' D1' & A0D'C' & ' <-&' ' &=' , -.10A&-' D1' & A0D'C' & ' <-&' ' &=' K<--10B& > #1' D1' 1B1C 1' &=' D1' C1-01' &=' F/< A1' &=' D1' <0 1@@ &=' &BD10= ' K' D' <@@ <-A' 0' -.?@1 ' D1 ' <CC? 1-<?-B10' '-' D1' &?- '1' &=' , 1 - ' D1' & A0D'C' ' <-&' ' &=' F D<AA&-' D1' & A0D'C' & ' <-&' ' &=' @< A&-' K' D' <@@ <-A' 0' -.?@1 ' D<CC? 1-<?-B10' '-' D1' &?- '1' &=' ?a' D1' & A0D'C' & ' <-&' ' &=' ! - > 1 ' K' D' D<CC? 1-<?-B10' '-' A'1' &?- '1' &=' L&-' D1' & A0D'C' & ' <-&' ' &=' '1 &-' D1' ? .D' &=' F 1-A&+1 ' D1' & A0D'C' & ' <-&' ' &=' F 1-A&+1 ' ! & 1 -' K' D' <@@ <-A' 1 ' D1' ' <CC 1-<?-B1\' '-' D1' &?- '1' &=' ?a@ <-A' D1' & A0D'C' & ' <-&? ' &=' 'BD1-' F ' D' <@@ <-A' 0' -.?@1 ' <CC 1-<?- 1B0' '-' D1' &?- '1' &=' 1 =& A' ! &' D<+1' <-A' &' D&@A1' <@@ <-A' 1, ' &=' D1' 0<>1' C A0D'CC'0' <-& '0' ? .D10' ==' B10@=110' &==' B' &=' #<'@@' K' a1' =11' =1 > 10' <-A' 1B1C 10' &=' C1-01@ K' D' <@@ <-A' 0' -.?@1 ' D1' C> 001' # ' KD< ' 0&' 1+0 -<>1' & ' -<>10' D1 ' #1' B<@@1A' ' H'&K1-' & ' # ' KD< ' 0&' 1, ' -<>1' <- ' &=' D1 >' '0' B<@@1A' & ' a-&K1-' '-' D1' , '-.'0' 0BD1H?1 ' & ' 1@OKD1 1@ &' D1' 0<>1' @'\<#1 D' ^?1-1' &=' -.@<-A' =& ' R>1' &=' D1 ' @'=1' > >1A' < @ ' <= 1 ' D1' A1A" &=' &? 1' 01'A' & 1'.-

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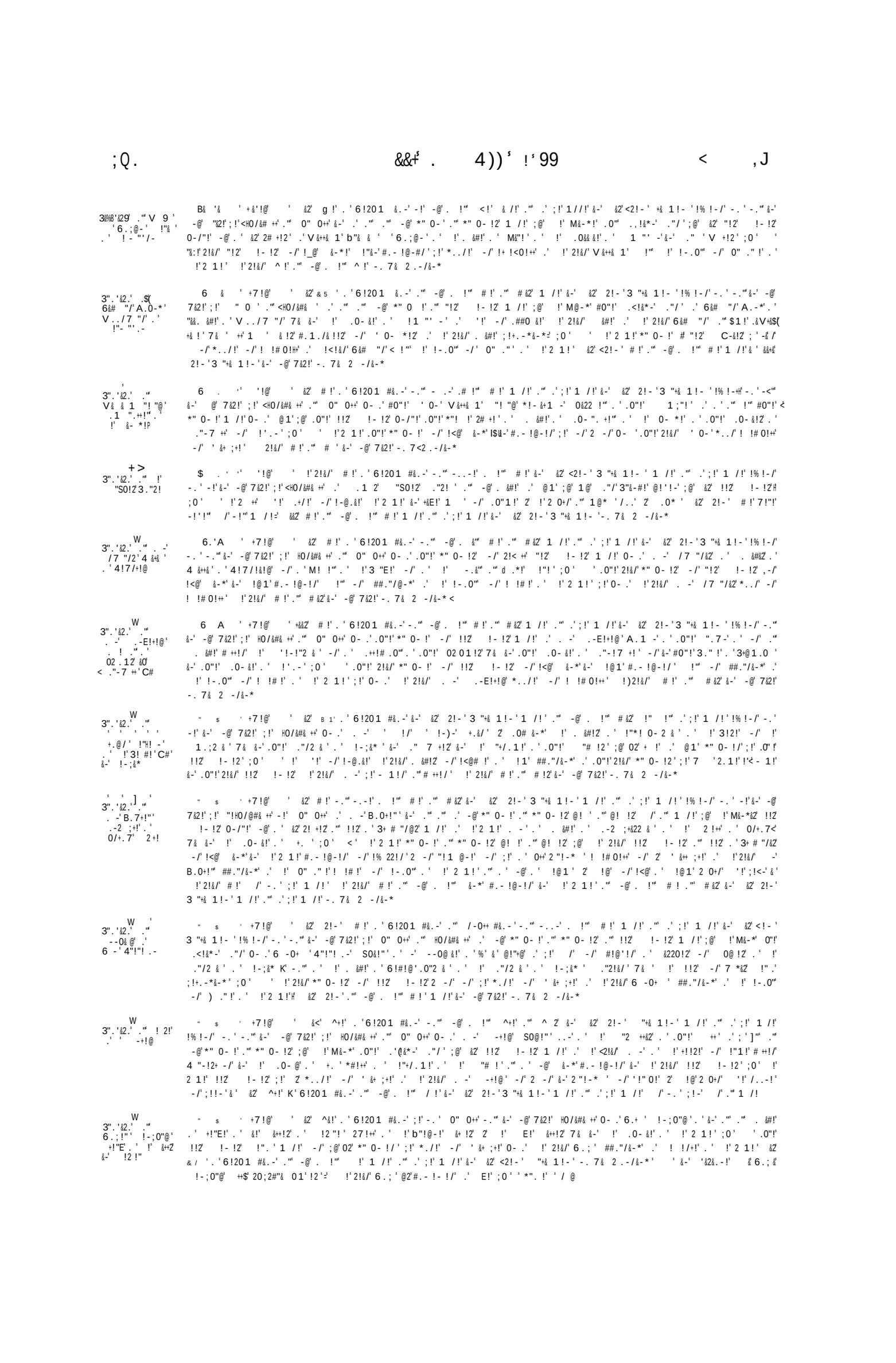

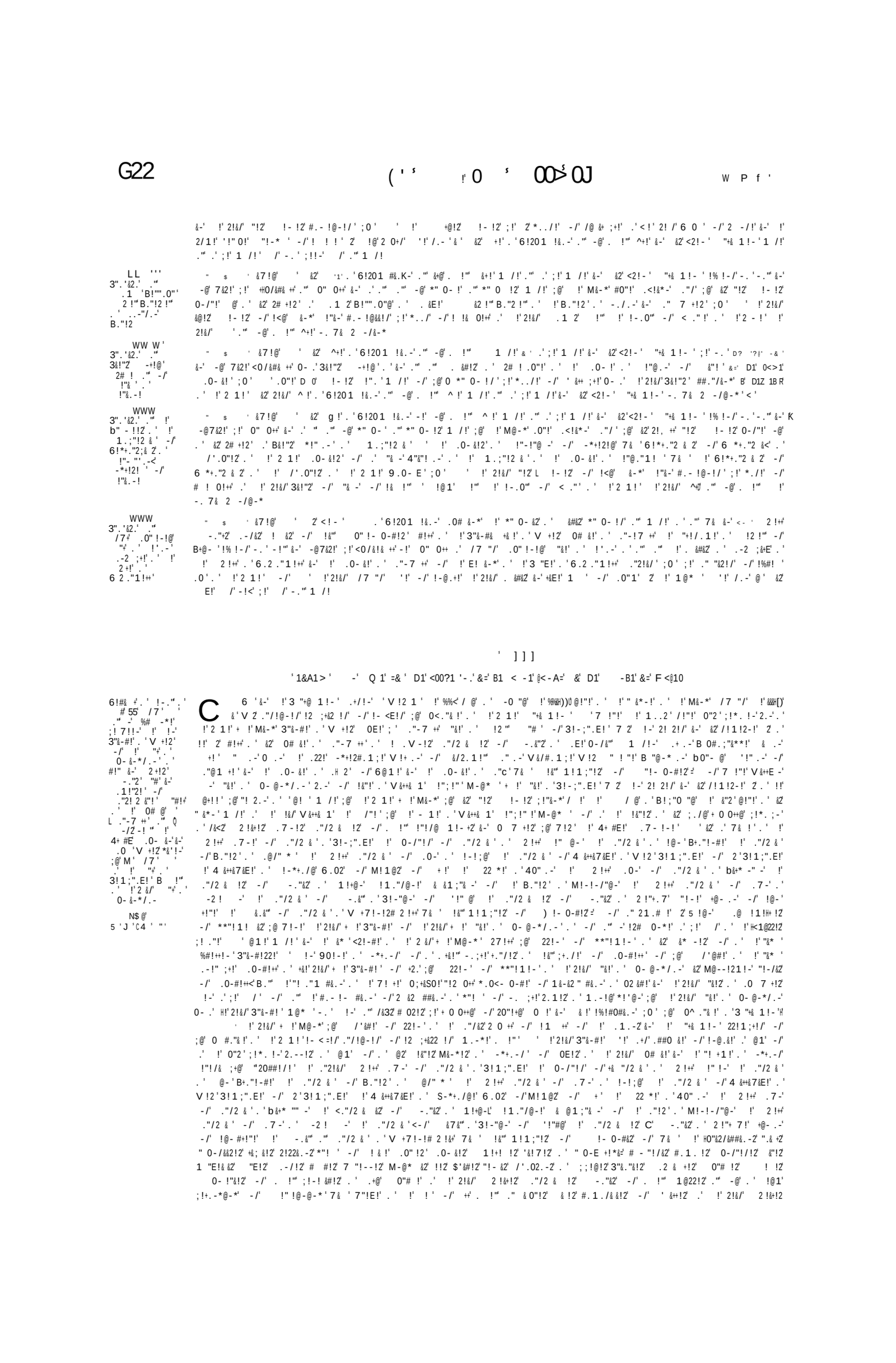

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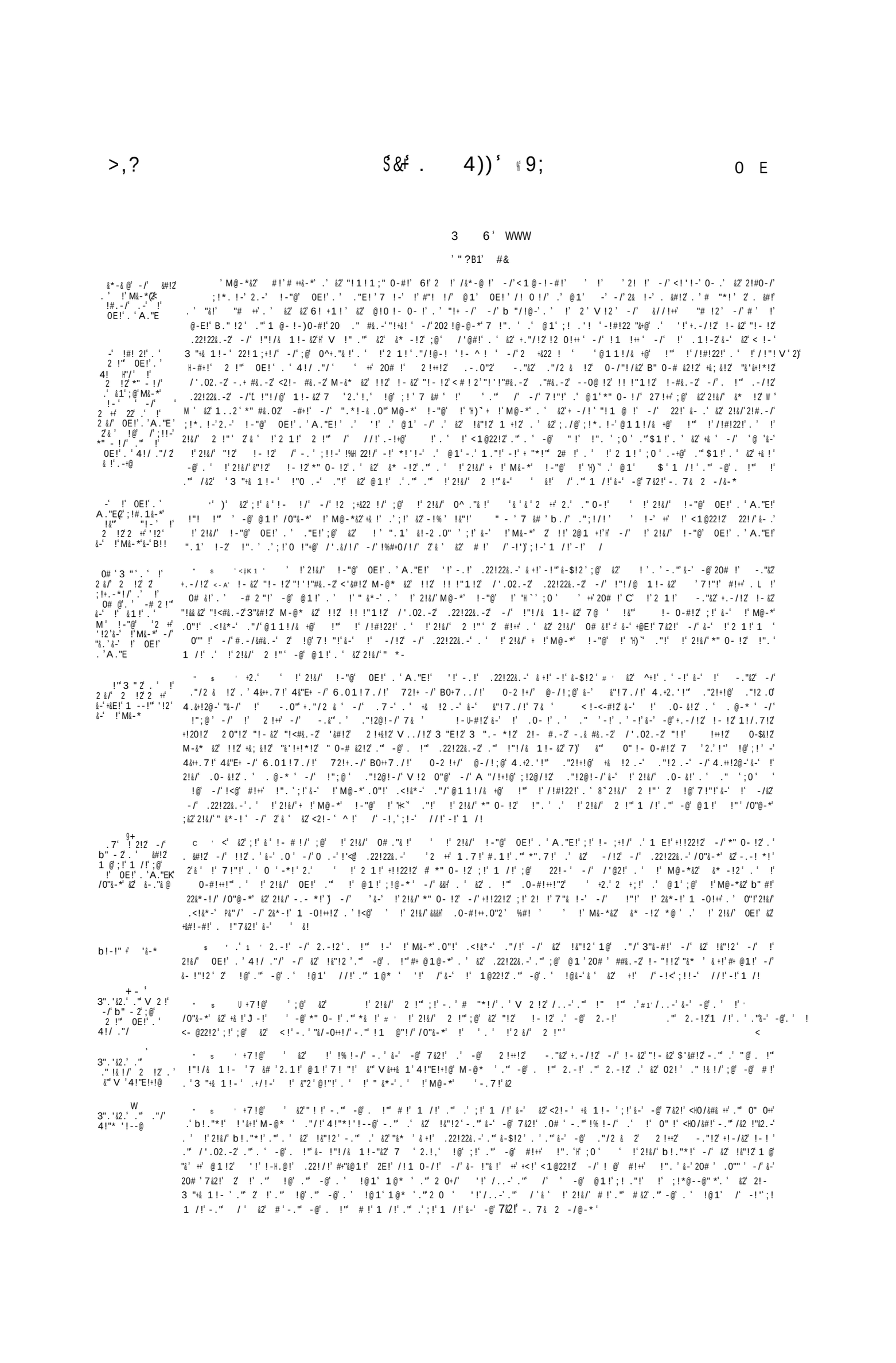

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!"!/& 1!-&2'1' !'2 1!' ^+!'2 !#& &!/-' -'7 &# '/!'&'7 2' '@/!/' '&' !' !-' -/'-.7!' 0E!'.'40E@-* 1'.'' &2' !&"!2'
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&-' !'1 -."&2'+.-/!2' -/' !"!/& 1!-&2' !-'!%<22!/'&-' !'2!&/' /!' -/'!<@' !!+d' !"/' '&-'20#'.0"-H!' -/'! !/+&!' 2' !'2 0+/' 2&/' C'.-' &2'
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' !'2 1!' 0E!'.'' .' &2' !&"!2';@"! 2.-'./&2 *"!1!'.' '+&!'2 1!' 7# 1'2' . ' !'2!&/' 0E!'.'' .' &2' !&"! ' '&2' !" ;"!-/&!/' -/'!2 ;+&22 !/';@' !'M@-*'.0"!' .<!&*-' ."/';@' 22!-'.' !' ."/!'2 0 +' -/' !1<+' -/' !' .1.-2'&-' &2' 2!-' "& 1!-' 22!1;+!/' -/';@' 0 .'& !'.' !'2 1!'3 "+& 1!-' ' !' !&/' 0# !22!' '!' .+/' -/'!-@.&!' .'' $" !'.' !'' +@' +' 1 -."&2' +.-/!2' !-!2' -/' !"!/& 1!-!2' .' !'' .@-!/&-' !'2!&/' <!'1 /!'&-' !'2!&/' '&' / @'.' .'!1;'' !'2!&/' 0"2'@!"!'&-' 0+' "!#.1 !-#!'.' +' 1 -."&2' +.-/&2' !-&2' -/' !"!/& 1!-&2' .' !'' .@-!/&-' !'2!&/' <!'1 /!'&-' !'2!&/' -.7!' 0E!' -/' &2' !&"!2' -/'2 # !' 2'#+!@1!' 20#' &2 *"!!1!-'
@!-2' !'2!&/'-.7!' 0E!' -/' &2' !&"!2' -/'7& .0'&&+<0 #&.-'' !'2 1!' 0E!' -/L &2' !&"!2+' -/' 2 +;!'!%#+0/!/'.' +' E1-1 <ʃ <+'-.
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.' !''2!&/' .7!'' -/'&-' +&E!7&2!' ' !'2!&/'-.7!' 0E!' -/' &2' !&"!2';!'!%#+0/!/'.' '@'.' !' 1 -."&2'+."/!2' !-!2' -/' &+!' -/'&-' !"!22!' 2' !@'.'' -@'.' !@1' '!'.''2 0+/' '!' //!'&-' !<& @22!2'.'' -@' #!+' .' !'2 1!'&' &2'6 R' /'-!,'
.@-!/' .' !'2!&/' 0# !2'.''& !'2!&/'-.7!' 0E!'' &2' !&"!2' !"! !'' .';!' /'.''1 /!'-.7& 2 -/@-* ;!' /'-!'1 /!

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-@ &-*'&-' !' 1@22!2'.'' &-' -@' #!+' !''.' .' !'2!&/' 0# !2'.'' .' !'2!&/'-.7!' 0E!'.'' &2' !&"!2' -/' +2.'2'@-*' .'!3@' 20# !' 2.-!' 2' -@' &-*' / @1!' '.'' .0*' .' '!'&-' -@'+.-/!2' !-&2' "!-!2'2'@#!2'.'' . !'' !"!/& 1!-!2'7 &# '7!"!' !'2!&/'+ !' 0E!' !' /"!'.' 02!'' .0"1 -#!'.'.'' ^'' !'+2'V&+'.' !'2!&/' 0E!' !' /"!'
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0E!' !' /"!' -/' ' !&'' #+!@1!' &+!'' &* '&-!"!2'!-"!' -/' .22!22&.-'&-' +' !' & @22!2' -/'&-'!<@' "' !". ';!' 2'*../!'
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. ' .'!,@. ' !' M&-*' +&!*!' !. +!'. !" !-'20#' 7 2!' &+!' !". ' ." -@' "!' !". ' /' ;!*@--@-*' !" !' 2!&/' 2 !2' "!+! 221' #.-&"1 #&.-2' -/' . !" &-*&2' 1 /!';@' !' 2!&/' .0-!22!' ." !" 2!&/' !. !!2' .' !' 2!&/' 0E!' ." -@' . !" .' &2' 02!' -/';!." !' 2!&/' <!' 1 /!' &-' !' 2!&/' "+& 1!-' .+/!-' !' 2!&/' '&HU)/@' 20# ' "&* ' &+!' -/' &-$!22!' 2' !@' ." -@' . ' !1' '!'." 1@* ' '!' /'&' &2' ^+!' 7!"!' -.' 1 /!' -!' //!

A ' 1@2' @"!++' . -' H6&2 !@ M-@* &2' V&++& 1' 0-2 ++' V&++& 1' H3 2 .&& . -' 3.7!" 2SO&!"2' -/' !""@' 6#C2#1' *!-&+1 -' -/' !<@' .' 02' 2!@ -' -/' /! 8.2!' 2' 7!!' 7!++' -27!"!' ;! ."!' b./'0 .-' .0"!' #.-2#&!-#!' ' ++' 2 2' "!+! 2 !2' -/' #.-&"1 #&.-2' -/'. !" &-*&2' 1 /!' 27!++' ;@' +&j ;! ' . -!22!'. ' %!-."/' + !' 1. !" .' . -' "&!' ' %!-."/' '-.7!' &2' ' M' ++' !" !. !!2' 2!&2!/' .'; '02!'. ' +/' &-' 6'20# !' <!+!2' -."&2' ."/2 & !2' .-/!2' -/' !-!2' 6!-!2' J'&#!' -/'. !" !"!/& 1!-&2' ' &# ' 7!"!' . ' !" !-!"& 0-#!' .' 6&# "/'+ !' 0E!' . ' b+.0#' -/' ;' !'@. !" 2.-!' ." 2.-!' ;@' @1' - 1!/' -/' 22&*-!/ V!"!' ;@' #. !"#&.-' .1 0+#& -' -/'. !" H. /&!2' -/' / 0-*&!"2' 0' .' !' 2!&/' .0-!22!' -/' !" 2!&/' !. !!2' &-' ';! + !' ;@' !'2!&/'+ !' 0E!' 0;2#"& #&. !2 rJ-' 6@2+!@' &" ' "@2' @"!++' V&+M 1'3 2 -' . -'+$.7!"' !-"@'6.;2.-' +2.' ' V&++& 1' 0-2 ++' /! .2!' 2' 7&++' 0-27!"!' ;!."!' b /' !" 1@'#.-2#&!-#!' ' !' 2!&/' .0-!22!' -/' !" !. !!2' 7 ' #.1 !++!/' 2' &2' ."2!&/

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' !' M&-*' .0"!' .,!&*-' ."/' -' !' 1.2!' 01;+!' 7&2!' 2 !7& '0-.' @.0"!' &* -!2' @.0"!' "0!' -/' & 0++' 20;*! !' -/ +&!*!1 -' /1.-/'/!'+'3.+!'M-&* '2.-' -/' !&"!'. ' . -'+ !' 0E!L.' 0 'J ' 7 !"!'] ' +!&22!/'@.0" b)#!' 'N-/!-0"!';! 7!!-' 5 !@-' ;@-1!-&2' *"!1!-&2' -/'&-/!-0"!2' .'#.'!-0-!2' ;@ 7&% !' @ 0"!' &* -!2' .-' !' .-' "@' -/'@.0"!' 2!&/' 0;*! !' .-' !' .' !" "&!'7!"!' 1 /!'7 !".' !' !-.0" !"! !" .++.7!' 'H' &2' &-/!-0"!' 1 /!' !' %%'H/@' .' !' 1.-!' .' B!<@!"!' !' M-&* ' .-' -/' '&&HO)'@!"!' .' !' "!&*-' .'#0"!' .<&*-' ."/' M&-*' /&&"@' !' 'HU))' ;&7H% !' !' 2 1!' .0"!' .'!&*-' ../' .-' !' .-' "&!' -/' /1.-/'/!'+'3.+!'M-&* '2.-' -/' !&"!' .' .-'+ !' 0E!' .' 0 ' !' !" "&!' V&-!22!' ' 7 !"!';@' 0/&."&!' . 3 "+& 1!-' . -'+ !' "&!' .' &-#.+-' !+/!" 2.-' -/' !& !' " -'.' !' 2!&/'+ !' 0E!' -/';". !" .' !' 2!&/' /1.-/' 7 .2!' !&"!' !' 2!&/' /1.-/' 7 2' -/' &2' 7 2' !@-' .' &* ' "! 2.-' 0/';@' ' 2 1!' 0/+."& !' ." !& !/' ++'+."/2 & !2' 1 -."&2'+.-/!2

' !' .++.7&-*' &2' !' B."1'. ' !' -"./0/&."@' B."1' 7 &# ' "!#!/!2' &2' ^+' .-' !' 6.++' &-' -#!"@D F' !1' SO!/ 1' ;+++' /' 1./01' ^+02' #.-!' #01' !/0+' !&/!1' --!% ' 1 -&;H !2 &0' 20;2#"& ' !% &;& ' !2 -.' 6!*&' &-' "+& 1!-.' /..' ' /& !1' </# 1' !%' " !' . &2' .1&&2' %. ' &-' !#' < ?' !' 22!-' &2' 2' .' ' 30;+&# ^+' F' `' M.@' +!' '0!+ ?

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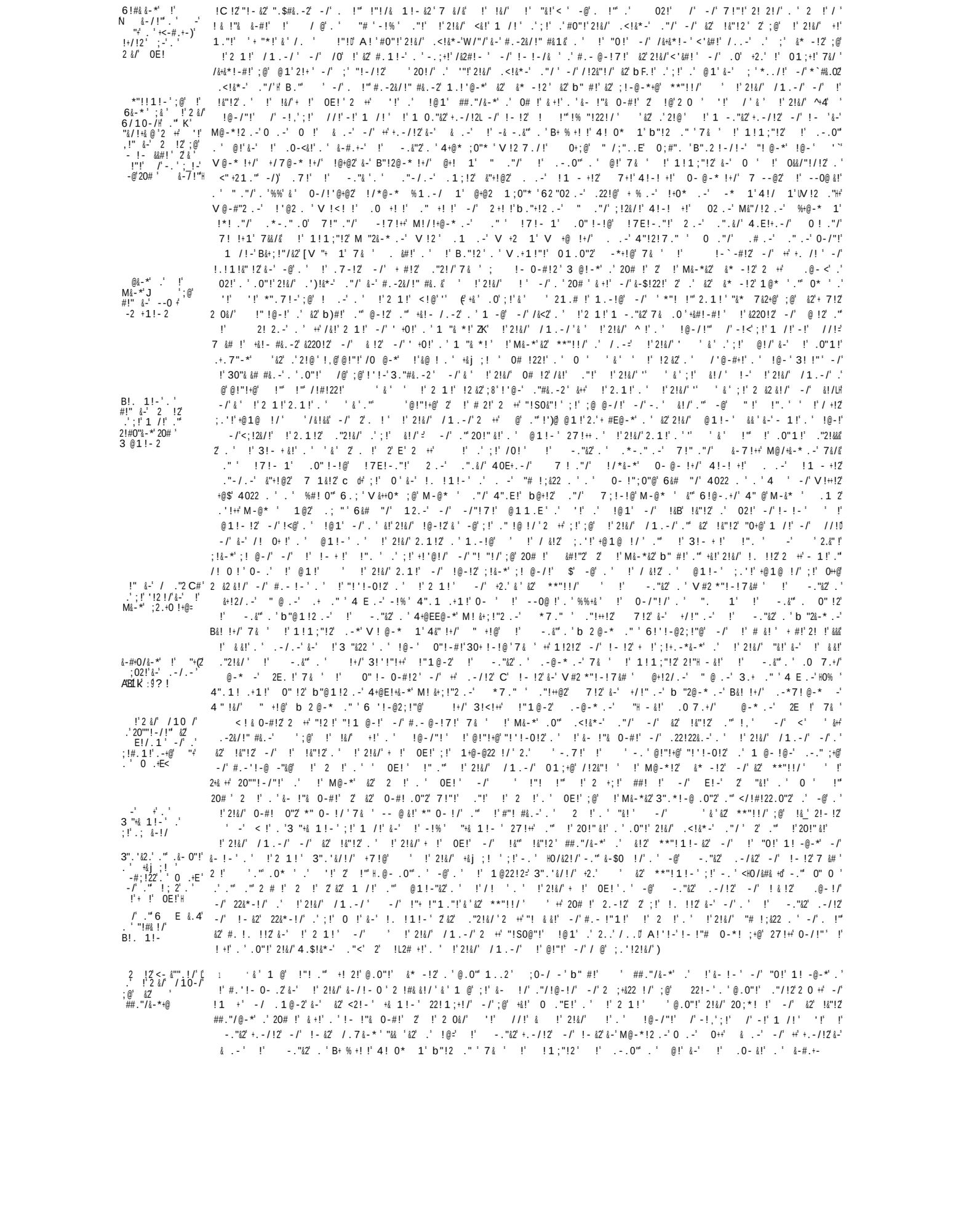

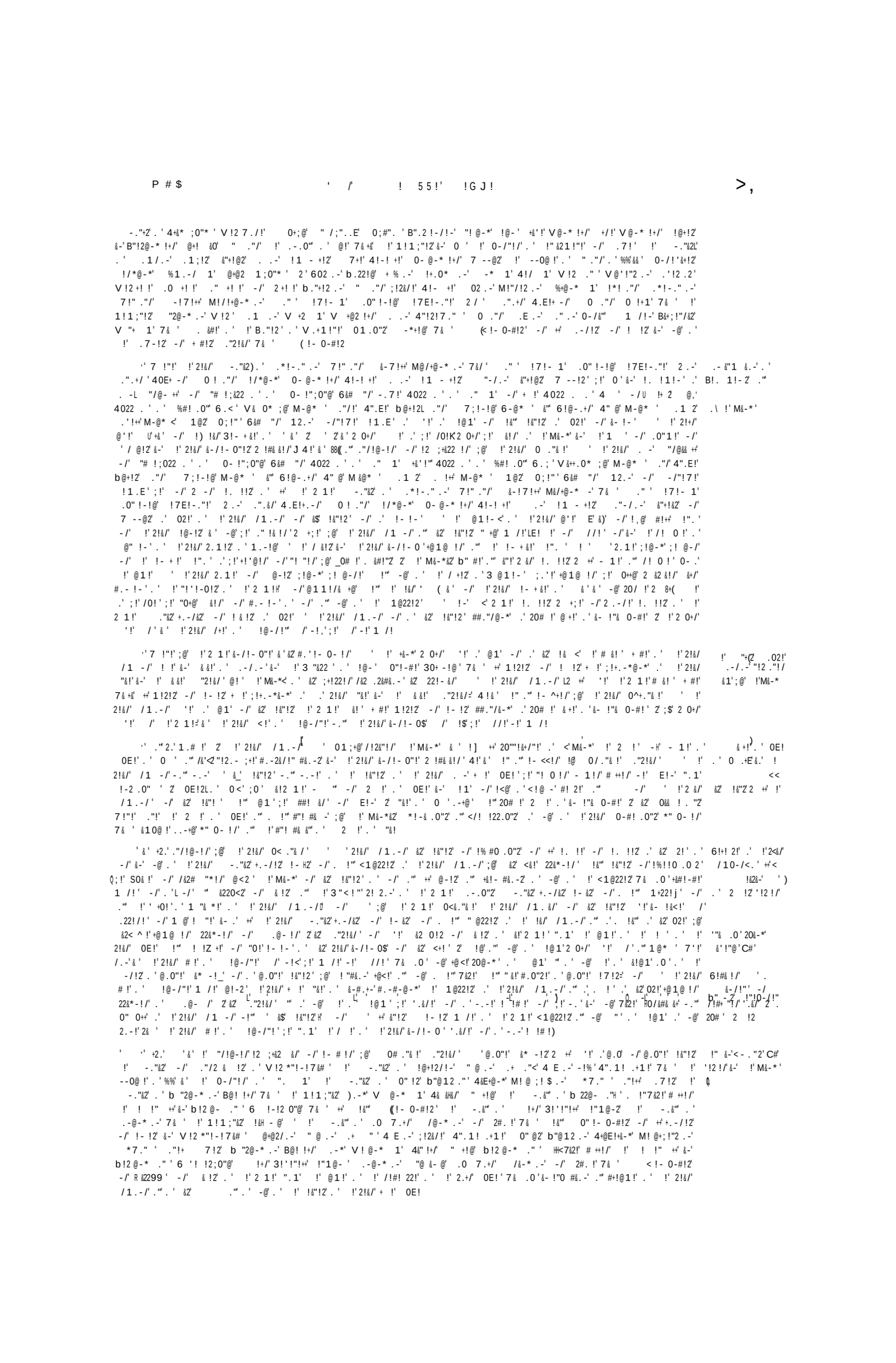

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3". '&2.' .'" !' .&- 0"!' . ' !' 0# !22

" s ' +7 !@' H& ' &2' # !' .'" -@' "' D K =9' &-' -@' 7&2!' ; !' -.)' <0 / &## +²' ." 0" 0+ď .^+&5 ; ! ' 0# !22!' . ' 0 <1 . /&!'" .'@ . 0"!' 2!&/' 20 ; *! ! ' . ' -/' '" -@' . ' !' 2!&/' - - ."&2' +. - /&2' -/' !- &2' &-' !' 2!&/' # !' 2 !## &!/' ." -@' !' . ' !@ 1 ' 7 &# ' 2 < ' ." .0 * ' .' ' !' ." !'" H. @ - . -'" -/' . 7 !"

3". '&2.' .'" !' !; 2' . ' !' + !' 0E!

$. ' -' +2.' 2 ' &2' # !' ." -@ &-*' . . - !@. ! /' & ' !' <1 !' ; !' - . ' HO/&##& +²' -. @' 0" 0+²' .' ." .'" 20# ' 2 !' 2' &2' 1 /!' ." !' @1 !- &2' . ' !' /! &2' . ' !' 2!&/' + !' 0E!' ' -@' < - ."H2' +. - /&2' -/' !- &2' ; . ' !' 22&*-!/' .' !' 2!&/' / 1 . - /

W & ! & -' . ' "!#& ! /' B!. 1 ! - ' 2' :@' . - /!'" B!. !12

C ' 7 !"!' &-' !' 2!&/' &- / ! - 0"!' & ' &2' **"!! / ' ' +²' 20# !' 2 . - !2' 2' ; !' !. !!2' &-' - / ' . ' !' 2!& ' - ."&2' +. - /&2' - ' ! - &2' 0 ' &-' !. !- !- ' .' !' 2! /' "/@ - +&' - /' .L' . !'" 2' &2' ."12!&/ ' _ 0+/' " & &!' - /' #. - !"1 !' !' 2 !' . ' !' 2!&/' "/@ - +² - /' . !'" &2' #. !. !!2' &-' !' 2 1 ! ' 4 !' & ' !" .@ ' ; @' !' 2!&/' 0 ."& !' "/!@&&!/' - /' !2 ; +&22 !/' ' !' 2 !' . ' !' 2 1 !' &"/@ - +² -Z' . !'" &2' #. !. !/ H' . ' - /' &-' !' 2 1 !' - ."&2' +. - / ' - /' !- /2 ' ; !' 2' *. . / !' - /' ! ! # 0! ² 2< . 0 * ' !' 2!&/' .+/' !. !; 2' & ' -@' 20# !' ; !' /' " & &!/' - /' #. - !"- !/' !' 2 !' . ' !' 2!&/' "/@ - +² - /' &2' #. !. !!2' !"&-

3". '&2.']. '" 6!- 2' 0<. 12)' -/' <' !'"&#!2

" s ' +7 !@' ' &2' # !' &-' /@' 7&2!' ; !' - . ' <HO/&##& +²' - ." 0" 0+ď .' -@' 2. - !' ." 2. - !2' - !' .' !&'" !&"!2 ' . ' ." .'" -@ 1 <' "!- /2' #O2 . ! - 2L' ." $' &#!2' 7 &# ' !@' ' !' . '" + @1 !' . 0 ' . ' -@' . ' !' 1@22!2 ' ; 0 ' ' !@' - /' !. @' . ' !@1' ' !' .22!/!' - /' !- H. &!' +² 20# ' "!- &2' #O2 . 1 !2' - /' , '&#!2' @!- 2 ' +² . /&!'" ! - ' !' M&-*' - /' @!- 2 ' @1' "!- &2' 7 & . 0 ' - @' . !'" <' &#!' .' !@1' - /' !&'" !&"!2' ." . !"7&2!' ##. "/&-*' $' !&'" "&* ' - /' &/!' &-' !' 2 1 !'= &2' # !' &-' - @' 7&2!' - . 7 & 2 . - /&-*

W 3". '&2.' .'" b" 2' ;@' !' M&-*

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D) b!- !" ² '&-*

s 7 ' .' !<@' 2. - !' .@ 2. - !2' . !'" ! - ' @ . 0" !' 2!&/' &* - !2' - /' @ . 0" !' !&"!2<' - /' !' 2!&/' / 1 . - /' - /' &2' !&"!2 ' - /' !' !&"!2' . ' !' 2!&/' + !' 0E!' - /' +² 2. - !2' '@ - *' - @' &- *' . ' !' 1@22!2' .' 02!' . ' !' 2!&/' / 1 . - /' - /' &2' !&"!2 ' ." . ' !' !&"!2' . ' !' 2!& ' ; +!' 0E!' +² !&'" "&*) ' & +!' ##&. - ' .22!22&. - ' !- "!' - /' &- $!2 ' 7 &# ' !@' '!' &-' !' = 1@_2!2' . '"&- ' - @' !' . ' !@1

W '&-*' ." 6&* 2' $ ' !' ". 7 -

'@ b' +2. ' .' !' M@-*' - /' &2' !&"!2 ' M&-*&2 ' 20# ' "&* ' & +!' - /' &- $!2 ' 2' !@' . 0 * ' .' ' !' &-' !' <1@22!2 ' . !'" !' - ' ; @' "! 2. - ' . ' !'2!&/' !@ - /"!' V "/2 & ' . ' !' 2!&/' / 1 . - /' <1 !'" 2! 2. - ' . ' +² !' 2!&/' 1@22!2' 22&*-!/' .' !' 2!&/' /0"D. - /' !'" !' /] ' . ' !' 2!&/' 0E!' - /' @ - !2' .'" +&!- #&. - 2' 1 /!' . ' !' 2 1 !' 7 & . 0 ' +&#!-#!' - /' . !'" 1@22!2' &-' !' 2!&/' &- /!- 0 ' 2 !#& &!/ ' 2' & ' !' 2!&/' # !' . ' !@ - /"!' /' - !3' ; !' /' - #' 1 /!

W ' 3". '&2.' ." Q @1 . -' &*; @ 2S

C ' ; !' &' ."/!@ - !/' ; @' !' 2!&/' 0/+. "& !' ' +² "!2' !- !2' 1 /!' ; @' .0"!' .<!&*-' ."/' !' M&-*' .' @1 . -' @*; @' 2SO@!" - /' .' !' !&"!2' 1 !2' . ' &2' ; . /@' #. 1 @ - *' . ' +² - ." &2' . - /!2' !- !2' - /' +² . !'" !"!/@ 1 !- !2 ' ; !' *. . /' - /' ! IZ, D !+' !' 2!&/' @1 . -' - /' &2' !&"!2 ' ##. "/&-*' .' !' !2 !2' &-' !' 2 1 !' "!2' !- !2' 2 !#& &!/' J -@' ^ !' &-' &2' <2!- ' "+& 1 !- ' .' !' #. - `"%&!' 1 /!' ." .' ; !' 1 /$' - . 7 & 2 . - /&-*' '@"&*' .' !, @ 2. - !' ." 2. - !2' . !'" !' - '@. 0"!' 2!&/' &* - !2' - /' @. 0" !&"!2 ' /' !' 2!&/' / 1 . - /' - /' &2' !&"!2 ' - /' !' !&"!2' . ' !' 2!&/' + !' 0E!' C' +² 2. - !2' '@ - *' -@' @ - *' &-' -@' . ' !' H 1@22!2' .' 02!' . ' !' 2!&/' / 1 . - /' - /' &2' !&"!2 ' ." . ' !' !&"!2' . ' !' 2!&/' + !' 0E!' ' +² !'" "&* ' & +!' ##&. - ' .22!22&. - ' !- "!' - /' &- !"!2 ' 7 &# !' !@' ' !' &&'' !' 1@22!2' ." &- ' - @' " !' . ' !@1

W ' B'. '&2.<' ." "* "! ' .0 - !22' . ' &-#. +-

" s ' +7 !@' ' &2' ^ !' ." - @' . !'" ^ !' 1 /!' ." .' ; !' 1 /!' &-' &2' 2!- ' "+& 1 !- ' !% !- /' - . ' - .'" &-' - @' 7&2!' #1' HO/&#& +d' ." 0" 0+²' .' "*"! !' .0&& !22!' . ' &-#. +- ' + !' !' V & !' . ' . - ' + !' "&!' . W&-#. +- ' - ." .' - @' . !'" '@ - *' 0@' &- '!2' & +!' "&* ' ." .22!22&. - ' .' 02!' . ' !' 2!&/' "* "! 2' . ' &- ' - /' .'" - @' - ."&2' ."/2 & !2' . - /!2' !- !2' 6 ! - &2' 6!&<#&. - 2')c'&#!2' - /' /' .02. - 2' 7 & ' !'" !-)-#!2 ' ." . ' - @' . ' !@1' ."$1 !' . ' +@ ' . ' !' 2!&/' "* "! ! ' - /' ' 2 !' - /' - @' . !'" 2. ' 2! 2!/' .' !&'" 02!' ; !' - . ' !%#+0/!/' ; @' &2' ^@!' .' '!' .##0 &!' .22!/!' - /' !OH. @!' /0"@ - *' !'" +& !' +² !' 1@22!2' - /' $ ' . ' !@1 ' &- ' +&E!' 1 "&&' - /' .0"1 !' 2'2 !' ." !@' ." - @' . ' !@1' 2 0+/' ." 1@* ' '!' /. . - ' &' &2' ^&!' ." ^+&2' //!' - !' !'" ; !' //!' ." 1 /!

W ' 3". '&2.' ." &" b ' +; .

" s ' +7 !@' ' &2' # !' !% !- /' - ' - !' ; !' HO/&#& +²' - !' 0" 0+²' .' b&+; !'" ' +; . ' M - @* ' - /' &2' !&"!2' 1 +!2 ' (=' ." ." - @' *" 0 - !' 1 /!' ; @' !' 6&- *' 0"!' .$!&*-' ."/' ; @' &2' "!2' !- !2' .' !' 2!&/' b&+; !'" ' - /' .' !' !&"!2' 1 +!2' . ' &2' ; ./@' ; !*. . &' . ' !' - .&" . ' 4& ! .' . !"7&2!' # ++!/' 4@" !+/' ; ; . ' - !' . ' !' '.02. - ' . ' !' 0"# !' . ' !' 2 1 !' - .&" ' - !' . ' - @ 0" !- 0 - !!2' . ' !' 2 1 !' &-' !' .0 - &!' . ' 4 !"E' - !' . ' - @' &- *' &-' !' 2 1 !' "!2' !- !2' #. - !@ - !/= ; 0 ' # ' !' 2 1 !' "!2' !- !/' - /' +² &- * ' !"@ - ' #. - !@ - !/ ' ; !' .' !' 2!&/' b&+; !'" ' - /' &2' !&"!2' 1 +!2' . ' &2' ; ./@' ; !*. !- ' Z' *./!' ! !^&0!+² - /' ' &++ ; +!' Z' . * ' &2' <!' - !' - @' . !'" / !1 /!' &-' &2' 2!- ' "+& 1 !- ' /' - !<' ; !' /' - !' 1 /!

W 3". '&2.' ." ' . - ' 2S

" s ' +7 !@' ' &2' 2!- ' # !' - !' - @' . !'" # !' ." # &2' 1 /!' ." .' ; !' 1 /!' &-' &2' 2!- ' "+& 1 !- ' !% !- /' - ' - !' ; !' &-' - @' 7&2!' HO/&#& +²' ." 0" 0+²' 0 - .' 9+@' !'" !@ - ' . - ' 2SO@!'" &2' !&"!2' ." 22&*-!2' . ' ." ." - @' *@ !' ." *" 0 - !' 1 /!' ; @' .0"!' 2!&/' & . ' !&*-' ."/!' ; @' &2' "!2' !- !2' ." . !"7&2!' 0 - .' !' 2!&/' +@' !'"!' . ' !' 2!&/' - ."&2' . ' 2 *"!- !7&# !' !+/' 3!' !"!+² - /' 0"1@ - 2' 7 & ' (!- 0 - #!2' - !' !' - .0" - /' ."/2 & ' . ' ! ."/!' 7 & ' < !- 0 - #!2' &-' !' .0 - !' . ' M!- ' - !' . ' "@' . ' !@1 ' ; @' 7 ' 2.' !3' - 1 !' ." - 1 !2' !' 2 1 !' +@' !'" . "' !' 2!&/' - ."&2' ." " ."/2 & !2' ." ' - @' . ' !@1' ; !' - 1!/' " # ++!/' &-' !L2 1 !' ; 0 ' ' +² "!2' !- !2' 1 /!' ; @' .0"!' 2!&/' .<!&*-' ."/' .' !' 2!&/' +@' !'" . ' - @' . ' !' 1@22!2' 2 . - /' - /' ; !' *./!' ; @1 ' - /' &2' !&"!2' ##. "/&-*' .' !' !- .0" 0" ." !' H& !- ' - /' ! !# !' . ' !' 2 1 !' !2' !- !2' - /' !<@' . ' !@1 ' C#

W 3". '&2.) ' . -' B&&*

" s ' +7!@)' ' &2' # !' . ' "!2 & 0#&. - ' "!201 !&. - ' ." /-0++ #&. - ' - ." - @' &-*' #. - !@ - !/' &-' !' 2 1 !' - ." - . - !' . !'" # !' .'" # &2' 1 /!' ." .' ; !' 1 /!' &-' &2' 2!- ' 3 "+& 1 !- ' !% !- /' - . ' - ." &-' - @' 7&2!' ; !' 0" 0+ď .'" HO/&#& +²' 0 - .' - ' B+ * ' A. 1 - ' . ' !' M&-*&2' 6 . ; !2 ' .' &2' !&"!2 ' S' . ' . ' ." .'" - @' *" 0 - !' .'" *" 0 - !2' ." &"!2' !- !2' 1 /!' ; @' .0".' .!< &*-' ."/' !' M&-*' .' !' 2!&/' . -' - /' &2' !&"!2 ' . ' - @' 1!2!2' * "/!@ - 2' +. - /' ." !- &2' 7 & ' !&'" S ! - 0 - #!2' 7 & &-' !' .0 - &!' . ' M!- ' . ' ." - @' . ' !' 1@22!2' + !' ; !+. - *&-*' .' . - ' + !' "&!' . ' &-#. +-' = ; 0 ' ' !' 2 1 !' "!2' !- !2' *" 0 - !' ." *" 0 - !2' ; !' 2' *. . /' - /' 2' ' &++ ; +!' .' !' 2!&/' . -' B&&* ' - /' .' &2' !&"!2' 2' !&' 7 ! "!' ." 2 0+/' ' !' ; !- ' &' &2' # !' . ' "!2 & 0#&. - ' "!201 !&. - ' ." /-0++ #&. ' ." <- @' . !'" # !' .'" # &2' 1 /!' ." .' ; !' 1 /!' &-' &2' 2!- ' "+& 1 !- ' /' - . ' ; !' /!' .'" 1 /!

W W 3". '&2.' 7' &" 6&# "/' 3. +!

" s ' +7 !&!2' ' &2' # !' ." - @' . !'" # !' &' ; !' 1 /!' &-' &2' 2!- ' "+& 1 !- ' !% !- /' - . ' - ." ; !' HO/&#& +²' .' - @' *" 0 - !2' ." "!2' !- !2' 1 /!' ; @' !' M@-*' . &"!' .<!&*-' ."/' .' &" 6&# "/' 3. +!' M - @* ' &-' - /' .' !' - ."&2' . ' B& ! !/!' L - /' V & !- 1 ' 7 & ' !' . - /<' !- ' - /' 6 ! - &2' .' !' 2 1 !' ; !+. - *&-*' 7 & ' . !'" !&'" (!- 0 - #!2' ; !@ - *' . ' + !' ; !+. - *&-*' .' . - ' !"+!' . &-#. +-' J ; 0 ' ' !' 2 1 !' *FO - ' 1 /!' ; !' *./!' - /' ! !# 0!+ +' - @' "/@ - 0 - #!2' # !' ." 2 0 !' 1 /!' .' !' #. 9)"&!' - . 7 & 2 . - /&-*=

" s ' +7 ! @ ' &2 2 ! - ' ^ + ! ' . ' 6 ! 2 & 0 # @ . - ' 6 ! 2 0 1 #&. - ' ' . & / & - * ' . ' " / - 0 + + #&. - ' - . ' " - @ ' &- * ' #. - ! @ - ! / ' &- ' ! ' 2 1 ! ' WW
- . ' " - . - ! ' . ! ' " <&! ' . ' " ^ ! 2 ' 1 / ! ' . ' " . ' ; ! ' 1 / ! ' &- ' &2 ' <2 ! - ' "+& 1 ! - ' ! % ! - / ' - . ' - . ' " &- ' - @ ' 7 & 2 ! ' ; ! ' 0 " 0 + + ' . ' " 3 " . ' & 2 . ' . ' "
H O / & # & + + ' . ' V & + + & 1 ' 1 @ ' 3 * ! ' . ' ! ' M & - * < ' 6 . ; & 2 ' . ' . ' . ' " . ' " - @ ' * " 0 - ! ' . ' " * " 0 - ! 2 ' . ' " ! 2 ' ! - ! 2 ' 1 / ! ' ; @ ' ! ' M & - * ' V & + + & 1 ' . ' - @ ' ! 2 ! & / ' V & + + & 1 ' 1 @ ' 3 * ! ' . ' ! ' M & - * ' V & + + & 1 ' 1 @
0 " ! ' . , ! & * - ' . " / ! ' . ' ! ' 2 ! & / ' V & + + & 1 ' . ' - @ ' ! 2 ! 2 ' . - / & 2 ' . " ! - ' 7 & ' < ! - 0 - # ! 2 ' & - ' ! ' 3 " & 2 2 ' . ' ! @ - ' 0 2 @ - 2 '
; ! 2 & / ! ' 3 0 + & 2 ' & - ' ! ' & & ! ' . ' . - / . - ' + ! ' ; ! + . - * & - * ' . ' . - ' + ! ' " & ! ' . ' & - # . + - ' ; 0 ' ' ! ' 2 1 ! ' & " ! 2 ' ! - ! 2 ' * " 0 - ! ' . " * " 0 - ! 2 '
; ! ' 2 ' * . . / ! ' - / ' 2 ' ' & + ; + ! ' . ' ! ' 2 ! & / ' V & + + & 1 ' 1 @ ' 2 ' ! @ ' 7 ! " ! ' . " 2 0 + / @ ! ' ; ! ! - ' & ' & 2 ' ^ ! ' . ' 6 ! 2 & 0 # &. - ' ' . & / & - * ' . "
/ - 0 + + #&. - ' . " - @ ' . ! " && ! ' . " ^ & 2 ' 1 / ! ' . " . ' ; ! ' 1 / ! ' & - ' & 2 ' 2 ! - ' "+& 1 ! - ' / ' - ! ' ; ! ' / ' . " 1 / !

: ' & > ' 1 ' ?

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7 2 ' 2 ! & 2 ! / ' & - ' & 2 ' / ! 1 ! 2 - ! ' 2 ' . ' ! ! ' . ' ! M ! & + ; ! " * ; ' . ! " 7 & 2 ! ' # + + ! / ' M ! & + ; " . 7 ! ' 7 & ' ! - 0 - # ! 2 ' # & " 1 ! 2 ! 2 & / ! ' & - ' & 2 ' / ! 1 ! 2 - ! ' 2 ' . ' ! ! ' . ' ! M ! & + ; ! " * ' 2 . - ' 2 2 ! 6 ! - / + ! 2 1 ' @ E ! ' 4 " . 1 ! 2 7 ! + + ' V - / ! 2 / . - ' & 2 ! + . " / ' 4 0 + ! & * ' 4 . @ . - ' . 7 . " & '
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. 0 ; . 0 " - ! ' ! 2 + ! ' 4 + % + ! ' "+ ! . " / ' b + ! & - 1 ' 7 @ 2 + @ - * ! ' " - ! . " / ' 3 ! " 1 ' - / ' " 1 + @ - * 1 ' - / ' . ' ! ' / ' 0 2 . - 2 ' . ' ! '
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- / ' ' ' # " ! 2 ' . ' + - / ' % + ' # " ! 2 ' . ' 1 ! / . 7 ! ' ' # " ! 2 ' . ' 2 0 " ! ' % % ' # " ! 2 ' . ' V . . / ! ' - / ' @ H & ' % & & H 2 ' & H / ' . ' " ! - ' 7 & '
) ! - 0 - # ! 2 ' & - ' _ @ 2 + . - / ' ./ . - ! ' 0 " . - ' " / ! + ! ! ' ! * " ' ! ' . " . - ' 0 1 ! . - ' ! E @ - 1 ' K) < / 1 ' - / ' 7 @ ! ' - / ' . '
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" ! # . 1 ! - # ! 2 ' ; " * ! @ - ! / ' - / ' 2 . + / ' ! ' 2 ! & / ' - . " & 2 ' . - / & 2 ' - / ' ! - ! 2 ' - / ' . ! " < 1 @ 2 2 ! 2 ' . ' . - ' ;0 ; " @ ' + ! 0 E ! ' . ' . " ' - / '
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" ! # . < ! ! 2 ' . " 2 ! & / ' - / ' ! ' . ' ; ! @ - * ' & <. ' 2 ! 2 ! / ' ! ' 2 ! & / ' . 1 2 ' " + ! 2 ' - / ' + & j ; ! ' & 2 ' V & ! ' ; @ ' @ - ! ' " ! + ! 2 2 ! / ' ! ' - / ' S 0 @ ! ' - / ' B & - ! ' ; @ ' " + ! 2 '
+ @ 1 ! / ' " . ' ! @ - < ' - / ' ! ' ! & " ! 2 ' . ' ! ' 2 ! & / ' . 1 2 ' + + ' ! ' 2 ! & / ' - . " & 2 ' . - / ! 2 ' - / ' ! - ! 2 ' - / ' . ! " < 1 @ 2 2 ! 2 ' 7 & ' < ! - 0 - # ! 2 '
. ' ! ' 2 ! & / ' + ! 0 E ! ' - / ' ; & 2 ' ! & " ! 2 ' . " ! , = ' - / ' ! ' 2 1 ! ' . 1 2 ' " + ! 2 ' - / ' + & j ; ! ' - . 7 ! ' / ! # ! 2 2 ! / ' ; @ ' ! ' 2 ! & / ' @ - ! ' V ! 2 1 & - 2 !
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. - / ! 2 ' - / ' ! - ! 2 ' - / ' . ! " ' ! [< - @ 2 2 ! 2 ' @ ! - 2 ' b ! . " * ! ' ; ! . ' . ' V ! 2 1 ' - / ' & 2 ' 2 0 # # ! 2 2 . 0 " 2 ' . " ! , ! ' - / ' ! " ' ; ! ' 2 ! & / ' 0 E ! '
/ & ! / ' ! " 7 . 2 ! ' / ! ' ! ' 2 ! & / ' - . " & 2 ' . - / & 2 ' - / ' ! - / 2 ' - / ' . ! " ! ' < 1 @ 2 2 ! 2 ' / ! 2 # ! - / ! / ' . ' . - ' . 7 " / ' + ! 0 E ! ' . " . ' V ! 2 1 & - 2 ! " ! 2 ! ' ! ' 2 & / '
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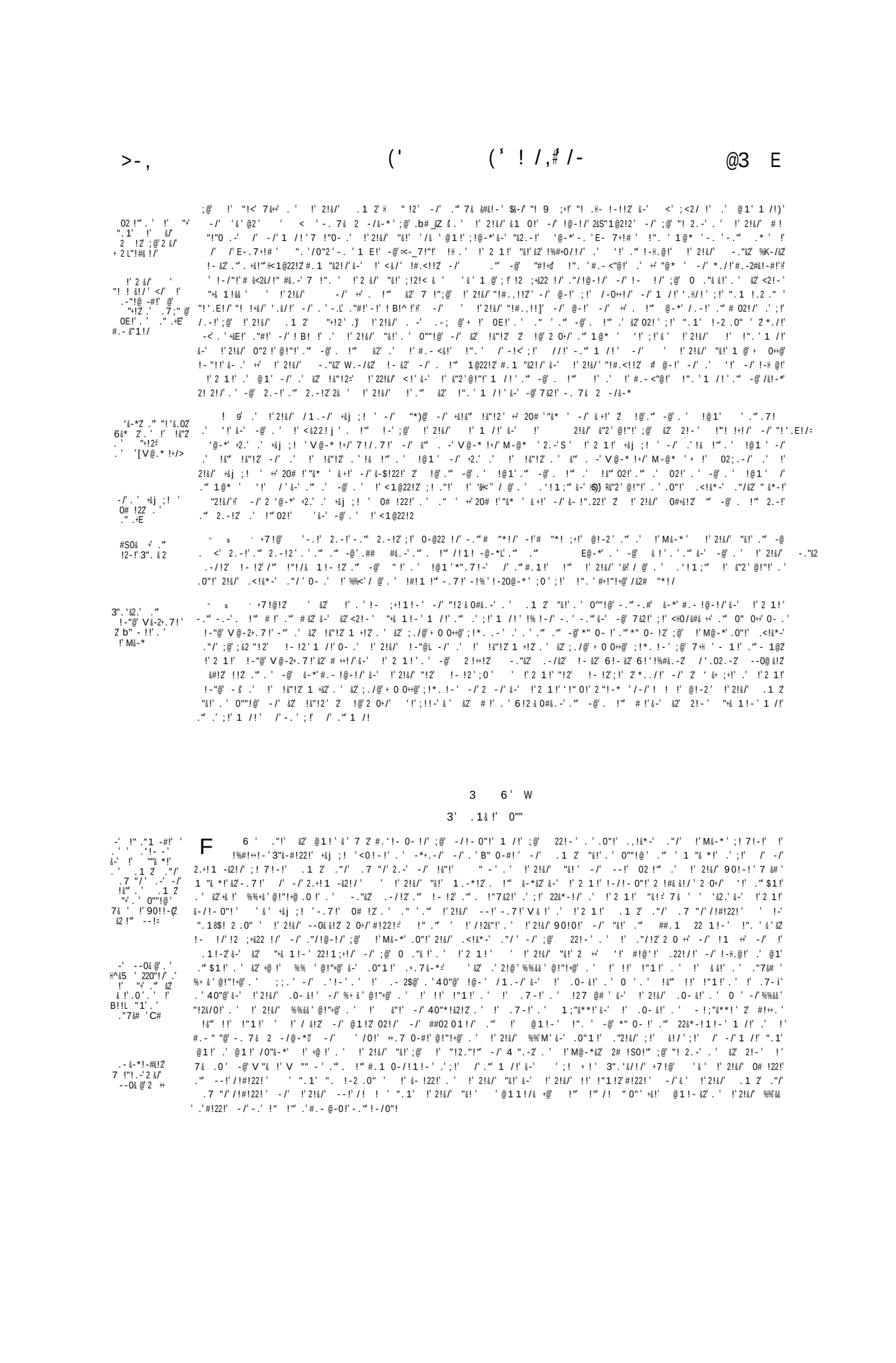

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V 6 ' /7 "/' .0" !-!@' "&!' . ' !' .-2 &"!' ;@' &2' /!/!' ;!"&-*' / !' !' @H))' / @' . ' .'!1;" -/' 2! +!/' 7& ' &2' 2! +!' . ' "" @2' ' @!'!-' -/' *" 0- !/' .' !" &* ' &* ' -/' 1@* @' 3"&-#!' !-"@' 0E!' . ' A."E!' /V "/' 0E!' . ' 40E' 6&# "/' 4022 . ' . ' +0" 1' .1 2' "SO&2' ." ' /1.-/' "&!' . ' 0 ' b!."*!' "&!' . ' "!7!2;0"@' !-"@' "&!' . ' 22!%' 6&# "/' b"!@L' 2.-' -/' !&" ' "!-' . ' !"+!' . ' M!-' b!."*!' -+!@' ."/' " 7-*!' &" 6!@-.+/' 4" @' M-@* ' -/' &" .1 2' #!" 20-' 2!2' .'!+' M-&* ' &2' -."&2' -/' ."/2 & !2' . ' @+!2;!"!' ." .-' 7-@' 4 &+!2 ."/' 0#.1;!' 4.E!+ -/' &@++' -/' V &7!+' 7& ' 0 +' . !" &2' +.-/!2' -/' !-!1!-&2' &-' @+!2;!"_' ." .-' 7-@' 4 &+!2 ."/' 0#.1;!' 4.E!+ -/' "@++' //' V &7!+' 7& ' !" <!-<-#!2' &-' !' .-&!' . ' !'.-' -/' &2' -."&2' . ' + -/' -/' 3@"@ .-' 7& ' +' &2' . !" +.-/!2' -/' !-!2' &-' !+ -/

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' 1..2' 01;+!' 7&2!'2 !7& ' 0- .' @.0"!' &* -!2' @.0"!' "0!' -/' !+ 0+² 20;*! ' b!" "/' B& j' b!" "/'+ !' "&!' . ' M@+/ "!' &-' @.0"!' +.-/' -/' ./"2 & ' . ' "+ -/' '7 !"!' &-' !'3 "+& 1!-' .+/!-' ' " / ' &-' @.0"!' 2!&/'+ -/' -/' ./"2 & ' . ' "+ ./' &;!' 0"2' / @' . ' !#!1;'" &-' !' %)'@!"!' . ' @.0"!' 1..2' -.;+!' " &*-' -/' ".1' !' 2 1!' / @' -/' + #!' ;@'/@<2' ".* #&.-2' -/' /H."- 1!-&2'#.- @-0!/' -/' /H."-!/' .' /@<2' . !'" / &!2' -/' + #!2' @.0"!' 2!&/' ;!2!# !'" 1.-*!' . !'" 2.-!2'7 2' ;@' 0^+."& !' . ' !'2 1!'3 "+@ 1!-' '#.-'&/+!/' -/' !@- !/' . ' &* ' "! 2.-' -/' +2.' ." !@!/'0- .'@.0"!' &* -!2' +² 2 !+!2' ./"2 & 2' -."&2 +.-/&2' -/' !- &2' 2' ;@' !' 2 1!' 1."!' +!@-+@' !"! ² 3+! 2!'&' !" .'" @.0"!' &* -!2' . ' @.0"!' ;.0-/ 0-' *`#!' -/' <&'" &&!' ;@' /'@2!' -/' 22!-' . ' @.0"!' ."/!2' 2 0 +² -/' !1 &² -/' !' .1.-2' &-' &2' <2!-' 3 "+& 1!-' 22!1;+!/' -/' ;@' 0/+ "& !' . ' !'2 1!' . ' ."/!@-!' !2 ;+&22 ' -/' !- # !' ' !' ."2!&/' # !' . ' !@-/"!' -/' ." !& 0"!' 1 /!' &-' !' 2!&/' 3 "+& 1!-' -/' !,@ # !' . ' !@-/"!' .'" ." !& 0"!' /' .'" 1 /!' &-' -@' 3 "+& 1!-' &-' @.0"!' 2!&/' +.-/' .'" ./"2 & ' . ' "+ -/' @!-2' @.0"!' 2!&/' ;!2!# !'" ;@' 7 '_'!,'-1!' .'" -1!2' !' ;!' -1!/' .'" # ++!/' &-' !' 2 1!' # !' .'" # &2' ;!<0 !"+@' .&/!' -/' . ' -.' ."#!'-!' ! !# !' -/' ;!' &-' -.'7&2!' H0/&#& +² .'" 0" && +² 0-.' @1'-!' &2' !&"!2' -!' .' -@' !. !!' .'" !. !!2' .' &2' 02!' .'" !&'" !&"!2' ' -/' ' @.0"!' 2!&/' ;!2!# !'" ;!' ;@' !' 2 1!' 0# ."& !'!- ;+!/' -/' "!2 ."!/' .' &2' - 1!' !2 !' /&*-& !' -/' <!1&-!-#!' ' !' /' ."' 7 2' . ' !' &"2' / @ . ' !' 2!&/'3 "+& 1!-' /' +2.' ;!' "!2 ."!/' -/' !- ;+!/' .'!-!"& !' !' +/' .22!/!' -/' !-H.@!' +² 2 !+!2' ."/2 & !2' -."&2 .7-!2 & !2' .7-!2' .-.0"2' +.-/!2' !- &2' "!-&2 '<'&#!2' !!' !"1!2' M-@* &2' !!2' /'.02.-2' .22!22&.-2' -/' !"!/& 1!-&2' -/' !,@ #!+² . ' !@1'7& ' 0" !- 0-#!2' ." !& !/' .'@.0"!' 2!&/' &* -!2' ;@' !' 2!&/' # !' . ' !@-/"!' ."' ;@' -@' #' . '3 "+& 1!-' 7 &# ' #.1!' "' .0* ' .' '!' #.1!-' .' !' -/&2' . '@.0"!' &* -!2' &-' -@' 7&2!' ;& ."#!' ."'"! 2.-' . ' !' 2!&/' !@-/"!' ."' -@' # !' ." # &2' . ' !@" /"!' ." !& 0"!' 27!+² 0 .-' !L' .22!22&.-' . ' @.0' .,!&*-' ./' 2' . ' -@' . !'" 2.-!' ." 2.-!2' -/' !@1' . ' '!' .+/!' .22!/!' /-/' !-H.@!' &-' +@E!' 1 ' -/' .0"1!' 2 !' -/' #.-/&#&.-' -/' &-' 2' 1 +!' -/' ' &+ ;+!' 7&2!' 2' !@' ." -@' . ' !@1'2 0+/' ." 1@* ' '!' /' ." /..-' &' @.0"!' 2!&/' ;!2!# !'" /' -!<' ;!!' #.-' &# !/' -!' !@- !/' . ' "! 2.-' -!' -@' #!' . ' !@-/"!' ." ." !& 0"!' @!-2' @1' /' ." 1 /!' 7& .0' 20 !' !". ' ." . ' -@' #!+² !". ' .0' . ' @.0"!' 2!&/' &* -!2' -/!2' ;@' ! &#&.-' +@<!' ." . !"7&2!' !'" ! #.0"2!' . ' @.0"!' + 7!2

' -@'b" - 2' .'20# ' 2 !2';@' !'M&-*' /!#+ "!/' ' .&/

-' +*.' '& ';!' ."/!@-!/'!2 ;+&22 !/' -/' !- # !/' ;@' !' 2!&/' 0# ."& !' ' +² !- !2' #.- &"1 #&!12' -/'*" 0- !2' 1 /!' .' -@' 2.-!' " 2.-!2' ;@' @.0"!' &* -!2' ." @.0"!' ! 0 &!' ." ! 0 &!2' . ' @.0"!' 2!&/' +.-/!' ." ."/2 & ' . ' "+ -/' !'" !' ."2!&/' !@-/!"' . ' !' 2 1!' 2 !+!2' -."&2' ."/2 & !2' -/' . !'" 1@22!2' ." -@' #!+² . 'L !@1 ' ;!' 0 $&@' '.&/!' -/' . '-.!' ."#!' 2 "!-* ' -!' ! !# !

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. 9ʻ .ʻ !<@ʻ . ʻ @.0"!ʻ+&!*!ʻ !. +!ʻ -/ʻ !&"ʻ !&"!2ʻ -/ʻ !,@ʻ . ʻ !@1 ʻ 2O# ʻ ##&.-ʻ"&* ʻ&- !"!2ʻ!- "!ʻ#+ @1!ʻ -/ʻ & +!ʻ ʻ 2ʻ !@ʻ .ʻ" -@ʻ . ʻ !@1ʻ / ʻ&-ʻ -@ʻ . ʻ !ʻ ."2!&/ʻ 2 !++!2ʻ -."&2ʻ +.-/&2ʻ -/ʻ !-!1!- !2ʻ -/ʻ +ʻ . !"ʻ<1&22!jʻ .ʻ" -@ʻ #!+ʻ . ʻ !@1 ʻ 2ʻ '&-* & ʻ &2ʻ ^+!ʻ . ʻ / &0++ #& -ʻ .ʻ" "!2 & 0#&.-ʻ /ʻ -!<ʻ ;!ʻ /ʻ -!ʻ 1 /!

" s .ʻ +7!@ ʻ -.ʻ 2.-!ʻ -.ʻ" 2.-!2ʻ ;!!ʻ '!%&/ʻ "!;+!/ʻ -.ʻ" &-ʻ -..ʻ 7&2!ʻ# "*!/ʻ . ʻ .ʻ" .ʻ" .## #&.-ʻ . ʻ !ʻ 2!&/ʻ 2 !++!2ʻ ."/2 & !2ʻ -."&2ʻ +.-/!2ʻ !- !2ʻ -/ʻ . !"ʻ <1@22!2ʻ .ʻ" -@ʻ . ʻ !@1ʻ -.ʻ" .ʻ" /&!ʻ E@-*ʻ "!2#!'@-*ʻ .ʻ" 1!/!+@-*ʻ . ʻ .ʻ" 7& ʻ !ʻ "!'!-O!2ʻ &220!2ʻ -/ʻ & !2ʻ . ʻ !ʻ 2 1!ʻ ".1!ʻ !ʻ @1!ʻ . ʻ !ʻ 2!&/ʻ !@-/"!ʻ 0-.ʻ !ʻ !2ʻ . ʻ !ʻ 0"& &# #&.-ʻ . ʻ .0"!ʻ /@ʻ -!%ʻ #.1@-*

3". '&2.' .ʻ" 1!2-!ʻ3". & 2

" s ʻ +2.ʻ ʻ &2ʻ ^&!ʻ !% !-/ʻ -. ʻ .ʻ -@ʻ 2 !++!2ʻ ."/2 & !2ʻ -."&2ʻ +.-/!2ʻ .ʻ" !-/2ʻ .ʻ" -@ʻ . !ʻ" !"!/& 1!- !2ʻ 7 &# ';!ʻ .ʻ" #.1!ʻ&- .ʻ !ʻM&-*&2ʻ -/!2ʻ ;@ʻ"! 2.-ʻ . ʻ -@ʻ / !ʻ . ʻ"!2.1 !&.-ʻ 1 /!ʻ .ʻ" /ʻ&-ʻ !ʻ2!&/ʻ + -/ʻ . ʻ "+ -/

3". '&2.' .ʻ" -@ʻ # '. '6!2O1 &.-ʻ &-ʻ "!+ -/

" s ʻ +7!@ ʻ &2ʻ # !ʻ . ʻ !- ;+!1!-ʻ -/ʻ"!2&0#&.-ʻ . ʻ b!" "/ʻ B& j ʻ b!" "/ʻ "&!ʻ . ʻ M@+/ "!& .ʻ" -@ʻ . !ʻ" <+!ʻ1 /!ʻ .ʻ" .';!ʻ1 /!ʻ&-ʻ &2ʻ 2!-'3 "+& 1!- ʻ!% !-/ʻ -. ʻ .ʻ -@ʻ -."&2ʻ ."/2 & !2ʻ +.-/!2ʻ !- !2ʻ "!- !2ʻ "!'<#&.-2ʻ)c'&#!2 !"1!2ʻ !!ʻ !"1!2ʻ M-@* &2ʻ !!2ʻ --0@ !!2ʻ !-#&.-2ʻ ."#&.-2ʻ @ !2ʻ .;+ #&.-2ʻ .;'!-#&.-2ʻ /'.02.-2ʻ " 0-# &2!2ʻ +&;&!2ʻ .22!22&.-2ʻ .ʻ" !"!/& 1!- &2ʻ 2 0 +ʻ .ʻ" !1 ++ʻ ʻ -@ʻ @1!ʻ !" !@-@-*ʻ .ʻ";!+.-*@-*ʻ .ʻ !ʻ .2 & +ʻ .02!ʻ.ʻ" 3"&."@!ʻ. ʻ M@+1 @- -ʻ&-ʻ "+ -/'.ʻ" .ʻ .2 & +ʻ . ʻ !&-ʻ . -ʻ !" 1'&-ʻ "+ -/'.ʻ" .ʻ -@ʻ . !ʻ" 1@2ʻ M! &-*ʻ2 +;!ʻ3"&.0ʻ" .< @-ʻ.ʻ" b.<-.0ʻ" . ʻ !ʻ2!&/ʻ .2 & +ʻ .02!ʻ.ʻ" 3"ʜ.0"@ʻ. ʻ M@+1 @- -ʻ.ʻ" . ʻ !ʻ2!&/ʻ .2 & +ʻ . ʻ !@-ʻ . -ʻ " 1'&-ʻ "+ -/'.ʻ" .ʻ -@ʻ . ʻ !&ʻ" 20##!22.0"2ʻ ;0ʻ ;!ʻ !%#! !ʻ -/ʻ ." "&2!/'.0 !ʻ . ʻ &_'= 2!-ʻ <&!ʻ -/'; !ʻ -. ʻ<ʜO/&## +ʻ -.ʻ" 0" 0+ʻ .ʻ -@ʻ . ʻ !@1'&-ʻ -@ʻ 1 -!ʻ" 7&2!

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-ʻ !ʻ3" @!'" ʻ ', !ʻ3"&.'" .ʻ ! -'. ' !"02 +!1ʻ&-ʻ -*+ -/ʻ !ʻ 3.22!22&.-2ʻ.ʻ !ʻ3"&."@ʻ.ʻ M&+1 @- -ʻ&-ʻ "!+ -/ʻ2 ++ʻ- ʻ ;!ʻ ." !& !/';@ʻ !ʻ "& <!'" .ʻ !ʻ3"&.'"&-ʻ &2ʻ 3 "+& 1!- ʻ .'" ʻ"! 2.- ʏU]'- ʻ -ʻ W

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C '.'!" &2' ;!' &'!- !/' -/' !2 C;+&22 !/' ;@' !' 2!&/' 0/* &!' ' +' *" 0- !2' .'L;!'1 /!' ;@' .0"!'2!&/' .,!&*-' ."/' ;@' VZ&"!2' !-!2'. '20# ' .22!22&.-' &+!' -/'&-$!2' 2' &2' .' @ &' +@1@ !/' -/' 22&*-!/';@' &2' 2!-' !'. ' &"!' H<1@22! '.'" . ' -@' !' !". ';!' 2' *./!' -/'. ' !' +&E!' ."#!' -/'! ! !' 2'& ' +' !'2 1!' &+!'&-!"!2' -/' .22!22&.-' 7!"! .0-/!';@' /0!' -/'+00 ' . &#!2' "! .01!/' -/' "!- @-@-*' . ' "!#."/!' &-' &2' 0-#!"@' -/' 2.' /' -/' /.-';@' !' 2 #!' . ' ' 1.-! ' ;! ."!' -@' 20# ' *" 0-!' 1 /!

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" $ ' +7!@ ' &2' 2!-' +!' -!'-.-!'. !'" 1 /!'." .' ;!' 1 /!' &-' &2' 2!-' 3 "+& 1!-' !% !-/' -.' -!' &-' -@' 7&2!';!' 0" 0+' -!' <0/&#& +' 0-.' . -' &2#.0-' !++@2' .' .'" .'" -@'*& !' .'" *" 0-!' 1 /!' 0-.' @1';@' V&++& 1' &2#.0-'4! 01.-';@' &2'&"!2' !-!2' . ' ." ' !' &2' 2!-' !' 2 1!' +!' ." /' -/' .' !' !&"!2' &+!2' .' &!' .0-&!' .' V ."#! 0" ' .';!' /' .' !'2 1!' + !' ." /' -/' .' !' !&"!2' &+!2' .' &2' ;./@' #.1@-*' 2' &-' !' 2 1!' "!2' !-!2' 1."!' +!@-+@' !"& ' !' "&* ' .' 7 &# ' -."&2' -/' ."/2 & 2' ;!+.-*!/' .' @.0' .,!&*-' ."/';@"! 2.-' ' !' !@-/!'" -/' ." !& 0"!' .' &'" V&++& 1'4!"E!+!@'M-@* ' !' 7 &# ';@' -' ^!' 1 /!' &-' @.0"!' 3 "+& 1!-' .+/!-' 'V!2 ' !' /@'. ' .'!1;'" !' &"2' @!"!' .'@.0'" " &*-'7 2' !@-!/' . &* ' "! 2.-0 -/'& ' &2' 2.' 1.2'*" #&.02' .,!&*-' ."/' -' !' 2 1!' &'" V&++& 1'4 "E+!@'+ ;."! '-.7!'&-' +&"2' 2!-'3 "&& 1!-' .' /-0++!' !' 2 1!' /!'.' !@-/"!' -/' .';!' "!2 ."!/' .' +' 20# '1 +2'+."/2 & !2'+.-/!2' !-!2' -/'. !'" !"!/& 1!-!2' 2' !' ." !& !/' .' @.0'" &* -!2';@' !' 2!&/' /!''7 !";@'&' !'2.'2 0+/';!' !' 2!&/' -."&2' -/' ."/2 & !2' 2 0+/';!' E!-' ".' @.0"!' 2!&/' 20 +& -' -.7& 2 - &-*' !' 0"# 2!' !". ';@' &2' 2!&/' b" 0- /!'" &-' .0"1!' ;.'!2!&/=' -/'.,' &2' .,!&*-' ."/'&'&2'2!&/' @.0"!' b" #!';@'. !'" ."1!'" "!2' !-!2' /'*" 0-!/' !' 2!&/' 1 -."&2' 1.-*!2'1 -@'. !'" &-*&2' .' 2 !'" 0E!'.'4!/ ."/'@.0'" -#+!' !' 7 &#' -."&2'7!"!'-.'E-.7!-' .' !'2!&/'+ !' ."/' 0/+!@' .';!'#. 2!/&-' -@' "!2' !-!2' 1 /!' .' !' 2 1!' 0E!' ' !' @1!'.' !' 1<@-*' .'/&!' 2!&/' &"!2L' !-!2' .' !' 2!&/'+ !' ."/' 0/+!@' -/' ;@' "! 2.-' !". ' !' 2 1!'+ !' ."/' 0/+!@' -/'@.0"!' 2!&/' 0 +& -' '!'#.-@-0 ++@';!-'2!&2!/' -/' E!-' !' &!2' !". ' "." !'/ !'. ' !'2!&/' "!2' !-!2' 1 /!' .' !' 2!&/'+ !' ."/' 0/+!@';@', 0!'. ' !' 2 1!'*" 0-!' &/&" .'7& .0' -@'<!-#!'." #+ @1!'1 /!' !". ';@' !'2!&/' 0E!'=' V !". '" &-' #.-2&/!" #&.0' .' !'<1@22!2' ;!'&'!- ;+!/' ."/!@-!/' -/' !2 ;+&22 !/';@' !'M@-*' .0"!' .,!&*&' ."/';@' 22!-' . ' !' ."/&2' 2 0!+' -/' !1 +' -/' !' .1.-2'&-' &2' 2!-'3 "+& 1!-' 22!1;+!/' -/';@' 0< ."& !' . ' !' 2 1!' ' !' 2!&/' *" 0-!' 1 /!' ;@' @.0' .,!&*-' ."/' .' !'2!&/' 0E!'. ' 4!/ ."/' 2' .0# &-*' !'2!&/' -."&2' . ' ." !+/' -/' V!+!@' 1 /!' ;@' @.0' .,!&*-' ."/' .' !'2!&/' -."&2' ." -@' #!+' !". ' ;@' "! 2.-' . ' -@' 7 1-@!' 1 +1' . ' &2' ;./@' #.1@-*' ;!'*../!'! !<+0!+' -/' ' &+ ;+!'&-' !' 7!' .'@.0"!' 2!&/' 0 +& -' -/' .' &2' !&"!2' 1 +1' . ' !';./@' . ' !' 2 &/'+ !' ."/' 0/+!@' #.1@-*' ".1' !' / !' .'L !' 2 1!' "!2' !-!2' !'" !' !-.0'" -/' <." !'. ' !' 2 1!'J %#! !'.-+@' '@.0' .,!&*-']."/'-!'@.0"!' !&"!2';!'-.';.0-/!-' .'7 " -' !' 2!&/' -."&2' .'" -@' #!+' !". ';@' "! 2.-' .' -@' 7 1-@!' #.1 "&2!/'&-' !' 2 1!' &"!2' !-!2' -@' ."1!'" "!2' !-!2' 1 /!' ;@' @.0' .,!&*-' ."/' .' !' 2!&/' 2 !'" 0E!'. ' 4!/ ."/' . ' !' 2!&/' -."&2' ." -@' #!+' !". ' .'" -@' !' &-' &2' I 2!-'3 "+& 1!-' 1 /!' .'" .';!' 1 /!' . ' '.&/@-*' .'" /-0++&-*' . ' -@' +0!' . ' !@-/"!' .'" .' !& 0"!' . ' !' 2!&/' &'" V&++& 1'4!"E!+!@'M-@* ' /' @!-2' !' 2 1!' &'" V&++& 1'&-' !' 2!&/' 3 "+& 1!-' .+/!-' !' 2!&/' '&H<' / @' .'" -@'],0!' . ' "!2 @ 0#&.-' ." "!2 ."@-*' . ' !' 2 1!' V&++& 1'4!"E!+!@'M-@* ' ." -@' 2.-!' ." 2.-!2' #+ @1@-*' !' H 1@22!2' ." -@' #!+' !". ' .' 02!' -/' ;! . !' . ' !' 2 1!' &'" V&++& 1'4!"E!+!@'M-@* ' .'" -@' . !'" ^+!' &-' &2' <2!-' 3 "+& 1!-' 1 /!' ." .' ;!' 1 /!' -. 7& 2.&&/@-*

b!-!" '&-*' .' 6&* 2=

A."E!' -/' &2' !&"!2' !' 2!&/' 2 !'" 0E!' .' 4!/ ."/' -/' &2' !&"!2' &'" V&++& 1'4!"E!+!@'M-@* ' -/' &2' !&"!2' -/' 20# ' . !'" 2.-!2' -/' !&"" !&"!2' '#+ @1! '."< !-/& ' -@' &+!' .' !'<1@22!2' ." -@' #!+' !". @';@' @.0' .,!&*-' ."/' ." !@1'." -@' .' !@1' ." .' 02!' .' -@'. ' !@1'20# ' "&* ' &+!' -/' &-'!2' 2' -@'. ' !@1' '!'&-'." .' !'<1@2212' ." -@' #!+' !&. '&' 1@* ' '!' /'&' &2' ^!' /' -!,' ;!-' //!' -." 1 /!-' -/' 2 '@-*' .' @.0' .,!&*-' ."/' -/' .' @.0"!' !&"!2' +' " - &2' 7&#!2' -/'# 2.1!2' . ' &!' 2!&/' ."&2' -/' .' !,@' #!+' !". ' 2' ;!' !". ' /0!' -/' ##02 01!/

N-/.' 6!-2' !"'&#!2' -/' 02.12<

N 0 +& -' 7 .2!' !&"!' !' &2' ' &2' .' 2!@' .-' .' /1.-/'2.-'.' !' 2 1!' + !' ."/' 0/+!@' ;@' @.0" "!2' !-!2';!"&-*'/ !' !' %&#H&J / @' .' "# ' !' &"2' @!"!' .' @.0"!' 1..2'-.;+!" *&-' *" 0-!/' .' !' 2 1!'+ !' %8"/' 0/+!@' !' ."/2 & !2' -/' -."$' .' ." !+/' -/'V!+!@'7& ' !&"" <!-0-#!2'&-' !' .0-&!'.'V ."#! 0"' .';!' /' .' !'2 1!' + !' ."/' -/' .' !' !&"!2' &+!2' .' &2' ;./@' #.1@-*' 2' &-' !' 2 1!' "!2' !-!2' 1."!' +!@-+@' !"& ' !' "&* ' .' 7 &# ' -."&2' -/' ."/2 & 2' ;!+.-*!/' .' @.0' .,!&*-' ."/';@"! 2.-' .' !' !@-/!'" -/' ." !& 0"!' .' &'" V&++& 1'4!"E!+!@'M-@* ' !' 7 &# ';@' -' ^!' 1 /!' &-' @.0"!' 3 "+& 1!-' .+/!-' 'V!2 ' !' /@'. ' .'!1;'" !' &"2' @!"!' .'@.0'" " &*-'7 2' !@-!/' . &* ' "! 2.-0 -/'& ' &2' 2.' 1.2'*" #&.02' .,!&*-' ."/' -' !' 2 1!' &'" V&++& 1'4 "E+!@'+ ;."! '-.7!'&-' +&"2' 2!-'3 "&& 1!-' .' /-0++!' !' 2 1!' /!'.' !@-/"!' -/' .';!' "!2 ."!/' .' +' 20# '1 +2'+."/2 & !2'+.-/!2' !-!2' -/'. !'" !"!/& 1!-!2' 2' !' ." !& !/' .' @.0'" &* -!2';@' !' 2!&/' /!''7 !";@'&' !'2.'2 0+/';!' !' 2!&/' -."&2' -/' ."/2 & !2' 2 0+/';!' E!-' ".' @.0"!' 2!&/' 20 +& -' -.7& 2 - &-*' !' 0"# 2!' !". ';@' &2' 2!&/' b" 0- /!'" &-' .0"1!' ;.'!2!&/=' -/'.,' &2' .,!&*-' ."/'&'&2'2!&/' @.0"!' b" #!';@'. !'" ."1!'" "!2' !-!2' /'*" 0-!/' !' 2!&/' 1 -."&2' 1.-*!2'1 -@'. !'" &-*&2' .' 2 !'" 0E!'.'4!/ ."/'@.0'" -#+!' !' 7 &#' -."&2'7!"!'-.'E-.7!-' .' !'2!&/'+ !' ."/' 0/+!@' .';!'#. 2!/&-' -@' "!2' !-!2' 1 /!' .' !' 2 1!' 0E!' ' !' @1!'.' !' 1<@-*' .'/&!' 2!&/' &"!2L' !-!2' .' !' 2!&/'+ !' ."/' 0/+!@' -/' ;@' "! 2.-' !". ' !' 2 1!'+ !' ."/' 0/+!@' -/'@.0"!' 2!&/' 0 +& -' '!'#.-@-0 ++@';!-'2!&2!/' -/' E!-' !' &!2' !". ' "." !'/ !'. ' !'2!&/' "!2' !-!2' 1 /!' .' !' 2!&/'+ !' ."/' 0/+!@';@', 0!'. ' !' 2 1!'*" 0-!' &/&" .'7& .0' -@'<!-#!'." #+ @1!'1 /!' !". ';@' !'2!&/' 0E!'=' V !". '" &-' #.-2&/!" #&.0' .' !'<1@22!2' ;!'&'!- ;+!/' ."/!@-!/' -/' !2 ;+&22 !/';@' !'M@-*' .0"!' .,!&*&' ."/';@' 22!-' . ' !' ."/&2' 2 0!+' -/' !1 +' -/' !' .1.-2'&-' &2' 2!-'3 "+& 1!-' 22!1;+!/' -/';@' 0< ."& !' . ' !' 2 1!' ' !' 2!&/' *" 0-!' 1 /!' ;@' @.0' .,!&*-' ."/' .' !'2!&/' 0E!'. ' 4!/ ."/' 2' .0# &-*' !'2!&/' -."&2' . ' ." !+/' -/' V!+!@' 1 /!' ;@' @.0' .,!&*-' ."/' .' !'2!&/' -."&2' ." -@' #!+' !". ' ;@' "! 2.-' . ' -@' 7 1-@!' 1 +1' . ' &2' ;./@' #.1@-*' ;!'*../!'! !<+0!+' -/' ' &+ ;+!'&-' !' 7!' .'@.0"!' 2!&/' 0 +& -' -/' .' &2' !&"!2' 1 +1' . ' !';./@' . ' !' 2 &/'+ !' ."/' 0/+!@' #.1@-*' ".1' !' / !' .'L !' 2 1!' "!2' !-!2' !'" !' !-.0'" -/' <." !'. ' !' 2 1!'J %#! !'.-+@' '@.0' .,!&*-']."/'-!'@.0"!' !&"!2';!'-.';.0-/!-' .'7 " -' !' 2!&/' -."&2' .'" -@' #!+' !". ';@' "! 2.-' . ' -@' 7 1-@!' #.1 "&2!/'&-' !' 2 1!' &"!2' !-!2' -@' ."1!'" "!2' !-!2' 1 /!' ;@' @.0' .,!&*-' ."/' .' !' 2!&/' 2 !'" 0E!'. ' 4!/ ."/' . ' !' 2!&/' -."&2' ." -@' #!+' !". ' .'" -@' !' &-' &2' I 2!-'3 "+& 1!-' 1 /!' .'" .';!' 1 /!' . ' '.&/@-*' .'" /-0++&-*' . ' -@' +0!' . ' !@-/"!' .'" .' !& 0"!' . ' !' 2!&/' &'" V&++& 1'4!"E!+!@'M-@* ' /' @!-2' !' 2 1!' &'" V&++& 1'&-' !' 2!&/' 3 "+& 1!-' .+/!-' !' 2!&/' '&H<' / @' .'" -@'],0!' . ' "!2 @ 0#&.-' ." "!2 ."@-*' . ' !' 2 1!' V&++& 1'4!"E!+!@'M-@* ' ." -@' 2.-!' ." 2.-!2' #+ @1@-*' !' H 1@22!2' ." -@' #!+' !". ' .' 02!' -/' ;! . !' . ' !' 2 1!' &'" V&++& 1'4!"E!+!@'M-@* ' .'" -@' . !'" ^+!' &-' &2' <2!-' 3 "+& 1!-' 1 /!' ." .' ;!' 1 /!' -. 7& 2.&&/@-*

3 6 ' W

3 ' -.' .0# !' C' !@1.0"

.' !' M&-*' .0"!' .<!&*-' ."/

' 1.2' 01;+!' 7&2!' ;!2!# & ' @.0"' &* -!2' @.0"' "0!' -/' !& 0+' 20;*&! ' -/' +&!*!1 -' . -' T.0# !' M-@* ' ."/' T.0# !' -/' !@1.0"J ' 7 !"!'&-' !'3 "+& 1!-' .+/!-' 'V!2 1' !'#K</ @'. ' .'!1;'" !' &"2'@!"!'. '@.0"!' 1..2' -.;+!' "&*-' &' 7 2' !- /!/' !2 ;+&22 !/'."/!@-!/' /!1!/' -/' /!#+ "!/';@' 0/."& !' . ' 3 "+& 1!- ' '@.0"!' 2!&/' " .0" ;@' !' 1!'. ' . -' ."/' T.0# !' 2 0+/' 2 -/' -/';!'#.-'&/!/' -/' !@-!/'. ' &* ' "! 2.-'/&2 ;+!/' -/' ."H0**!/'. ' +' .-.0" 2 !'/&*-@!' -/' <!1&-!-2'C' !'- 1!2'. ' !' 2 1!' -/' ." !& !' .'@.0' .<!&*-' ."/' -/' .'@.0" !&"!2' +' 2!+2' -."&2' ."/2 & !2' 0-/"!/&2' " 0 # &2!2' +&; &!2' "&'&+!*!2' /'.02.-2' -.& #&.-2' 2!- #&.-2' +.-/&2' -/' !-&2' "!-&2'"!<#&.-2' -/'[<'&#!2' ."#&.-2' --0& !2' !-#&.-2' "&* &2' -/' +' . !" !"!/& 1!-&2'*./!2'# !++!2' -/' /! &2'7 !". ' !'." -@'. !" 2 -!'." 2.-!2' .' &2'02!'7 2' ." 7!"!'2!&2!/' ." .22!22!/' !'%%HU)/@'. ' 0*02'&-' !' &"2'@!"!'. '@.0@!'1.2'-.;+!'" &*-'." -@' @1!' !"' 7& &-' &2' @.0"!'6! +1!' . ' -*+.-/' '-+ -/' V +!2' ." +!&2' ." &-' !' "# !2' !". '&-' !!' 2@1 +!' !!' &+' ." B1!'. ' +& !' ." +@ !2' 2' 1."!' ' + "*!' &-' !' 2 1!' / !' 1.-*!2' . !" 1 @' !"!!0 3+! 2!'&-'@.0"!' &* -!2' . '@.0" 1.2' ;0-/ -')#!' ." 2.'10# ' 2'@.0"!'2!&/' " .0" 2& '/&!' /! ' . 'M&-*' 6&# "/' &@[<' -!<' . !-/!/' @.0" bF#!';0'!'' .' !' 0 1.2' . ' &2' .7!" ".' ' @ &!' &/!" .' ';!-' "0!' -/' .;!/&!-' .'@.0"!' &* -!2'&-' &2' +&*! 0-#!' -/' &-' +' . !" &-*&2' ';!#.1! ' .'@.)' 2!&/' 20;*&!' . ' /0 &!' .' /.' .'@.0' 1.2' /" /' -/' 2.<!&*-'+&!*!' ."/' -/' 7&+!' /.' /0"&-*' &2' +@ !'J '1@' +! 2' @.0"!' &* -!2' . '@.0"!' 1.2 !' !2 #& +' -/' ;0-/ -'*)#!' -/' ;+!22!/' /&2 .2&#&.-';@' !' /'@2!' -/' 22!-' . ' !' ."/&2'< 0 +' -/' !1 +' -/' .1.-2'&-' &2' 2!-'3 "+& 1!-' 22!1;+!/' -/' ;@' 0<."& !' . ' !' 2 1!' ' &' ;!' ."/!@-!/' !2 ;+&22 !/' -/' !- ;+!/' ' !' 2 1!' ^+!' . ' !@-/"!' -/' +' . "!' <&2' . ' !@-/!" /' @!-2' @.0"!' 2!&/' " .0" &-' !' 2!&/'3 "+& 1!-';@' 7 ' -1!' ." -1!2' !';!'#++!/' &-' !' 2 1!';!''.&/!'. ' -.!' ."#!'-!'! ! !' -/' '@.0"!' " .0" &-' !' "!2."!/' .'!2!/'3 "+& 1!-';@' 7 ' -1!' ." -1!2' !';!'#++!/' &-' !' 2 1!' ^+!' . ' !@-/"!' -/' +' . "!' <&2' +.-/&2' !-&2' "!-&2'"!<#&.-2'3"&#!2' /'.02.-2' !&"!2' 1 "E! &2' 7 "!--!2' &!2' " 0-# &2!2' '&!7&2' " -E +!*' 0-/"!/&2' -/' +' . !" "&* &2' -/' !"!/& 1!-&2' 7 '2.'!,' !@' ;!' &-' -*+. /' "+ -/' V +!2' +!&2' -/' # !2' . ' !'2 1!' 7 !". ' !' ." -@'. !" 2.-!'." 2.-!2' 7!"!' 2!&2!/' &-' &2' ." !&" !1! -!' 2' ' !!' !!' &+' *!&& +' ." 2 !#& +' ." -@'. !" 2 !' 7 '2.'!,'&' ;!' !' 2!&/' %%H)0/@'. ' 0*02' ." -@' @1!' 2& ' -/' .' +' . &" 1 -."&2' -/!2' !-&2' "!-!2' "!<#&.-2'c'&#!2' "&* &2' -/' !"!/& 1!-&2' 7 '2.'!$' !@';!' 7 &# !' '!' ++!-'/!2#!-/!/'#.1@-' -/'*".7!-' '*2 0+/' '!' ++!-'/!2#!-/!/' /1@-' ." *".V!&.'@.0"!'2/&!' " .f'&' !' 2!&/' ^+!' ' !@-/"!' /' -!<' ;!' 1 /!' -." /'K -/' '&';!' +! 0+' .' @.0"!' 2!&/' " .0" &2' !&"!2' -/' .' &2' !. !!2' 7& .0' -@' +@<!' ." -@' !" 2 !' .';!' /'.0' .'@.0"!' -/&2' ." .0 !'.'@.0"!' .0" !'.' && 0-#!"@' .'!-"!'&-.' +' -/'!<@'.' !'2!&/' ."/2 & 2' -."&2' .-/&2' -/' !-&2' -/'. !" <1&22!2' -/'!<@' *#!+' .' !@1' 27!+' 0 .-' !' .22!22&.-' .'@.0' .<!&*-' ."/' 2' -' !' .22!22&.-'.' -@' . !" 2.-!' ." 2.-!2' -@'/&2#!-' ." -@' . !" 2 !' 7 '2.'!,'&' ;!' !' 2!&/' ^+!' . ' 0*02' ." -@' @1!' 2& ' -/' .' +' . &" 1 -."&2' -/!2' !-&2' "!-!2' "!<#&.-2'c'&#!2' "&* &2' -/' !"!/& 1!-&2' 7 '2.'!$' !@';!' 7 &# !' '!' ++!-'/!2#!-/!/'#.1@-' -/'*".7!-' '*2 0+/' '!' ++!-'/!2#!-/!/' /1@-' ." *".V!&.'@.0"!'2/&!' " .f'&' !' 2!&/' ^+!' ' !@-/"!' /' -!<' ;!' 1 /!' -." /'K -/' '&';!' +! 0+' .' @.0"!' 2!&/' " .0" &2' !&"!2' -/' .' &2' !. !!2' 7& .0' -@' +@<!' ." -@' !" 2 !' .';!' /'.0' .'@.0"!' -/&2' ." .0 !'.'@.0"!' .0" !'.' && 0-#!"@' .'!-"!'&-.' +' -/'!<@'.' !'2!&/' ."/2 & 2' -."&2' .-/&2' -/' !-&2' -/'. !" <1&22!2' -/'!<@' *#!+' .' !@1' 27!+' 0 .-' !' .22!22&.-' .'@.0' .<!&*-' ."/' 2' -' !' .22!22&.-'.' -@' . !" 2.-!' ." 2.-!2' -@'/&2#!-' ." -@' . !" 2 !' 7 '2.'!,'&' ;!' !' 2!&/' ^+!' . ' 0*02' ." -@' @1!' 2& ' -/' .' +' . &" 1 -."&2' -/!2' !-&2' "!-!2' "!<#&.-2'c'&#!2' "&* &2' -/' !"!/& 1!-&2' 7 '2.'!$' !@';!' 7 &# !

;!*. !-' 2' &2' Z<2!&/:' .'" @1./& +@' !'" -@' 2O# ' ; "*!@-' 2 +!' "!+! 22!' ." 2 !' 2.' 1 /#ℍ !' 2 1!' . -' T.0# !' M-@* ' ."/' &W.O# !' -/' &2' !&"!2' 2 +² ' !' +² !' 2!&/' _&2'+.-/&2' ! &2' -/'. !'"<1&221Z &-' !$@' 2O# ' "!2' !-!2'2 !#& &!/'7 !".'ℍ!2 !' &2'." 2 +;!'2.' #!22&/' '# /!/' /-0++!/'." /!$1@-!/'." !'" !' /! ' . ' -@' 2O# ' 2.-!2'7& .0' !&"!' 1 +!' . ' &2';./@';!*. !-' ." 7 !". ' -@' 2O# ' ; "*!@-!' 2 +!' "!+!22!' ." 2 !' 2 +;!' 1 /!' &-' +@E!' 1 ' # .0"1 !' -/' +&E!' !2 !' 2' & ' !' 2!&/' g#!' . ' !@-/"!' /'-!,' ;!' /'-!' 1 /!' -/' 2'&' -.' '&2.' &-' &2' Z !' 7!"!' /'&- /!'-." 2 !#& &!/' @

3". '&2.' ." &" 6.;!"' !@-@

" s L +7!&!2' ' &2' &!'. ' - ;+!1!-' -/'6!2&0#&.-'. ' . -' ."/'T.0# !'-."-. &-*'#.- !@-!/'&-' !'2 1!'-." -.' . !'" !'." &-' !'I<!-' "+& 1!-'1 /!'." .';!'1 /!'!%!-/'-.'-." &-' -@' 7&2!';!' ℍO/&#& +² ." 0" 0+² 0-.' &" 6.;' !@-@'M-@* '." .' !' !&"!2'1 +!2'. ' &2';./@'+0 0++@';!*. !-'.'.'." ." -@' *" 0-!'." *" 0-&2';@' !'M&-*'.0"!' .,!&*-L' & "/';@' &2' &"!2' !-!2'1 /!'0-.' !'2!&/' &" 6.;' -/' .' !' !&"!2'1 +!2'. ' &2';./@'+7 0++@';!*. !-';@'7 '-1!'." -1!2' !'2 1!' &" 6.;' !@-@ØK # ++&/' &-' !'2 1!'. ' -@' 2!++&2" ."&2' -/!2' !-!2'6!<&2'6!<#&.-2' /'.02.-2' --0&!2' &#!2'B!!2'." -@'. !'" &-*'#.-!&-!/'&-' !'2!&/'&"!2' !-!2';0' ' !'2 1!'&"!2' !-!2';!'2'*./!' -/'2' !'&+ ;+!' .' !' 2 1!' &" 6.;' -/'.)' !' !&"#*'1 +!2'. ' &2';./@'+0 0++@';!*. !-' 2' !@'2 0+/' '!';!!-'&' &2']_&!'. '6!2&0#&.-'." -@'. !'" ^+!'." ^ _' &-' &2' <2!-' "+& 1!-'1 /!'." /' ;!'1 /!' /'-.';!' /'." 1 /!

3". '&2.' ." &" .1 2< .'!++

" s +7!@' ' &2' &!'. ' - ;+!1!-' -/'6!2&0#&.-'. ' . -' ."/'T.0# !'-."-.!' &-*'#.-!@-!/'&-' !'2 1!'-." -.-!'. !'" ^&!'." &&2'&-' &2' <2!-' "+& !-'1 /!'." .';!'1 /!' !%!-/'-.'-." &-' -@' 7&2!';!' ℍO/&#& +² ." 0" 0+² 0-.' &" .1 2' .'!++²M-@* '-/' .' !' !&"!2'1 +!2'. ' &2';./@'+7 0++@';!*. !-'.'.'." ." -@' *" 0-!'." *" 0-!2';@' !'M&-*'.0"!' .,!&*-' ."/';@' &2'&"!2' !-!2'1 /!'0-.' !'2!&/' &" .1 2' .'!++²&2'." !@';!'# ++!/'&-' !'2 &!' -@' 2!++&2' 1 -.'&2' +</@2'!-&2' "!-&2' "!,#&.-2' /'.02.-2' --0&!2'. &#!2'M-@* &2' !!2' ." -@'. !'" &-*'#.-!@-!/'&-' !'2!&/'&"!2' !-!2';0' ' !'2 1!' "!2' !-!2';!'2'*./!' -/' /'&+ ;+!' .' !' !&"!2' 1 +!2'. ' !' ;./@'. ' !'2!&/' &" .1 2' .'!++²+0 0++@';!*. !-' 2' !@'2 0&/' '!';!!-'&' &2' ^+!'.'6!2&0#&.-'." -@'. !'" ^!&-' &2' 2!-' "+& 1!-'1 /!'." .';!'1 /!' /'-.';!-' /'." 1 /!

3". '&2.' ." &" Q6.;!"' V@+0* ;@' .' 4".E!

" s +7!@' ' &2' ^+!'. ' - ;+!1!-' -/'6!2&0#&.-'. ' . -' ."/!'T.0# !'-!"-. &-*'#.-!@-!/'&-' !'2 1!'-." -.-!'. !'" #&!'." ^#&2'&-' &2' 2!-' "+& 1!-'1 /!'." .';!'1 /!'!%!-/'-.' -." &-' -@' 7&2!';!' ℍO/&#& +² ." 0" 0+² 0-.' 6.;' V@+0* ;@' .'4".E!'M-@* '." .' !' !&"!2'1 +!2'. ' &2';./@'+0 0++@';!*. !-' .' .'." ." -@' *" 0-!'." *" 0-!2';@' !' M&-*'.0"!' .,!&*-' ."/';@' &2'&"!2' !-!2'1 /!'0-.' !'2!&/'V&++& 1' -/' .' !&"!2' 1 2+!2'. ' &2';./@'+0 0++@';!*. !-' .' ;@'7 '-1!'." -1!2' !' 2 1!'V&++& 1'&2' # ++!/'&-' !'2 1!'. ' -@' 2!++!2' -."&2' .-/!2' !-&2'6!-&2'6#,#&.-2' /'.02.-2' --0&!2'. &#!2'M-@* &2' !!2' M.' -@'. !'" &-*'#.-!@-!/'&-' !'2!&/'&"!2' !-!2';0' ' !'2 1!' "!2' !-!2';!'2'*./!' -/' /'&+ ;+!' .' !' !&/' V&++& 1' -/' .' !&"!2'1 2+!2'. ' &2'h(8+0 0++@';!*. !-' -/'2 -/'&-' 2 1!', 0!'2"!-* ' -/'! !^!' @!-2' !'2!&/' . -' ."/' T.0# !' -/' &2' !&"!2' 2' !@'2 0+/' '!';!!-'&' &2' ^+!'.'6!2&0#&.-'." !-@'. !'" ^+!'&-' &2' 2!-' "+& 1!-'1 /!'." .';!'1 /!' //!'-.';!!-' //'." 1 /!

3". '&2.' W ." &" . -' "! "@

" s ↕ +7!@' ' &2' ^+!'. ' - ;+!1!-' -/'"!2&0#&.-'. ' . -' ."/'T.0# !'-!"-. &-*'#.-!@-!/'&-' !'2 1!'-." -.-!' . !'" !'." !'2 &-' &2' 2!-' +& 1!-'1 /!'." .';!'1 /!'!%!-/'-.' -." &-' -@' 7&2!';!' ℍO/&#& +² ." 0" 0+² 0-.' &" . -' ." "! "@'M-&* '." .' !' !&"!2'1 2+!2'. ' &2';./@'+0 0++@';!*. !-' .' .'." ." -@' *" 0-!'." *" 0-!2';@' !'M&-*'.0"!' .,!&*-' ."/';@' &2' "!2' !-!2'1 /!'0-.' !'2!&/' . -' -/' .' !&"!2'1 2+!2'. ' &2';./@'+0 0++@';!*. !-';@'7 '-1!'." -1!2' !'2 1!' . -' &2' # ++&/' &-' !'2 1!'. ' -@' 2!+²2' -!"2' +-/&2' !-&2' "!-&2' "!,#&.-2' /'.02.-2' --0&!2'. &#!2'M-&* &2' !!2' M.' -@'. !'" &-*'#.-!@-!/'&-' !'2!&/' "!2' !-!2';0' ' !'2 1!' "!2' !-!2';!'2'*./!' -/' /'&+ ;+!' .' !' !&/' V&++& 1' -/' .' !&"!2'1 2+!2'. ' &2';./@'+0 0++@';!*. !-' -/'2 -/'&-' !'2 1!', 0!'2"!-* ' -/'! !^!' @!-2' !'2!&/' ." "/' T.0# !' -/' &2' !&"!2' 2' !@'2 0+/' '!';!!-'&' &2' ^+!'.'6!2&0#&.-'." -@'. !'" ^+!'&-' &2' 2!-' "+& 1!-'1 /!'." .';!'1 /!' //!'-.';!!-' /'." 1 /!

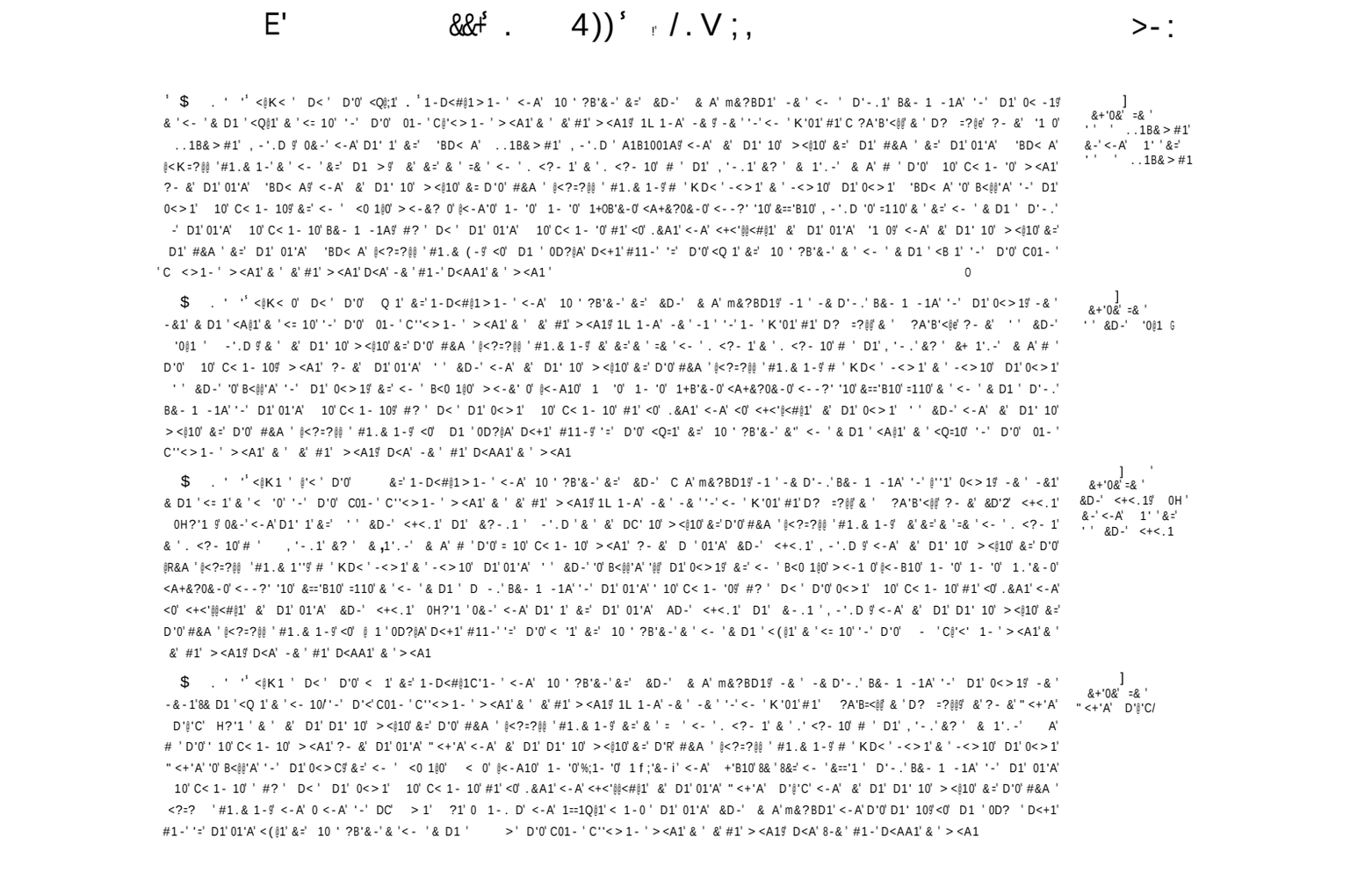
3". '&2.' W ." ! &2#.&1 'V" +2

" s +7!@' ' &2' # !'. ' - ;+!1!-' -/'6!2&0#&.-'. ' . -' ."/'T.0# !'-!"-. &-*'#.- @-!/'&-' !'2 1!'-!"-.;' ' . !'" # !'." # !2'&-' &2' 2!-' "+& 1!-'1 /!'." .';!'1 /!'!%!-/'-.'-!" &-' -@' 7&2!';!' ℍO/&#& +² ." 0" 0+² 0-.' &" [&#.0-'V!++@2'." .' !&"!2'1 +!2'. ' &2';./@'+0 0++@';!*. !-' .' .'." ." -@' *" 0-!'." *" 0-!2';@' !'M&-*'.0" .,!&*-')."/' ;@' &2' "!2' !-!2'1 /!'0-.' !'2!&/' . -' &#.0-!'V!++@2' -/' .' !' !&"!2'1 +!2'. ' &2';./@'+0 0++@';!*. !-' .' .'." ." -@' *" 0-!'." *" 0-!2';@' 7 '-1!'." -1!2' !'2 1!' . -' &#.0-!'V!++@2' &2'# ++&/'&-' !'2 1!'. ' -@' 2!+²2' 2'+-/&2' !-&2' "!-&2' "!,#&.-2' /'.02.-2' --0&!2'. &#!2' !!2' ." -@' .l8<' &-*'#.-!@-!/'&-' !'2!&/'&"!2' !-!2';0' ' !'2 1!' "!2' !-!2';!'2'*./!' -/' /'&+ ;+!' .' !' 2 1!' . -' &#.0-!'V!++@2' -/' .' !&"!2'1 +!2'. ' &2';./@'+0 0++@';!*. !-' 2' !@'2 0+/' '!';!!-'&' &2' # !'. '!2&0#&.-'." -@'. !'" # !' &-' &2' 2!-' +& 1!-'1 /!'." .';!'1 /!' /'-.';!!-' //!'." 1 /!

3". '&2.' W ." &" . -' !@-!@

" s +7!@2' ' &2' # !'. ' - ;+!1!-' -/'6!2&0#&.-'. ' . -' ."/'T.0# !'-!"-. &-*'#.-!@-!/'&-' !'2 1!'-!"-.!'. !'" # !'." # !2'&-' &2' 2!-' "+& 1!-'1 /!'." .';!'1 /!'!%!-/'-.'-!" &-' -@' 7&2!';!' ℍO/&#& +² ." 0" 0+² 0-.' &" . -' !@-!@'M-&* '." .' !&"!2'1 +!2'. ' &2';./@'+0 0++@';!*. !-' .' .'." ." -@' *" 0-!'." *" 0-!2';@' !'M&-*'.0" .,!&*-' ."/';@' &2' "!2' !-!2'1 /!'0-.' !'2!&/' &" . -' !@-!@'-/' .' !&"!2'1 +!2'. ' &2';./@'+0 0++@';!*. !-' .' ;@'7 ' -1!'." -1!2' !'2 1!' &" . -' !@-!@'&2'# ++!/'&-' !'2 1!'. ' -@' 2!+²2' 1 -!"2'+-/!2' !-!2' "!-&2' "!<#&.-2' '.02.-2' --0&!2' . &#!2' !!2' ." -@'. !'" &-*'#.-!@-!/'&-' !'2!&/' "!2' !-!2';0' ' !'2 1!' "!2' !-!2';!'2'*./!' -/' 2' !&+;+/' .' !' 2 1!' &" . -' -²' .' !&"!2'1 +!2'. ' &2';./@'+0 0++@';!*. !-' 2' !@'2 0+/' '!';!!-'&' &2' # !'. '6!2&0#&.-'." -@'. !'" # !' ." # !2'&-' &2' 2!-' +& 1!-'1 /!'." .';!'1 /!' /'-.';!' //!'." 1 /!

E' &&ᶠ . 4))ʻ ᶦ / . V ; , >- :



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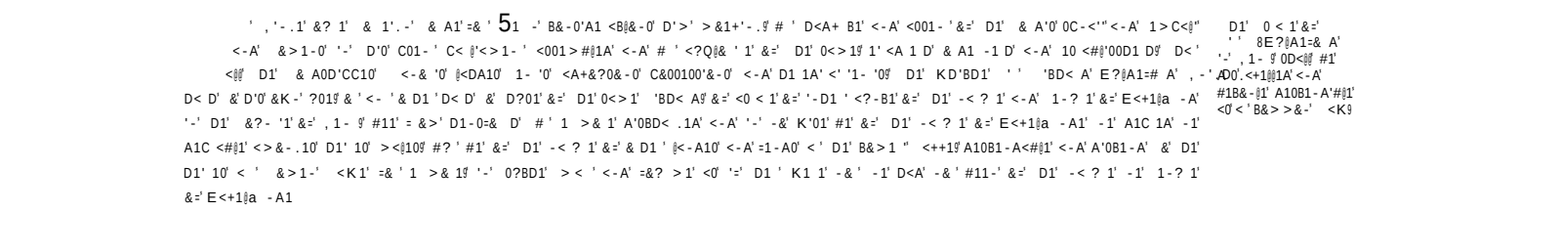

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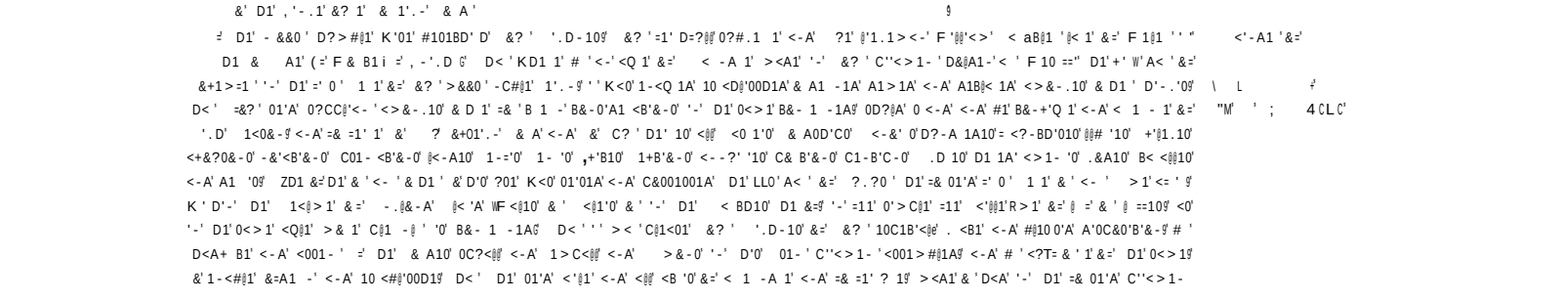

s s

6!#& !ƒ &^' 1C$'1A'<0' &' D1' 0<'A' ' F0 < a 1

D&$A1-' D1'01'A' =' 0 ' 1 1$ & ''-'<- '& D& 'C <- 1- ' 0' D1-' D<' > 1' D&$A1-'< 1-0 ' &? ' 01'A' 0?CC$'<- '& ' D'0' D1' 10$ # ' KD< ' 0&' 1R' -<>1' & ' -<>10' D1' #1' B<$$'A' '-' D1' 0<>1$ & ' &' D1' D? '$&001' <-A' A'0<#$ -.' & ' C ?A B1' &=' &? ' 01'A' 0?CC$'<- '& ' &='D'0' D1' 10$ & ' <- '=1&='" & =1&==10' &' D?01' &=' &? ' 01'A' 0?CC <?- $ &R' A' D?01' &=' <- '&='D'0' <?-B10 10' KD&0' D1' 1' &=' #$&A1' D1' < ' > 1' &=' > <a'-.' &= ' D1' 0<>1' <Qa1' & ' <- ' > 1' 0' D' K<0$ #1' ? ' $ '+&'A1' <A-?$$1A' 1C1$$1A' <-A' &=' -&1' =& B1' -1' 1==1Q$1 ' -A' D<' D1' 0<>1' <Q '0' -1' <- ' &=' D1 >' #1'7 4' 1- ' K '01' C ?A'B'<$$' A ' D? =?$e' &' &? ' 01'A' 0?CC$'<?- ' -1' &' D'0' D1' 10$ -1' &' <- ' C0&-1' < ' <- ' > 1' =1&==11' &' D'0' ?01' &?BD'-.' D1' > '0010' & ' <- ' CB1$$' D1 &=$ #? ' #1' < 1-0 ' #1 >' <-A' 1R ' &=' D1 >' ? ' $ ' +&'A1' ! <-A' D<' &? '01'A' 0?CC$'<?- ' <-A' D'0' D1' 10' <-A' <$$' =1&==#10' &' D'0' ?01$ > < 'D<+1' 0?BD' <+<?- <.1' -' 1 D'-.' <-A' #1' -' <0' .&A1' B<01' <-A' B&-A'B'&-' '-' D1' <K1$ <-A' 1- 1' D<+1' <-A' 1- & 1' D1' => 0010' <-A' 1 , ' C< 1' D1 &=$ <0' '=' D1' 01'A' <= 1' & ' <Q=B10' -1' <- '&=' D1 >' D<AA1' -1+' #1-' D<AA1' -1' > <A1

%#! &.-' .'" b" " 2'. ' !' M&&&<' " ?a1' &=' 1A=& A' &? ' -B$1' &=' D1' > '0010$ D1 &=' #1' <0' .&A1' <-A' 1==1A?1$$' '-' D1' <K1' <= ' ' 1-? 1' C? C& 10' &=' D1' 0<>1$ <0' '=' D'0' <Q 1' &=' <A-?$$<B'&-' <'RA 10 ' ?B'&-' D<A' -&' #11-' > <A1' -1' D<AA1 ' -A' <$0&' D<' ' ' #1' & A1 -1A' # ' D1' 01'A' <?Q & ' 1$ D< ' > >1A'< $ ' <= 1 ' D1' 01'A' " ?1' &=' 1A=& A' #1' A1A' K ' D&? ' '00?1' > <$1' &=' D'0' #&A ' #1.& 1-$ D<' D1' , '-.1' &? ' & 1'.-' & A' D<+1' <-A' 1-& 1' R > 1' &=' D'0' $ =1$' <$$ <0 1$$0' <-&' 0' & A0D'C ' $&-A10' 1D 10' 1- '0' 1 B'&-0' +'B10' <A+&?0&-0' , -'.D 110' =110' $'# '10' = <?-BD'010' K'A' <$$' & D1 ' D1 1A' <> K' '0' D<' #11-' B& > C '01A' '-' D1' 01'A' 10' C< 1- 10' & D1' 01'A' " ?1' > <A1$ KD'BD1' # ' D1' 01'A' <Q$1' &=' < 1 -A 1' K1 1' &=' #1' =& =1' 1A

%

b" - 2'; @' !' M&-*' j&B!; ' !- ' . '#!" &-' 2 !2' .' 2 &/' &"' V &++& 1' /!#+ "!/' .&/

' #1' ' ' & A1 -1A' # ' D1' 01'A' <?= & ' 1$ D<' <$$' 10' C< 1- 10' #1 - . A< 1' < ' F 10 'D' LL 0 A< '&=' ! 1# ?< ' D1' 1 1' &=' D1' 1'. -' &=' D1' , '- .1' D< ' -&K1' '0$ > <A1' # ' D1' , '-.' &? ' &+01'.-' & A' &' D1' 01'A' F '$$'<>' 1 a1$1 $ &=' 51 -' <-&' 0' '<-A10' <-A' 1D $0' '-' A'1' 0<>1' 10' C< < 10' 0C1B'='1A$ &' #1' D<A' &' D1' 01'A' F '$$'<>' <-A' &' D'0' D1' 10' > >1A'< $ ' <= 1 ' A'1' A1 D' &=' D1' 01'A" " ?1' K' D&? ' D1' 10' > <$1' &=' D'0' #&A ' #1.& 1-$ #1' +&'A1' <-A' &=' -&1' =& B1' -1' 1==1=$1

! " ! ' / ! ' . ' ! 0E!' . ' 4!/ ." /' 7 & .0 '0 !&"2' . ' ;&2'4./@' -/' ! !#! 2!' . ' ! ' M&-* &"' V &++& 1' 2 ' '!' ! 2 !2' 2 !#& &!/' &-' ! ' 2 &/' b" - 2

C ' D<' ' ' #1' & A1 -1A' # ' D1' 01'A' <?Q & ' 1$ D<' D1' 01'A' ' ' F '$$'<>' <-A' D'0' D1' 10' <-A' <$$' =1&==11' <-A' =1&==110' &' D1' ' ?01$ <-A' D1' ' D1' 10$ > > 1A'< $ ' <= 1 ' D1' A1 D' &=' D1' 01'A" " ?1' K' D&? ' D1' 10' > <$10' &=' D'0' #&A ' #1.& 1-$ <-A' <= ' ' D1' A1B1001' &=' D1' , '-.' &? & 1'.-' & A$ D<+1' <-A' 1-& 1' <$$ D1' 01'A' <0 1$$0' > <-&' 0' $<-A'0' 1- '0' <-A' & D1 ' D1 1A' <>1- '0' # ' D1' 01'A' B 1' &=' < 1 -A 1' =& =1' 1A$ <-A' '-' D1' 01'A' 10' C< 1- 10' 0C1B'='1A$ '-' $'a1' > ? ' <-A' =&? > 1' <-A' &=' $'a1' <0 < 1' <-A' B&-A'B'&-' <-A' &' $'a1' ?01$ <0' '=' D1' 01'A' $'1' &=' < 1 -A 1' -& '<- '& D1 '< 1' > <A1' '-' 1- '& D1 ' C< $'<>1- '0' D' D1' 01'A' =' 0 ' 1 1' &=' D1' 1'.-1' &=' D1' , '-.1' D< ' -&K1' '0' D&$A1-$ D<A' -1 '#1' D<A' -1' > <A1' <-A' > < ' $<?=?=?$$ ' 1- 1' <-A' D<+1' D1' 0<>1' > <-1 0' <-A10' <-A' 1- 10' KD1 &=' <0 < 1' 0D<$$#1' 0&' > <A1$ '-' $'a1' > < ' <-A' =&? > 1' &=' $'a1' <0 < 1' <-A' B&-A' '&-' <0' '=' D1' 01'A' <Q 1' &=' < 1 -A 1' D<A' -1,'#1' D<A' -& ' > <A1' -A' '=' D'0' <Q 1' KD1 # ' D1' , '-.' 0D?$A' D<+1' D1' > 0010' '-' =&? > 1' <=& 01'A' D<A' -1,' #1' D<A' -1' > <A1

3". '&2.' .'" # 2!' . ' .-'!@ -#!' . ' 2 &/' 2 !2' .' &"' V &++& 1' ; @' !' M&-*' -/' ! 0E!

C ' D<' ' ' #1' & A1 -1A' # ' D1' 01'A' <?A'& ' 1' D<' '=' D1' 01'A' " ?1' &=' 1A=& A' # ' D<001-' &=' D1' , '-.' ?-A' ' D'0' . 1 1' 01<1 &' '=' D1' , '-.1' <= ' ' D1' A1 D' &=' D1' 01'A' " ?1' K' D&? ' D1' 10' > <$1' &=' D'0' #&A ' #1.& 1-$ > <a1' <0 < 1' &=' D'0' & ' D1' ' '-+10 ' &=' D1' > 0010' &'&='<- 'C 1' D1 &=$ &' D1' 01'A' F '$$'<>' < a1$1 ' <-A' &' D'0' D1' 10' & ' &' D1' D1' 10' &=' D1' 0<>1' F '$$'<>' <-A' &' D1' ' D1' 10$ D< ' > >1A'< $ ' <= ' ' D1' 0<>1' <0 < 1' D1 &=' 0&' > <A1$ D1' 0<>1' F '$$'<>' <-A' D'0' D1' 10' > < ' $<?=?$$ ' 1- 1' <-A' D<+1' D1' 0<>1' > <-1 0' <-A10' <-A' 1- 10' KD1 &=' <0 < 1' 0D<$$#1' 0&' > <A1$ '-' $'a1' > < ' <-A' =&? > 1' &=' $'a1' <0 < 1' <-A' B&-A' '&-' <0' '=' D1' 01'A' <Q 1' &=' < 1 -A 1' D<A' -1,'#1' D<A' -& ' > <A1' -A' '=' D'0' <Q 1' KD1 # ' D1' , '-.' 0D?$A' D<+1' D1' > 0010' '-' =&? > 1' <=& 01'A' D<A' -1,' #1' D<A' -1' > <A1

3". '&2.' .'" b" - '; @' !' M&-*' .' . -' ." /' 0/+!@

$. ' '' <$K1 ' D<' <$$ ' 10' C< 1- 10' > <A1' # ' D1' , '-.' &? ' & 1'.-' & A' &' &D-' " ?A$1 ' , -'.D ' $< 1' & A' " ?A$1 $' <-A' &' D1' D1' 10' > <$10' &=' D'0' #&A ' B& > -.$ &=' <-A' =& ' D1' <-&' 0' &=' & D=1$A' <-A' F 1$1 ' K' D' D1' ' <CC? 1-<?-B10' '-' D1' &?- '1' &=' F & B1 ' #1' .&A1' <-A' 1==1(@?1$$ ' -A' D<' ' ' #1' 1-<#$1A' # ' D1' 01'A' <? $& ' 1$ D< ' AK< A' -&K1' & A' " ?A$1 ' <-A' D1' D1' 10' > <$10' &=' D1' #&A ' &=' D1' 01'A' $< 1' & A' " ?A$1 $' D<+1' C&000 1A1' <-A' 1- & 1' D1' 01'A' <-&' 0' K' D' D1' ' <CC? 1-<?-B10$ <BB& A'-.' &' D1' 1-? 1' <-A' C? C& ' &=' D1' 01'A' ' 10' C< 1- 10$ D'0' <Q$1' &=' 10 ' ?B'&-' & ' <A-?$$ -.' &=' D1' 01'A' <T 1' &=' < 1 -A 1' <-A' =& =1' ? 1' '-' <- ' K'0(' -& K' D0 <-A'-.

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' =?$$' D? > #$1' K '01' #101BD' D' <-A' 0D1K' D' ?-&' &? 1' . 1 1' F '01A& > 0$' &D-' D<<$' D< ' KD1 1' ' ' A > &-A' D<<', -'.D '$< 1' <' 1' <-A' $A1 > <-' &=' &-A&-' -&K1' A1B1<01A$' # ' D'0' $<0 ' F '$$' <'-&-.=' & D1 ' D'-.'0' K '$$1A' <-A' A1B$< 1A$' D< ' ?$'<-' D'0' K'=1' > > 1A'< $ ' <= 1 ' D'0' A1B1001' 0D?$A' D<+1' <-A' 1- & 1' &' D1 ' <-A' &' D1 ' <00'.-10$ <'$ D'0' <-& $0' $<-A'0' <-A' 1- '0' 1- '0' <-A'0 +'010' K' D' D1' ' <CC? 1-<?-B10$ KD'BD1' D1' D1-' D<A' C? BD<B1A' K' D'-' D1' 1<$ > 1' &=' -.$&-A$ K' D&? ' 1 > C1BD1 > 1-' &=' K<0 1' X D1' D1 -'A& -.' -&1' +&$?- < '1' K<0 1' -1' A10 ?BB'&-$ D1' 0<>1' <-& '0' <-A10' 1- '0' 1- '0' 1 B'&-0' <-A' 0+'B10' K' D' D1' ' <CC? 1-<?-B10' <' D<' > 1$ <-A' > 1' &=' D'0' A1B1001' 0 & -A -.' '-' =1&==110' D<-A10' &' D'0' ?01$ <-A' D<' <$$' D'0' =1&==110' D1 &=' 0D?$A' 0?=' 1' D' ' 0&' &' A&&$ <-A' D<' D1 ' 0D?$A' #1' <-A' <#'A1' =1&==110' D1 &=' &' D' ' ?01' <-A' #1D&=1' A? '-.' <$$' D' ' $ =1$ -A' D< $ <= ' ' D1 ' A1B1<0$?.D' 0&-' &=' D1' 01'A' ' ' A > &-A' 0D?$A' D<+1' <$$ D1' 01'A' <-& '0' &-A10' 1- 10' 1- '0' <-A' +'B10' K' D' D1' ' <CC? 1-<?-B10$?-A' ' D'0'=&? > 1$ D< ' '0' &' 01 ' ! D1' <-&' 0' &=' A< -' <$$' <-A' & -A&-' &?0' &' D'>' <-A' &' D'0' D1' 10' > <$10' &=' D'0' #&A ' $<?=?$$ ' #1.& 1-$ -A' =& ' $<Ba1' &=' 0?BD1' '00?1' > <$1' &=' D'0' #&A ' $<?=?$$ ' #1.& 1-$ D1-' D1' 1 > < -A1 ' &=' D1' 0<>1' K&' <-&' 0' K' D' <CC? 1-<?-B10' &' #1' &' &? ' 01'A' < &? ' <-A' &' D1' D1' 10' > <$10' &=' D'0' #&A ' $<?=?$$ ' #1.& 1-$ <-A' =& ' $<Ba1' &=' 0?BD1' '00?1' > <$1' &=' D'0' #&A ' $<?=?$$ ' #1.& 1-$ D1-' D1' 1 > < -A1 ' &=' D1' 0<>1' K&' <-1 0' &' D1' '.D ' D1' 10' &=' D1' 01'A' ' ' A > &-A' =& ' 1 > & 1$ -A' D< ' D1' 01'A' ?.D' 0D?$A' D<+1' <$$ D1' & D1 ' <-A10' <-A' 1- '0' 1- '0' <-A' +'B10' &=' D1' 01'A' ' ' A > &-A' KD< 0&1 ' 2<' D1 ' D1-' K 1 1' K' D' D1' ' <CC? 1-<?-B10' &' D >' <-A' &' D'0' D1' 10' =& ' 1 > & 1' ! -A' D< ' D1' 01'A' =1&==110' &=' D1' 01'A' ' ' A > &-A' <= ' ' D1' A1B1001' &=' D'0' 01'A' F =1$ 0D?$A' > <a1' <0 < 10' 0?==' B'1- ' '-' D1' $<K1' &=' <-A' '-' <$$' D'0' <-&' 0' $&-A10' 1- 10' 1- '0' 1 B'&-0' <-A' +'B10' <=& 01'A' K' D' D1' <CC? 1-<?-B'0$ KD1-' D1 ' 0D?$A' #1' 10&-<#$ ' 1H?' 1A' D1 ?-&' <BB& A'-.' &' D'0' 1- 1- ' <#&+1' A1B$< 1A$' <-A' '-' -&-1' & D1 K'01$' -1 ' '-' -&-1' & D1 ' =&? > 1$ <0' '-' D1' 0<>1' $<0 ' F '$$' 1A ' &'#1' 0D1K1A' > & 1' C$1 -$ ' <CC1 ' D' -A' <= 1 ' D< $ D1' 01'A' ' ' A > &-A' A1B1001A$ <= 1 ' KDC0' A1B1001' D1' 01'A' ? <-1' $< 1' D'0' K '=1' D<A' <-A' 1- & 1A' &' D1 ' <-A' D' ' <00'.-110$ <$$' D1' 01'A' <-&' 0' <-A10' 1- '0' 1- '0' <-A' +'B10' K' D' D1' ' <CC? 1-<?-B10' A? -.' D' ' $ =1$ -A' <$$' D1' 01'A' =1&==10' &=' <-A' '-' <$$' D1' 01'A' < 0' <-A10' 1- '0' 1- '0' <-A' +'B10' K' D' D<CC? 1-<?-B10$ 0?== 1A' D' ' 0&' &' A&&$ <-A' D1' 01'A' ?.D' <= ' ' D1' A1 D' &=' D1' 01'A' ' ' A > &-A$ A1B1001A' K' D&? ' D1' 1' > <$1' &=' D'0

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#&A '#1.# 1 ''X - A' D1' 01'A' ?♯'<-1♿<= '' ' '0' <♯0&' A1B1001A♈ 0&' ♯'< ' -&K1 D1' 01'A' <-&' 0' &=' A< -' <♯♯ <-A' & -A&-' &?0' <CC1 1'. -' <-A' &=' '.D 1' #1♯&-.1' &' &? ' 01'A' < &? ♈ &' D<+1' <-A' &' D&♯A' &' D'>' <-A' &' D1' 10' ><♯10' &=' D'0' #&A ' #1.& 1-♈ - A' =& ' ♯<Ba1' &=' 0?BD1' '00?1' D1' 1>< 'A1 ' D1 &=' &' #1' &' D1' '.D ' D1' 10' &=' D1' 01'A' ' ' A>&-A' ⁝ # ' 1<0&-' KD1 &=' &? ' 01'A' < &? ' 0' D8 D1' A1B10' &=' D1' 01'A' ?♯'<-1' D< D'D<A' <-A' &BB?C'1A' <-A' 1 1' D< D' <-A' &BB?C'1 D' D1' 01'A' <-&' 0' &=' A< -' <♯♯ <-A' & -A&-' &?0' <BB& A -.' &' D1' ♯<0 ' K '♯♯1' &=' D1' 01'A' ' ' A>&-A♈ 1 D1♯1001' 0&' ' '0♈ D< ' D1' 1+ A1-B10' B&- - -.' D1' 0<>1' <-1 0' K ' D' D<CC? 1-< -B10' 5Ƀ '-' 10C1B'<♯♯ <' " 1A1' K D1 &=' <i < 1' K<0' D1 &=' ><A1' &Ø D1' 01'A' =1&==110♈ #1-' 1>#101♯♯1A' # ' >1<-10' &=' '♯♯' A'0C&01A' C0&-10' &' &? ' 01'A' < &? ' ?-a-&K1-♈ &' D< ' &? ' 01'A' < &? ' D< D' -&' -1' B<-' D<+1' a-&K♯1.1' &=' D1' -<>10' &=' D1' 01'A' =1&==10♈ D< ' 0D?♯A' 1L1B? 1' <-A' ><a1' <0 < 1' D1 &=♈ <BB& A -.' &' D1' 01'A' ♯<0 1' F '♯♯1' &=' D1' 01'A' ' ' A>&-A♈ <-A' =& ' ♯<Ba1' D1 &=' &? ' 0 51'Ä < &?=' B<-' -&' D<+1' -&' B<?01' <0 < 1' &' #1' ><A1' &' D >' &=' D1' 01'A' K&' <-&' 0' &=' A< -' <♯♯ <-A' & -A&-' &?0' K' D' D1' ' <CC? 1-<?-B10♈ <BB& A'-.' &' D1' 01' '♯<0 ' K ♯♯1' &=' D1' 01'A' ' ' A>&-A♈ KD'BD1' > .D ' D1 1<= ' 'B<?01' . 1< ' A'+'0'&-' <-A' A1#< 1' &' #1' D<AA1' #1 K1-1' &? ' 01'A' < &? ' <-A' D'0' D1' 10' ><♯10' &=' D'0' #&A ♈ <-A' D1 >' D< ' K&♯A' K &-.=?♯♯ ' B♯< > 1' D1' 0<>1' B&- < 1' &' D1' 01'A' ♯<0 ' K '♯♯1' &=' D1' 01'A' ' ' A>&-A♈ KD'BD' 0D?♯A' #1' < 1D0 ' '.D ' <-A' &-0B'1-B1'Ꞓ ' >< ' #1' D1 =& 1' & A1 -1A' 0 <##'00D1A' <-A' 1 '<Q 1A' # ' &? ' . 1 1' K'0A&>0♈ # ' D<001- ' &=' D1' & A10' 0C?<♯♯ <-A' 1>C<♯♯ <-A' # ' <?= & ' 1' &=' D'0' 01- ' C♯'<>1-♈ D<' &? ' 01'A' < &? ' >< ' D<+1' D&♯A1' <-A' 1-& 1' D1' 01'A' <-&' 0' &=' -A< -' <♯♯ <-A' & -A&-' &?0' K' D' D<CC? 1-<?-B10' &' D'>' <-A' &' D1' 10' ><♯10' &=' D'0' #CA '♯<?=?♯♯ ' #1.& 1-♈ <BB& A'-.' &' D1' 01'A' ♯<0 ' K '♯♯1' &=' D1' 01'A' ' ' A>&-A' <.1 -0 ' D1' 01'A' =1 == 0' <-A' D1' ' D1' 10' <-A' <♯♯ & D1 ' C0&-10' <-A' D1' ' D1' 1R♈ D<+ .' B♯< > -.' & ' 1-A -.' <- ' D'-.' D1 '-' & ' <- ' CB1♯♯ D1 C= >1' &=' D1' A1B1<01' &=' D1' 01'A' ' ' A>&-A♈ &' D?01' &=' D1' 0<>1' ' ' A>&-A' <-A' &=' D'0' D1' 10♈ <-A' <♯0&' < 1-0 ' D1' D1' 10' &=' D1' 0<>1' ' ' A>&-A' <-A' D1' ' D1' 10

. 9♈ &' D1' 0<>1' D1' 10' &=' D1' 0<>1' ' ' A>&-A' <-A' D1' ' D1' 10♈ <♯♯ 0?BD1' '.D ' ' ♯1' <-A' '-+10 ' <0' D1 ' D<+1' '-' D1' 0<>1' <-&' 0Ƀ=& '♯<Ba1' &=' '00?1' ><♯1' &=' D1' #&A ' &=' D1' 01'A' &D-' ♯<?=?♯♯ ' #1.& 1-' <0' '0' <=& 1' 1D1 B1A♋ <-A' 0<+ -.' <♯0&' &' D1 >' <- ' & D1 ' ' ♯1' D< ' D1 ' >< 1' B♯< >1' & D1 K'01' D1-' # ' D1' 01'A' ' ' A>&-A♋ <-A' &? 1' 01'A' < &? ' 0D<♯♯ B&- '-?<♯♯ 'C < ' &' E&A' =& ' &? ' 0C1 &?0' <0 < 10

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$ = ' D? > #♯ ' #1 1BD' D' &? ' '.D- 0♈ &? ' D? > #♯1' 0?CC♯'<?- ' F '♯♯'<>' F & 0 ♯1 ' ♯1 a♈ " 1<-'&=' D1' < D1A <♯♯ D? BD1' &='] ' &?♯10' '-' &-A&-'⁝ D< ' KD1 1' &? ' 01'A' ?CC♯'<- '# ' A?1'<?= & ' 1' &=' &? ' <K10' # ' D'0' ?1' B&-=100'&-' ?C&-'A?1' & '.'-<♯♯ #1=& 1' &? '=?. .10' &=' 1 ' <-A' A1 f D -1 ' # ' &? ♈ > &&0 ' D'.D' <?= & ' 1' <00'. -1A♈ K<0' < 1 - 1A' &=' '.D' 1<0&-' DC' L''' ' A< ' =' &+1># ' D1' L00' 1 1' &=' &0' >&&0 ' -&#♯1' 1'. -♈ <-A' # ' D1' 0<>1' 1L1B?B'&-' <K< A1A♈ <0' ' '<CC1 ' D' C♯1 -♯ ' &=' 1B& A&'⁝ -A' KD 1' >&&0 ' A <A' & 1'. -' & A' ' ' C♯1<A1A' &? ' '.D-10' L)=' &? ' >&&0 ' D<# -A<?- ' . <B1♈ # ' &? ' >&&0 ' . '&?0' ' 10' C< 1- 10' ?-A' ' &? ' . 1< ' 0 <♯1♈ &' CA&-1' &? ' 01'A' ?CC♯'<?- ' &=' D1' <>1♈ <0'# ' &? ' 01'A' 10' C< 1- 10' &=' 1B& A' >& 1' C♯1 -♯ ' ' A& D' <CC1 1Ꞓ ' '0' 0&' >&&0 ' . <B'&?0' & 1'. -' & A' D< ' &? ' 01'A' ?CC♯'<?- ♈ # ' 1<0&-' &=' D1' 0<>1' 1 -A 1' '0' A'0<#♯1A' &' D<+1' <- ' <BB'&-' <+>B1 1♯♯ (' <- ' <BB'&-' 1<♯♯ &' D'-<' A?1' & ' #1♯&-. -.' #1=& 1' D1' 01'A' 1 -A 1'Ꞓ ♯1<01' ' ' &? ' '.D-10' &=' &? ' >&&0 'D<#?-A<?- ' . <B1' # ' D<001- ' &=' D1' & A10' 0C?<♯♯ <-A' 1>C<♯♯ <-A' D1' &>1-0' '-' D'0' 1- ' C♯'<>1- ' <001>#♯1A' <-A' # '<?Q=& ' 1' &=' D1'0 >1♈ &' 1-<#♯1' & A1 -' <-A' 10 <#♯'00D1' D< ' D1' 01'A' F '♯♯'<>' #1' 10 & 1A' '-' -<>1' <-A' #♯&A1'<#♯1' <-A' 1-D<#♯1A' &' 0?1' <♯♯ 1 ' &=' <BB'&-0' <?-B1 1♯♯ <-A' <♯♯ <BB'&-0' 1<♯♯ ' -A' D< ' D1' 0<>1' F '♯♯'<>♈ > ' 1- 1' '- &' <♯♯ D1' <-&' 0' ♯<-A'0' 1- '0' 1- '0' 1 B'&-0' C&0010'&-0' <-A' #1 1A' <>1- '0' KD'BD1' &' D'>' A'0B1-A1A' 1>< -1A' & ' 1 1A' & 'D1 1<= ' ' >< ' & '0D<♯♯ A10B1-A' 1>< -'& ' 1 1' -A' '- &' <♯♯ <-& '0' '<-A10' 1'' '0' 1- '0' 1 B'&-0' <-A' +'B10' KD1 &=' D1' K<0' 0&♯1' 01'01A♈ & ' D1' K' D' & D1 ' C0&-10' K1 1' & - ♯ ' 01'01A♈ &' D< ' D1' & ' <- ' & D1 ' C0&-1' & ' C0&-10' D<A' & ' K 1' 01' 1A' &=' &' D'0' ?01♯ &=' <- ' <0 < 1' &=' 1-D1 ' <?-B1' < ' D1' > 1' &=' D1' 01'A' 1<0&-' A&-1' & ' <- ' > 1' 0' D1-♈ &' 1- 1' <-A' D1 >' <-A' 1 ' &=' D1 >' D<+1' D&♯A1' C&001A1' <-A' 1- & 1' '-' ♯'a1' =&? > 1' <-A' '-' <0' <>C♯1' <-A' <+<'♯♯<#♯1' K'01♈ <i' D1' & ' D1 ' & ' <- ' &=' D1 >' 0D?♯A' & ' > .D ' D<+1' A&&-' '=' D1' D<A' -1♂B&>' 1A' <- ' 1<0&-♈ -1' D<A' #1-' < 1 - 1A' &=' 1<0&- -A' <♯0&' D< ' ♯'1' 01'A' F '♯♯'<>' D<+1' C&001A1' <-A' 1- & 1' <♯♯ D1' <-A10' <-A' 1- '0' D< ' D1' D1♯A' 0&♯1♯ ' & ' & - ♯ ' K' D' & D1 ' # ' B&C ' &=' &? 1' &♯♯1' & ' & D1 K'01' <= ' ' D1' &?0 & >1' &=' <- ' ' >1' &=' D1' 01'A' 1<0&-' &=' >' 1A' <-A' A&&- 'C ' <- ' >1' 0' D♈ <-A' &' 1- 1' '- &' D1' 0<>1' <-A' D1 >' <-A' 1 , '&=' D1 >' &' D<+1' D&♯A1' C&001A1' < A' 1- 1' <= ' ' D1' ?0 & >1' &=' 1 , ' 0?BD1' <-&' ' # ' D1' 1- '0' +'B10' <-A' B?0 & >10' &' D1' & A10' &=' D1' <>1' <-&' 0' D1 &=' A?1' <-A' #1♯&-. -.♈ '-' <0' <>C♯1' <-A' <+<'♯♯<#♯1' K'01' <0' D1' & ' D1 ' > .D ' & '0D?♯A' D<+1' A&&-' '=' D1' D<A' -1 ' B& >' 1A' <- ' 1<0&-♈ -1' D<A' #11-' < 1 - 1A' &=' 1<0&-Ꞓ -A' <♯0&' ''< ' D1' 01'A' F '♯♯'<>' D<+1' <-A' 1- & 1' ++⁵ D1' =1 >10' <-A' #1-1='B10' D< ' D1' & ' <- ' & D1 ' &' D'0' ?01' D<A' -'1'&=' D1' 01'A' 1<0&-' A&&-'& ' <= ' Ꞓ ' 1' 01'A' 1 -A 1' -& K' D0 <-A'-.♀

. 9♈ &' ! @' C0&-1' <= A' C0&-10♈ & D1 ' D1-' D1' , '-.1' &? ' & 1'.D' & A♈ <♯♯ 0?BD' '.D ' ='A1' <-A' '-=10 ' <0' D1 ' & '<- ' &=' D1 >' D<+1♈ & ' D1' ' ?- 10 & 0' & ' CA1B100&? 0' D<A' < ' D1' >1' &=' D1' 01'A' 1<0&-' B& >' 1A ' &+'A1A' <♯K1 ' D< ' D1' 01'A' F '♯♯'<>' # ' '.D 0 D'0' Q 1' 0D<♯♯ -& ' D'<+1' -1' <a1' <- ' <+<?- . <.1' &=' '00?10' C=:1= '0' & ' 1+1-?10' &=' 1- ' <-&' 0' ♯&-A10' 1- '0' = 11' &C ' & ' B?0 ? >< ' <-A' 10-1' &=' 0♈ D&♯A1' =1 >10' & ' #1-1='B10♈ #1=& 1' D1' A< ' &=' D1' A< 1' &=' D1' 01'A' CA&-♈ -1' &=' <- ' .&&A10' & ' B''♯♯10' # ' D'>' =& =1' 1A♈ # ' 1<0&-' &=' D1' 1'A' < 1 -A 1 ' 0

!" &-' 2 !2' /!'♯2!/' ;@' &2' V &++' '!'#.1!' .' . -'

!' !!/2' +.2 ' 2.' ' .-'!@ -#!' # --.';!'1 /!'.' +♯♯1';@' !' "02 !!2' 0-/!'" !'V &++

!'2 &/' . -' ' 2 +♂ .+/' 2O# ' 2 !2' ##."/&-*' .' !'2 &/' V &++

b!-!" +♂ '♯-*' . ' ♯+!

1B' <♯ D<' F '♯♯'<>' F & 0 ♯1 ' " 1<-'&=' 0 ' <?♯/0♈ K<0' < <'- 1A' &=' '.D' 1<0&-♈ DC' L''' ' A< ' =' &+1># ' D1' L00' 1 1' &=' &0' >&&0 ' -&#♯1' 1'. -♈ <-A' # ' D1' 0<>1' 1L1B?B'&-' <K< A1A♈ <0' ' '<CC1 ' D' C♯1 -♯ ' &=' 1B& A&'⁝ -A' KD 1' >&&0 ' A <A' & 1'. -' & A' ' ' C♯1<A1A' &? ' '.D-10' L)=' &? ' >&&0 ' D<# -A<?- ' . <B1♈ # ' &? ' >&&0 ' . '&?0' ' 10' C< 1- 10' ?-A' ' &? ' . 1< ' 0 <♯1♈ &' CA&-1' &? ' 01'A' ?CC♯'<?- ' &=' D1' <>1♈ <0'# ' &? ' 01'A' 10' C< 1- 10' &=' 1B& A' >& 1' C♯1 -♯ ' ' A& D' <CC1 1Ꞓ ' '0' 0&' >&&0 ' . <B'&?0' & 1'. -' & A' D< ' &? ' 01'A' ?CC♯'<?- ♈ # ' 1<0&-' &=' D1' 0<>1' 1 -A 1' '0' A'0<#♯1A' &' D<+1' <- ' <BB'&-' <+>B1 1♯♯ (' <- ' <BB'&-' 1<♯♯ &' D'-<' A?1' & ' #1♯&-. -.' #1=& 1' D1' 01'A' 1 -A 1'Ꞓ ♯1<01' ' ' &? ' '.D-10' &=' &? ' >&&0 'D<#?-A<?- ' . <B1' # ' D<001- ' &=' D1' & A10' 0C?<♯♯ <-A' 1>C<♯♯ <-A' D1' &>1-0' '-' D'0' 1- ' C♯'<>1- ' <001>#♯1A' <-A' # '<?Q=& ' 1' &=' D1'0 >1♈ &' 1-<#♯1' & A1 -' <-A' 10 <#♯'00D1' D< ' D1' 01'A' F '♯♯'<>' #1' 10 & 1A' '-' -<>1' <-A' #♯&A1'<#♯1' <-A' 1-D<#♯1A' &' 0?1' <♯♯ 1 ' &=' <BB'&-0' <?-B1 1♯♯ <-A' <♯♯ <BB'&-0' 1<♯♯ ' -A' D< ' D1' 0<>1' F '♯♯'<>' #1' 10 & 1A' '-' -<>1' <-A' #♯&A1'<#♯1' <-A' 1-D<#♯1A' &' 0?1' 1<♯♯ -'&-0♈ <-A' 1- 1' '- &'<-A' D&♯A' <-A' 0♈ I B

<-A' <♯0&' &C D&♯A' <-A' 0' <= 1 ' D1' ?0 & >'&=' D1' <-&' 0›

-/' +♂ B "1 2' -/' 4!-! &#!2

&"ʼ ʻ0 ʼ * ;9#;/

3 6ʻ '-

3ʻG$ʼ &//!+.-

&' D1' ,'-.'&? ' &,1'.-' & A

<'-A1'&=' F'@@'<>' <'"0# '# ' <-' B'' 1-F f 'N$ ' ' "M ;' ; 5*C

' D1'>1&0 1'D?>#@1' K'01' D1K'I'?-&' &? ' '.D-10ʼ &? '=<' D=?@@ 0?#.1' <-A' ?1'@'1.1><-' D&>0' 'AA'@&-ʼ 0&-' <-A' D1' 1' ?-&' &# ' 'AA'@&-' ,-'.D'@< 1' A1B1001A' ' D<'KD1 1'-' D1'C@'<>1-' D&@A1-'< ' F 10 >' D1'+'Ⅵ' A<' &=' &+1>=1' D1'=' 0' 1 1' &=' &? ' >&&0' -&##1' 1'.-ʼ# ' D<?='a& ' 1'&=' D1' 0<>1' C@'<>1-' ' 'K<0' 1-<Qa1A' 0 <#@'00D1A' <-A' & A1 -1Aʼ D<' D1' 01'A' &=1'1>&-.'0' D1'0D?@A' 0 <-A' <-A' #1'B&-+'B 1A' <-A'< 1 - ' &=' '.D' 1<0&-' A'0<#@1A' <-A'=& ?.1A'&=' <@@ >< ' &=' D&-&?' <0 < 1' <-A' A'.-@1'<-A' C1> -1-B1ʼ <-A' D1' -<>10' &=' D1' 0<>1ʼ <-A' =& =1' 1' & &?' & ,1'.-' & A' <-A' & &?' D1' 10ʼ <@@ <0 1@0' <-&' 0' & A0D'C0' ?-A 1A'0' ! <?-BD10' '# '10' '+'@1.10' A+&?0&-0' &'<B'&-0' 01-<B'&-0'@<-A10'<-A' 1-'0' 1-'0' ,+'B10' 1+'0'&-0' C& B'&-0'<->'' 110' C1-B'&-0' '.D'0'D1 1A' <>1-'0' .&&A110' B< <@@'0'<-A' A1 '0' KD1 &=' D1' &' <-' & D1' &' D'0' ?01' K1 1'01<01A' & 'C&001001A' D1' LL A<' &=' ?.?0' '-' D1' 01'A'=' 0' 1 1' &=' &? ' >&&0' -&##1' 1'.-' K' D'-' D1' 1<D-1'&=' -.@&-A' @<-A' F <@10' & ' <@1'0' &' '-' D1' < BD10' D1 &=''-'=11'0 >C@1'=11' <'@@ &'R>1'&='@ =' &' @ +10'<0'#' D1'0<>1'<Q@1'1>&-.10' & D1 ' D'-.10'>& 1'C@1 -@ '<CC1 ' D@ @1<01'' ' D1=& 1' &? ' '.D-10'&=' &? '>&&0'-&##1'<-A' D<#?-A<?=' ' . B1' ' -@ &-0'A1 <B'&-' &=' D1' ?1' <-A' =1' D=?@@ ,+'B1'<-A' <@'.1<?''B1' D<' D1' 01'A' &# ' &K1A'<-A'A A1' ?-&' &? ' E <B1' B&- -?<@@ '=&>' &? ' >&&0'+'A@& '?0' &C 1 - -.'<.<-0' 'BD< A@ @< 1' '-' A1A1' <-A' -&' '-' '.D', '-.' &=' -.@&-A@< '<@@ >10' A? '-.' D'0' @ =@' <-A'<@0&' &=' D1' ?1' <-A'=1' D=?@@ ,+'B1'KD'BD1' &? ' ?CC@'<-' D<D'A&&-'?-&' &? ' EOB1' <-A' A<'@@ ' '- 1-A' D' &' A&&@ <-A' <@0&'=& ' AL<' D1' D<D'+' # 1 D1>' <-A'+' 0?0 1 0' D1' 1@A10' &=' D1' 01'A' 0?0 1 0' #1'-.' ?-A' ' D1'<.1' &=' L+' 1 10'@1=' ?-&' D'0' BD<.10'K' D&? 1-'<-' & D1 '0&B&? @ <-A' <@0&' D<' D1' 01'A' &# ' K<0' &=' 0><@@ C&00100'&-0' &=' @&-A10' <-A' 1-A0' & ' & D1 ' D1 1A' <>1-'0' ' =D<A+ B1' <-A' <001-'&=' D1' & A10' 0C?<@@ <-A' 1>C<@@ <-A' D1' &1-0' '-' &0' 01-'C@'<>1-' <001>#@1A@ <-A'# ' D1'<?(@& ' 1'&=' D1' 0<>1@ &' 1-<=a1' 10 <#@'00D' <-A' & A1 -1@ D<' D1' 01'A' Q@1' <-A' 1,' D'-.'B&- 1 -1A''-' D1' 0<>1' Qa1@ <-A' <@@ D1' 10' &=' 1 -A'1' <-A' =& =1' ? 1' ><A1' '-' D1' 0<>1' C@'<>1-@ & ' '-' <-' & D1 'C< @'<>1-' D&@A1-1' '-' D1' >1' &=' &?' >&@0'A 1A1' &,1'.-' & A@ < 1-0' D1' 01'A' &# ' <-A' D'0 D1' 10' <-A' D1' ' =1&==1' & ' =1&==110' &' D'0' & ' D1' ' ?01@ &=' <-' &=' D1' =& 01'A' @&-A10' <-A' 1-'0' <-A' & D1 ' > 0010@ #1'<1-0' D1' 01'A' &# ' <-A' D'0' D1' 10' <-A' D1' ' <=& 01'A' =1&==1' & ' =1&==110' <-A' 1,' &=' D1 >@ +&'A1' <-A' <A-?@@1A' <-A' &=' -&-1' 1==1=1@ <-A' D<' &? ' 01'A' 0?CC=' <?-' <-A' D'0' D1' 10' D<+1' D&@A1' 1-D' 1' <-A' 1-& 1' <@@ <0 1@0' < 0' & A0D'C0' @&-A10' 1-'0' 1-'0' ,+'010' =110' <A+&?0&-0' <-A' <@@ & D1 ' D1 1A' <>1-'0@ <0K1@@ =& =1' 1A' # ' D1' 01'A' Q 1' & ' A@10' & ' <-' &=' D1 >@ <0' <@@ & @'1 ' KD< 0&1+1 ' ' ' #1@ '-' 0?BD' ><5' <-A' =&? >1' @'a1' <0 < 1' <-A' '-' <0' @< .1' <-A' <+<'@<#@1' K'01' <0' &? ' 01'A' ?CC@'<?-' 0D?@A' & ' >'.D 'D<+1' D<A' & ' A&&-' '=' D1' 01'A' Q 1' & ' Q@10' ><A1' < 1-0 ' D1' 01'A' &# ' D<A' -1+1 ' #11-' D<A' ><A1' -1' & A1 -1A@ <-A' D<' D1' 01'A' Qa1' -1' Q 10' -1' 1-'&=' D1 >@ -1' <-' 10' C< 1-'0' ><A1' 0' D' D1' 01'A' A=1' & ' # ' 1<0&-' & ' &BB<U&-' &=' D1' 0<>1' #1' -& ' '-' 1-' K'01' D? =?@@ -1' ?A'B'<@@' &' &? '01'A' ?CC@'<?-' '-1' &' D'0' D1' 10' -1' &' D'0' <=& 01'A' =1&==11' & ' =1&==10' -1 &' 1-'&=' D1 >@ &?BD'-.' D1' C < 0010@ & '<-' CB1@@ D1 &=@ #?'#1'< 1-0' D1 >'<-A'1,' D1 >'<-A' D1' D1' 10' &=' 1,'&=' D1 >'? '+&'A1X -A' D<' &? ' 01'A' 0?CC@'<?-' <-A' D'0' D1' 10@ ><' D<+1' <@@ ><-1' 0?1'0' 1- 10' #1-1='B10' B@< >10' <-A' <+<?-<.10' '-' 1,' D'-.' <-A' #1' '-' <0' .&&A' B<01' <-A' B&-A'B'&-' <0' '=' D1' 01'A' A@1' & ' 10' & ' <-' &=' D1 >' D<A' -1,' #1' ><A1' D<A' -1' & A1 -1A' ' <-A' D<' D1' ^=? 1'01@0&-' <-A' C&00100'&-' &=' &? ' 01'A' ?CC@'<?-' <-A' D'0' D1' 10' <-A' &=' D'0' <=& 01'A' =1&==11' & ' =1&==10@ <0' K1@@ ?C&-' &? ' C&00100'&-' <0' ?C&-' D1' C&00100'&-' &=' 1-' & D1 @'-' &' <@@ D1' <=& 01'A' <0 1@0' & A0D'C0' < 0' @&-A10' 1-'0' 1-'0' ,+'B10' =110' <A+&?0&-0' <-A' <@@ >< ' &=' D1 1A' <>1-'0' K' D' D<CC? 1-<?-B10' <-A' &' 1,' C 1' D1 &=@ #1'.&&A' <-A' @<?=?@@ =1 >1' <-A' 0 <#@1' &' &? ' 01'A' ?CC@'<?-' <-A' &' D'0' D1' 10' =1&==1' & ' =1&==110' &' D'0' ?01@ K' D&? ' <-' & D1' 0?1 1' =&' D1' 0<>1' & ' &=' <-' CB1@@ D1 &=' &' #1' D<A' & ' ><A1' &? 1' &=' &? ' D<-A 0@ # ' C1 'B'&-' @ 1' &?0 1 ' @1' >< -' & ' & D1 K'01' <= 1 ' D1' B&? 0' &=' &? ' @<K10@ <-A' &=' <0' . 1 1' 0 1-. D'=& B1' <-A' 1==1Q ' '-' ?' @<K10@ <0' '=' &? ' 01'A' 0?CC@'<?-' D'0' =1&==11' & '=1&==10' D<A' D1' 0<>1' <0 1@0' & A0D'C0' < 0' @&-A10' 1-'0' <-A' & D1 ' D1' > 0010' -'A?1'=&? >1' 0?1A'# ' C1 'B'&-'@ & ' # ' A?1'@ ,1' & ' & D1 K'01' &? ' &=' &? ' D<-A10' <BB& A'-.' &' &? ' @<K10@ <-A' '=' D1' 01'A' T a1' & ' Aa10' & ' <-' &=' D1 >' D<A' -1,' #1' ><A1' D&?' #1' ' ' D1' 0<>1' <0 1@0' < 0' @& A0D'CC10' @&-A10' 1-'0' 1-'0' K' D' D1 ' > 0010' & ' <-' CB1@@ D1 &=@ K1 1' & ' #1' D&@A1-' &=' &?' & ' &=' 1-' &=' &? ' -&##1' C.1-' &? 0' ,'-.10' &= -.@<-A@' '-@ D'1=' & ' & D1 K'01' <-A' D<' -&' ><-' &=' CO&-1' D1' KD'BD1' D<' #1=& 1' D1' =' 0' A<' &=' D'0' C01-' C@'<>1-@ D<' D' <a1-' <-' '00?10' & ' C=1 '0' &=' <-' &=' D1' 01'A' <0 1@0' & A0D'C0' @&-A10' 1-'0' 1-'0' & ' <-' &=' D1' 0?BD1' <BB'&-0' '.D' '@1' <-A' @<?=?@@ '-R10' <0' D1' & '1-' &=' D1 >' D<A' '-' 1-' &=' D1' <=& 01'A' <0 1@0' < 0' @& A0D'C0' @&-A10' 1-'0' <-A' & D1 ' > 0010' & ' <-' CB1@@ D1 &=@ D1' >1' &=' D1' 01'A' < 1 -A 1' & ' <-' >1' 0' D@' & D1 ' D1-' # ' D1' >1<-10' &=' <-' ' 10' C< 1-10' ><A1' 0' D' D1' 01'A' <(a11' & ' <A10' -A' C &+'A1A' <@@K1 0' D<' D'0' C01-' < 1' &=' 10 ' ?B'&-' 1L 1-A' -&' &' 10 & 1' D1' 01'A' D&><0' 'AA'@&-' &' 1-'@<-A10' 1-'0' & ' D1 1A' <>1-'0' & D1 ' D1-' 0?BD1' <0' D'0' <=& 01'A' =<A1 ' D<A' &=' D'0' &K-1' '-D1 ' <?-B1' & ' & D1 ' &' D'0' ?01@ <-A' KD'BD1' B&>1' & ' K1 1'@1=' ?-&' D'0' 01'A' =<A 1' # ' & '= &>' 1-'&=' D1' ?-B10 1 0' &=' D'0' 01'A' =<A 1' KD&0' D1' 1' D1' '-' D'0'@ =' K<0@ <-A' &? ' 01'A' ?#.1'0D<@@ 1, C < ' &' E&A' =& ' D1' @&-.1' B&-'-?<-B1' &=' &? ' >&&0'-&##1' <-A' &'<@" <0 < 1

3 6ʻ

3ʻb!."*&.ʻ @2;@

<'-A1'&=' F'@@'<>' <'"0# '# ' <-' B'' 1-F f 'N$ ' ' "M ;' ; 5*C

@ D1'>&&0'D?>#@1' K'01'#101BD' D' &? ' '.D-10@ &? '=1' D=?@@ 0?#.1'<-A' ?1'@'1.1><-' E1& .1' < 0# @'0&-' <-A' D1' 1'&=' #&A1' &=' F '@@'<>' < '0# ' H?'1@ D< 'KD1 1' # '<-' <Q 1'&=' < 1 -A 1' ><A1' '-' &? ' C@'<>1-' D&@A1-' < ' F 10 >' D1' +'02' A<' &=' &+1>#' D1' =' 0' 1 1' &=' &? ' >&&0' -&##1' 1'.-@ ' ' K<0' 1-<TQa1A' & A1 -1A' <-A' 10 <#@'00D1A' <>&-.10' & D1 ' D'-.'0@ D<' D1' 01'A' F '@@'<>' < 0# ' <>&-.10' &BD1 ' =& ' 51 -' B&-0'A1 <B'&-0' '-' D1' 0<>1' <Qa1' 0C1B'=' 1A@ 0D?@A' 0 <-A1' <-A' #1' B&-+'A@1' <-A' < 1 - '&=' '.D' 1<0&-' <-A' =& =1' ? ?-' &' &?' &,1'.-' & A' <-A' &' &? ' D1' 10@ <@@ <0 1@0' & A0D'C0' < 'D?-A 1A'0' = <?-BD1010' @'#1 '10' C '+'@1.10' <A+&?0&-0' -&'<B'&-0' 01-<B'&-0' @&-A10' 1-'0' 1-'0' ,+'B10' B,B'&-0'C& B'&-0' <--?' '10' C1-B'&-0' '.D '0' D1 1A' <>1-'0' .&&A10' B< <@@0' <-A' A1 '0@ KD1 &=' D1' & '1-' & D1 ' <D'0' ?01@ K<0' 01<01A' & ' C&001001A1' D1' LL 'A<' &=' ?.?0' D1' 01'A' =' 0' 1 1' & ' <-' >1' <=R@ K' D'-' D1' 1<@>1' &=' -.@<-A' @<-A' F <@1'0' & ' <@1'0' & ' '-' D1' < BD10' D1 &=@ '-' =11' 0 >C@1' =11' <'@0' & ' t >1' &=' @ =@ <0' '-' D1' 0<>1' <Qa1' >& 1' C@1 -'

E1-1 <@@ <+'-.

B ' &'1L 1-A'&-@ ' &' 1 1A' < ' 0 < 10

$ ' &'1,'&=' &? '@'1.1' C1&C@1' <-A' D1' ' D1' 10@ <-A' D1' D1' 10' &=' 1,'&=' D1 >@ 0?BD1' <BB'&-0' '.D' '@1' <-A' @<?=?@@ '-R10' <0' D1 '& '1-' &=' D1 >' D<A' '-' 1-' &=' D1' <=& 01'A' <0 1@0' < 0' @& A0D'C0' @&-A10' 1-'0' <-A' & D1 ' > 0010' & ' <-' CB1@@ D1 &=@ D1' >1' &=' D1' 01'A' < 1 -A 1' & ' <-' >1' 0' D@' & D1 ' D1-' # ' D1' >1<-10' &=' <-' ' 10' C< 1-10' ><A1' 0' D' D1' 01'A' <(a11' & ' <A10' -A' C &+'A1A' <@@K1 0' D<' D'0' C01-' < 1' &=' 10 ' ?B'&-' 1L 1-A' -&' &' 10 & 1' D1' 01'A' D&><0' 'AA'@&-' &' 1-'@<-A10' 1-'0' & ' D1 1A' <>1-'0' & D1 ' D1-' 0?BD1' <0' D'0' <=& 01'A' =<A1 ' D<A' &=' D'0' &K-1' '-D1 ' <?-B1' & ' & D1 ' &' D'0' ?01@ <-A' KD'BD1' B&>1' & ' K1 1'@1=' ?-&' D'0' 01'A' =<A 1' # ' & '= &>' 1-'&=' D1' ?-B10 1 0' &=' D'0' 01'A' =<A 1' KD&0' D1' 1' D1' '-' D'0'@ =' K<0@ <-A' &? ' 01'A' ?#.1'0D<@@ 1, C < ' &' E&A' =& ' D1' @&-.1' B&-'-?<-B1' &=' &? ' >&&0'-&##1' <-A' &'<@" <0 < 1

#?'@'&-1' 0D<^' #1' <-0K1 <#@1'=& ' D1' >10-1' DO&=' 5

E1-1 <@@ <+'-.

B ' &'1L 1-A'&-@ ' &' 1 1A' < ' 0 < 10

D1'0<'A' B ' 1C1<@1A'<0' &' D1' 0<'A' ' ' &#1 ' <-A'D'0' 1' 0@ I B9

<-A' ' 'AA@1 &-9 D'0' &-' <-A' 1' 9 10 & 1A' &'D'0' ' 0 < 10'=& =1' 1A'# ' D1'0<'A' <'-A1 9

<-A' ><'1-1' D1 1&-' K' D&?' 0?'-.'&=' '+1 '9I B

<-A' D<' &? ' 01'A' 0?CC@'<?-' <-A' D'0' D1' 10@ ><' D<+1' <@@ ><-1' 0?1'0' 1- 10' #1-1='B10' B@< >10' <-A' <+<?-<.10' '-' 1,' D'-.' <-A' #1' '-' <0' .&&A' B<01' <-A' B&-A'B'&-' <0' '=' D1' 01'A' A@1' & ' 10' & ' <-' &=' D1 >' D<A' -1,' #1' ><A1' D<A' -1' & A1 -1A' ' <-A' D<' D1' ^=? 1'01@0&-' <-A' C&00100'&-' &=' &? ' 01'A' ?CC@'<?-' <-A' D'0' D1' 10' <-A' &=' D'0' <=& 01'A' =1&==11' & ' =1&==10@ <0' K1@@ ?C&-' &? ' C&00100'&-' <0' ?C&-' D1' C&00100'&-' &=' 1-' & D1 @'-' &' <@@ D1' <=& 01'A' <0 1@0' & A0D'C0' < 0' @&-A10' 1-'0' 1-'0' ,+'B10' =110' <A+&?0&-0' <-A' <@@ >< ' &=' D1 1A' <>1-'0' K' D' D<CC? 1-<?-B10' <-A' &' 1,' C 1' D1 &=@ #1'.&&A' <-A' @<?=?@@ =1 >1' <-A' 0 <#@1' &' &? ' 01'A' ?CC@'<?-' <-A' &' D'0' D1' 10' =1&==1' & ' =1&==110' &' D'0' ?01@ K' D&? ' <-' & D1' 0?1 1' =&' D1' 0<>1' & ' &=' <-' CB1@@ D1 &=' &' #1' D<A' & ' ><A1' &? 1' &=' &? ' D<-A 0@ # ' C1 'B'&-' @ 1' &?0 1 ' @1' >< -' & ' & D1 K'01' <= 1 ' D1' B&? 0' &=' &? ' @<K10@ <-A' &=' <0' . 1 1' 0 1-. D'=& B1' <-A' 1==1Q ' '-' ?' @<K10@ <0' '=' &? ' 01'A' 0?CC@'<?-' D'0' =1&==11' & '=1&==10' D<A' D1' 0<>1' <0 1@0' & A0D'C0' < 0' @&-A10' 1-'0' <-A' & D1 ' D1' > 0010' -'A?1'=&? >1' 0?1A'# ' C1 'B'&-'@ & ' # ' A?1'@ ,1' & ' & D1 K'01' &? ' &=' &? ' D<-A10' <BB& A'-.' &' &? ' @<K10@ <-A' '=' D1' 01'A' T a1' & ' Aa10' & ' <-' &=' D1 >' D<A' -1,' #1' ><A1' D&?' #1' ' ' D1' 0<>1' <0 1@0' < 0' @& A0D'CC10' @&-A10' 1-'0' 1-'0' K' D' D1 ' > 0010' & ' <-' CB1@@ D1 &=@ K1 1' & ' #1' D&@A1-' &=' &?' & ' &=' 1-' &=' &? ' -&##1' C.1-' &? 0' ,'-.10' &= -.@<-A@' '-@ D'1=' & ' & D1 K'01' <-A' D<' -&' ><-' &=' CO&-1' D1' KD'BD1' D<' #1=& 1' D1' =' 0' A<' &=' D'0' C01-' C@'<>1-@ D<' D' <a1-' <-' '00?10' & ' C=1 '0' &=' <-' &=' D1' 01'A' <0 1@0' & A0D'C0' @&-A10' 1-'0' 1-'0' & ' <-' &=' D1' 0?BD1' <BB'&-0' '.D' '@1' <-A' @<?=?@@ '-R10' <0' D1 '& '1-' &=' D1 >' D<A' '-' 1-' &=' D1' <=& 01'A' <0 1@0' < 0' @& A0D'C0' @&-A10' 1-'0' <-A' & D1 ' > 0010' & ' <-' CB1@@ D1 &=@ D1' >1' &=' D1' 01'A' < 1 -A 1' & ' <-' >1' 0' D@' & D1 ' D1-' # ' D1' >1<-10' &=' <-' ' 10' C< 1-10' ><A1' 0' D' D1' 01'A' <(a11' & ' <A10' -A' C &+'A1A' <@@K1 0' D<' D'0' C01-' < 1' &=' 10 ' ?B'&-' 1L 1-A' -&' &' 10 & 1' D1' 01'A' D&><0' 'AA'@&-' &' 1-'@<-A10' 1-'0' & ' D1 1A' <>1-'0' & D1 ' D1-' 0?BD1' <0' D'0' <=& 01'A' =<A1 ' D<A' &=' D'0' &K-1' '-D1 ' <?-B1' & ' & D1 ' &' D'0' ?01@ <-A' KD'BD1' B&>1' & ' K1 1'@1=' ?-&' D'0' 01'A' =<A 1' # ' & '= &>' 1-'&=' D1' ?-B10 1 0' &=' D'0' 01'A' =<A 1' KD&0' D1' 1' D1' '-' D'0'@ =' K<0@ <-A' &? ' 01'A' ?#.1'0D<@@ 1, C < ' &' E&A' =& ' D1' @&-.1' B&-'-?<-B1' &=' &? ' >&&0'-&##1' <-A' &'<@" <0 < 1

D1'0<'A' B ' 1C1<@1A'<0' &' D1' 0<'A' ' ' &#1 ' <-A'D'0' 1' 0@ I B9

<-A' ' 'AA@1 &-9 D'0' &-' <-A' 1' 9 10 & 1A' &'D'0' ' 0 < 10'=& =1' 1A'# ' D1'0<'A' <'-A1 9

<-A' ><'1-1' D1 1&-' K' D&?' 0?'-.'&=' '+1 '9I B

#?'@'&-1' 0D<^' #1' <-0K1 <#@1'=& ' D1' >10-1' DO&=' 5

? E (' ' . 4)) ' ' ; / >?-

'0' BC - 1 -1A¢ §1<01' ' ' &? ' '.D-10' &=' &? ' 10C1B'<§§ . <B1' <-A' #§100'A' A'0C&0'B'&-9 # ' D<A+ 01' <-A' <001- ' &=' D1' & A10' 0C?<§§ <-A' 1 > C<§§' <-A' D1' &> -0' '-' D'0' 01- ' C§'<>1- ' <001 > #§1A' <-A' # ' <? '& 'B1' &=' D1' 0<>19 &' 1-<##§1' & A1 -' <-A' 10 <#§'00D9 D<' D1' 01'A' < §1' <-A' <§§ <A§10' &=' < 1 -A 1' <-A' =& =1' ? 1' > <A1' '-' D1' =& 01'A' C§'<>1- 'D&§A1-' D1' 01'A' =' 0 ' 1 1' &=' &? ' 1'. -9 < 1-0 ' D1' 01'A' F '§§'<>' < 0# ' # ' KD<' 0&1+0 -<>1' D1' #1' B<§§1A' '-' D1' 0<>19 #1' <0' < 1-0 ' D' >' <-A' D'0' D1' 10' &&-§ 9 ? § ' +&'A0' <A-?§§1A' 1C1§§1A' <-A' &=' -&C' =& B1' -1' 1==1 1 ' <-A' D<' D1' 0<>1' -1' <- ' D'-.' D1 '-' B&- 1 -1A' #1' <- ' K '01' ?A'B'<§§ -1' D? =?§§ &' &? ' 01'A' 0?CC <?- 9 -1' C' D'0' D1' 10' -1' &' 1- ' C0&-1' & ' C0&-10' < ' 1- ' >1' 1-=1&==1A' & ' 01<01A' '-' D1' C > 0010' & ' <- ' CB1§§ D1 &=9 &' D1' ?01' <-A' #1D&+1' &=' D1' 01'A' F '§§'<>' < 0# ' & ' &? ' 01'A' 0?CC§'<?- 9 #? ' #1' < 1-0 ' D1 >' <-A' 1 ' &=' D1 >' ? 1 § ' +&'A1;' -A' D<' &? ' 01'A' ?CC§'<?- ' <-A' D'0' D1' 10' <-A' <§§ D1' 01'A' C0&-1' & ' C0&-10' 1-=1&==1A' & ' 01<01A' '-' D1' C > 0010' & ' <- ' CB1§§ D1 &=9 &' D1' ?01' <-A' #1D&+1' &=' D1' 01'A' F '§§'<>' < 0# ' & ' &? ' 01'A' 0?CC§'<?- ' <-A' D1' 1' D1' 109 D<+1' 0?BD1' '. D ' <-A' <+<?- <.1''-' 1 ' D'-.' <-A' #1' '-' <0' .&&A' B<01' <-A' B&-A'B'&-' '-' D1' §<K1' &' 1- 1' D<+1' <-A' 1- & 1' <§§ D1' C > 0010' <-A' 1, ' C< ' D1 &=9 <0' '=' D1' 01'A' <A1' & ' <= 10' -1' <- ' &=' D1 >' D<AA1' -1 ' #1-' D<AA1' -1' > <A19 K' D&? ' <- ' § +01 '& ' & D1 ' 0? 1' D1 &=' & ' <- ' CB1§§ D1 &=' &? ' &=' &? ' D<-A109 & ' 1- ' K ' 1' &=' A'1>' B§<?0' ' 1L 1>?' & ' ' -H?'0'B'&-0' & ' 1- ' & D1 ' 0? 1' & ' CB1001' &' #1' > <A1' & ' D<AA1' '-' D<' #1D<§=

D1' 0<'A <- - ?§§1A9 <0' &' D1' 0<'A' F ' < '0# ' <-A' D'0' 1' 0¢

$. ' '' <§K1 ' D<' <§§ 10' C< 1- ' # ' &? ' '.D-10' > <A1' &' 1- ' C0&-1' & ' C0&-10' &=' D1' C > 0010' & ' &=' <- ' C ' D1 &=9 -&K1' #1 -.' '-' 0 1-. D' <-A' =& B19 & ' D<' K1 1' '-' 0 1-. D' <-A' =& B1' D1' L' 'A<' &=' = & ' §<0 ' C<0 9 0 & -A1' <-A' #1' .&&A1' <-A' 1==1 =?1§§ '-' D1' § <K1' <= ' ' D1' 1-? 10' <-A' CC? '0' &=' D1' 0<>19 <0' '=' D'0' <A§1' &=' <A-?§§<B'&-' <-A' 10 ' ?B'&-' D<A' -&' #11-' > <A1' -1' D<AA1

&+'0&' =& ' E <- 0' # ' D1' , '- .

) ' '' D'0' # ' D1' 01'A' <?Q & ' 1' #1' ' ' 1-<Q§1A' & A1 -1A' <-A' 10 <#D00D1A9 D<' ' '=' <- ' &=' D1' 01'A' C0&-10' .' KD& > ' 1- ' 10' C< 1-§10' #1' > <A1' &=' 1- ' C< ' &=' D1' C > 0010' & ' D1' ' D1' 10' & ' <00'. -110' D1 1<= ' ' '-' §<?=?§§ K'01' 1-=1&==1=1' &? ' 01'A' ?CC§'<?- ' & ' 1- ' &=' D'0' D1' 10' & ' 1- ' & D1 ' &' D'0' ?01' '-' =11' ' &' D' > ' & ' <- ' &=' D1 >' > <a1' <0 ? 1' & ' 1§110' &=' D1' ' ' .D ' <-A' ' §1' '-' & ' &=' <- ' &=' D1' <0 1§0' & A0D'C0' < 0' §&-A10' 1- '0' & ' D1 1A' <>1- '0' & ' <- ' C ' D1 &=9 KD1 ?- &' D1' 0<>1' C0& 1' 0&&' > <a' -.' 0?BD1' =1&==1 > 1- ' 0 < 1' & ' 1§110' '0' 1- ' §1A' # ' D1' 0<> (' 10' C< 1- 10' ' # ' >1<-1' &=' <- ' &=' D1' 0<>1' 10' C< 1- 10' D<' D1-' 1 ' #=' D1' 0<>1' 10' C< 1- 10' KD1 1' -' D1' 0<>1' <0 1§0' & A0D'C0' <-1 0' §&-A10' 1-A0' & ' D1 1A' <>1- '0' KD1 &=' 0?BD1' =1&==1 > 1- ' 0 < 1' & ' 1 110' 0D<§§ 0&&' #1' > <A1' 0§'<§#1' B& > C '01A9 0D<§§§ &?BD' -.' <§§ D<' \ d' D1' KD'BD1' D<' =1&==1 > 1- ' 0 < 1' & ' 1§110' 0-<§#1' 0&&' > <A19 #1' &&-§ ' = & > ' D1' -1' &=' D1' > <a' -.' D1 &=' +&'A1' <-A' &=' -&&' =& B1' '1' 1==1Q§1' ' -A' D<' -&1' = -1' #1' -' <A1' &' &?' &+ 1' .-' & A' -1' &' &? ' D1' 10' =& ' <- ' 0?BD1' =1&==1 > 1- ' 0 < 1' & ' 1§110' <-A' D<' &? ' 01'A' 0?CC <?- ' <-A' <§§ D' 1=0' 0BD1 & 0' <-A' <§§ & D1 ' C0&-10' #1' A'0BD< .1A' &=' <§§ '00?10' C=1 '08<-A' 1+1-?10' <a1-' §1+'1A' <-A' CB1 +1A' &=' D1' C > 0010§ #1=& 1' D'0' 1- ' C§'<>1-

K' D&?' !' -1' &' D1' , '- . ' " '0BD< .1' =& ' >10C1' &=' 0

' D<' ' ' #1' 1-<##§1A' # ' D1' 01'A' <?(=& ' 1§ D<' > >1A'< § ' <= 1 ' D1' <A+&'A<?-BB' &=' 1 ' & ' 1- ' &=' D1' 01'A' 10' C< 1- 10§ # ' >1<-1' &=' <- ' =1&==1 > 1- ' 0 < 1' > <a' -.' & ' 1§110' <0' '0' <##&+101'A 8& ' A1 R > -<B'&-0' &=' D1' 0 < 10' B& > C '01A' '-' D1' 0<>1' & ' '-' <- ' &=' D1 >§' # ' A1 D' K' §'&?' D1' 10' > <§1' & ' 1- ' & D1 ' K'01§ ' #1' §1=?§§ &' D1' i1'A' E1& .1' & ' &' D'0' D1' 109 <-A' &' D1 >' KD'BD1' K1 1' =1&==10' D1 &=' &' D1' ?01' &=' D1' 01'A' F '§§'<>' < 0# ' & ' E1& .1' D1' >1' &=' D1' < 1 -A 1§ C' 1- =1' D<+1' <-A' 1- C 1' <§§ D<' § D<' '0' & > C 01A' '-' D1' 0<- 1' 10' 0&' +&'A1A' & ' KD1 &=' D1' 0 < 1' & ' < 10' 0D<§#1' 0 ' A1 < -1A§ '-' 0?BD1' > <-1 ' <-A' =&? >1' <0' D1' & ' D'0' D1' 10' & ' =1&==110' &' D'0' ?01' 0D?§A' & ' > .D ' D<+1' A&&-' # ' 1<0&-' &=' D'0' <Q 1' &=' 10 ' ?B'&-9 '=' -&# 0?BD1' 1 /C< 1- 100' D<AA1' #11-' > <A1' -1' D<A¢ LB1C ' && -§ ' =& ' D'00?1 i' <-A' 1+1-?10' D1 '-' '-' D1' > 1<-1' >1' <a1-' <-A' CB1 +1A9 KD1 &=' D1' -1' <- ' & D1 ' &' D'0 ?01' 0D<§§ '-' -&K'01' <a1' <- ' C=1 1' -1' D<+1' <- ' <BB'&-' =& ' D1' 0<>1

LB1C ' <0' &' >10-1' &=' 0

C "f D'0' #1' ' ' 1-<B 1A' & A1 -1A' <-A' 10 <#§'0D1A' # ' D1' 01'A' ?= & § 19 D<' &D-' '00D&C' #=' § 1' 'BD< A' > 0&D' <-A' &D-' C1-01 9 D<+1' D&§A1' <-A' &BB?C'1' = & >' D1' =10 ' C=' 1 - ' 'BD1§§ D< BD<?-.1§§ §<0 ' C<0 ' ?- &' D1-A1' <-A' R > 1' C=' +' ' 1 10' D1 ' -1L ' =&§&K' -.9 <0' 1-<?- '0' =& ' R > 1' &=' 1 109 §§' 0?BD1' <-1 0' §&-A10' 1- '0' 1- '0' 1 B'&-0' +'B10' <A+&?0&-0' C&00100'&-0' <-A' & D1 ' 1 1A' <>1- '0' CB1§§ &=' D1' C > 0010' -&K1' #1' -.' '-' D1' , '-.10' D<-A10' & ' C&00100'&-9 <-A' -& ' . <' - 1A' # ' D' >' # ' D'0' 10' C< 1- 10' (' 1- ' C0&-1' & ' C0&-109 -&K1' #1' -.' '-' D1' ' 0 1-. D' <-A' =& B1' & ' D<' K1 ' '-' 0 1-. D' <-A' =& B1' D1' A< ' &=' Q &# ' §<0 ' C<0 9 & ' KD1 &=' -&K1' D1' , '-.' <a' D' & ' K1' &' <a1' D1' C=1 '09 & ' 0D?§A' & ' > .D ' A&&' '=' ?1' <-A' §<?=?§§ &§ B1' K1 1' D1 &=' =&?-A1-' <-A' 1 &//-1A' <BB& A' -.' &' D'0' '.D ' <-A' ' §1' '-' D1' 0<>19 <= ' ' D1' A?1' B&? 0' &=' D'0' §<K109 -A' D<' D1' , '-.1' D<+1' <-A' CB1 +1' A? '-.' D'0' C§1<0? 1' &? ' &=' D1' 0<>1' CB1§§0' &=' D1' C > 0010' 9 = &>' D1' =10 ' &=' 1 - ' 'BD1§§ D< BD<?-.1§§ §<0 ' C<0 9 < 1-' <-A' <--?1§§ 0&>1' &=' <-' '§' ' 1 1§ ' &' #1' C<'1A' &' D1' 10& 1 ' &=' D'0' D<> # 1' =& ' D1' >1' #1' -.9 & ' 0?BD1' & D1 ' C0&-1' & ' C0&-10' <0' D'0' =.D-10' 0D<§§ <00'. -1' <-A' A1C? 1' '-' D<' C '1§ <' D1' =10 ' C=' D1' ? '=' B<B' &-' &=' &? ' <A ' 1 - ' < '1' # ' D<-A10' &=' D1' 1-<?- 10' =1 > &? 0' <-A' &B?C &? 0' D1 &=' =& ' D1' -1' #1 -.9 D1' =' 0 ' C< > 1- ' D1 &=' &' #1. -1' < ' A'1' =10 ' &=' D1' ? '=' B<B' &-' &=' &? ' <A ' 1 - ' < '1§ KD'BD1' 0D<§§ #1' '-' D1' 1 1' #=' &? ' & A' E&A' < a' ' LLLL+ 9 -A' D<' D1' , '-.'0' 10' ?-A1 ' D'0' C +1' 0B<§1' & ' D'0' 0'. -1 ' 10 '=' -.' D1' C< > 1- ' &=' DC' 01'A' <- - ?1§§ 0& > 1' &=' & -1 ' <-A' 1 1§ ' 1- 9 A' 1A§1A' &' D1' 10& 1 ' <-A' < & -0' &=' D'0' 0BD1H?'1 ' =& ' D1' > 1' #1' -.9 #1' <-A' 0§' <§#1' 0?=='B'1 - ' A'0BD< .1' =& ' D1' C<'1 0' <-A' C< > 1- ' D1 1&=' < ' <§§ > &0' ¢ -A' A'0BD< .1' <§0&' <0K1§§ =& ' D1' 01'A' <-§0' §&-A10' 1- '0' 1- '0' 1 B'C-0' +'B10' <A+&?0&-0' C&00100'&-0' <-A' & D1 ' 1 1A' <>1- '0' <0' =& ' <§§ D1' 01'A' 1-<?- 10' =1 > &? 0' <-A' &BB?C'1 0' &=' D1' U<>1' D' 1=0' <-A' & D1 ' D1' = -.'0' ==' B1 0' =& ' D1' > 1' #1 -.9 <-A' =& ' B1<00' -.' <-A' A'0BD< . -.' &=' <§§ CB1001 0' &' #1' <K< A1A' <-A' A' 1Q§1A' C? '&=' D1' 1'A' &? ' =& ' D1' , '-.' '-' D<' #1D<§=' -A' D<' D1' 01'A' '00D&C' 'BD< A' <-A' &D-' D<+1' .&&A' <-A' 0? 1' ' §10' &BB?C<B'&-' <-A' ' -+10 ' ' -' D1' C-' 001 ' A? -.' D1' 01'A' R > 1' &=' +' ' 1 10

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.5 9' .' !<@ 2.-!' -/' 2.-!2 . !'" !-' !' M&-*' -/' &2 !- !!2 -/' !&" !&"!2 1 +!2 ;.' !' "! !"#!/' -/' 2O# !' . !'" 2 2 +' #+ @1!';@ !@1' '" . ' !&" .22!22&.-' +' 2O# !' "&* ' &+!2 #+ @1!2 !- "!!2 -/' ##&.-2 2 !@ .'" !-@ . ' !@1' '!' .'" 1@* ' '!' /' &-' .'" .' !-@ . ' !' 1@22!2' 2 &' &2 /' -!<' ;!!-' //!' -!'" 1 /!

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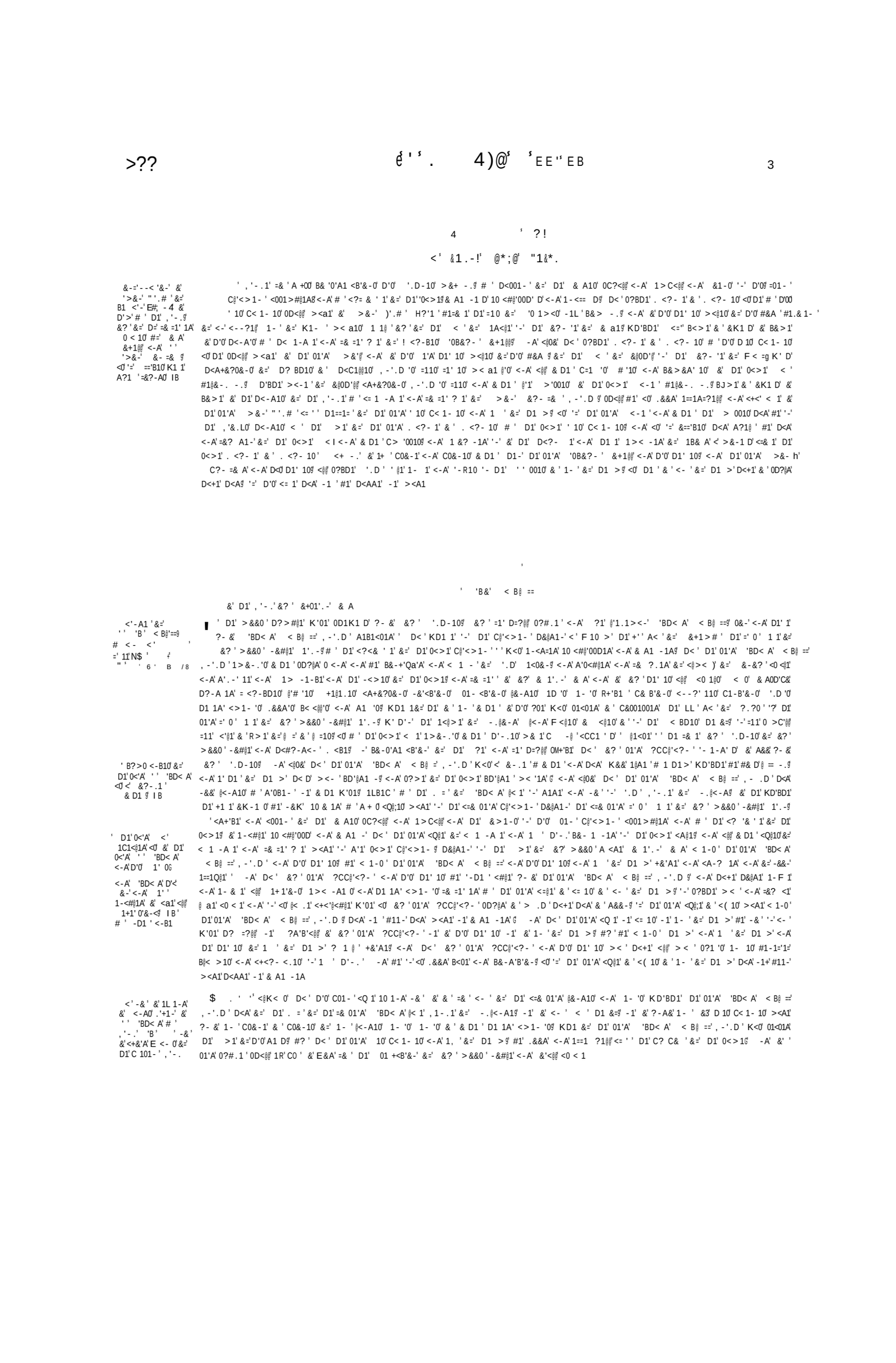

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ʲ 3ʼ +!1!- !ʼ E!+ .-

&' D1' , '- 1' &? ' & 1@.-' & A

▌ ' 1' >&0 ' D? > #@1' K '01' #101BD' D' &? ' '.D-10ℊ &? ' ?1' ?#.1 ' @1>1- ' a1@ &-' E1- '@><-ℊ D<' K D1 1'-' &? ' C <>1- ' D&@A1-' < ' F 10 >' D1' A< ' &=' &+1> # ' '-' D1' D' A' 1 1' &=' &? ' >&&0 ' . <B'&?0' 1'. -ℊ 'K<0' 1-<= 1A' # ' <?Q & ' 1' &=' D1' 01'A' C@'< &1- ℊ D<' D1' 01'A' @1>1- ' a1@ &-' <>&-.10' & D1 ' C0&-10ℊ 0D?@A' #1' 1C? 1A' ?.1A' <-A' <a1-' <0' < < &? ' <-A' B&-+'(@1' <-A' < 1 - ' 2= '.D' 1<0&-ℊ <-A' D<' <@@ &-&? 0' <0 1@0' & A0D'CC0' < 0' ?-A 1A'0' @&-A10' <-A' 1- '0' K' D' D1' ' <CC? 1-<?-B10' <A+&?0&-0' , -'.D '0' =110' =1 >10' 1>< -A1 0' 1 0'&-0' @'# '10' @1 10' ? '0A'BB'&-0' = <?'' BD'010' <-A' & D1 ' 1 1AL <>1- '0' .&&A10' <-A' B< <@@10ℊ KD'BD1' D1' 01'A' @1>1- ' & ' <- '& D1 ' &' D'0' ?01' D<A' & ' K<0' C&001001A' &=ℊ &=' <- '<0 < 1' &=' 1-D1 ' <?-B1' D1' '' 0 ' A< ' &=' ? -' D<-' @< ' C<0 ℊ 0D?@A' #1' =& =1' 1A' &' &? ' '.D-10ℊ &' D<+1' <-A' 1- & 1' &' &? ' E <B1' <-A' &? ' D1' 10' =& ' 1 ' ! @1<01' ' ' &? ' '.D-10' &=' &? ' >&&0 ' D<#?-A<- ' . <B1ℊ # ' D<A+ B1' <-A' <001- ' &=' D1' & A10' 0C?1@L' <-A' 1>C& <@L' <-A' D1' &1-0' '-' D'0' 01-' C@'?>1- ' <001> #@1A' <' A' # ' <?= & ' 1' &=' D1' 0<>1ℊ B&-0'A1 -.' D<' &? ' 01'A' ?CC@'<?- ' '0' <0' 0& &K=?@@ <-A' 1C1- <-' <0' <-' B 1< ? 1' >< ' #1' &=' <@@ D<' D<' D1' D< D' A&&-' &' D1' A'0C@1<0? 1' &=' &? ' '.D-10ℊ B&- < ' &' D1' A?1 '1' &=' D'0' <@'1.1<?-B1ℊ -A' D<' D1' '0' <-A' 1+O 0D<@@ #1' C01 <- @ ' &? ' ?1' @'1.1>< -' <-A' >&&0 '&#1'0<?- ' ?#.1 ℊ &' & A1 -' <-A' 10 <#@ 00D' D<' D1' 01'A' I 1' & ' Q@10' ><A1' '-' D1' 01'A' C@'<>1- ' D&@A1-' < ' F 10 >' D1' 01'A' 'L\Ø A< ' &=' &+1> # ℊ 1-0' D1' 01'A' @1>1- ℊ # ' KD< ' -<>1' & ' -<>10' 0@' 1,' D1' #1' -<>1A' & ' B<@@1A' 'C' D1' 0<>1' Q 1' & ' Q@10ℊ #1' +&'A1' <-A' &=' -&' =& B1' -1' 1==1B ' < 1-0 ' D1' 01'A' @1>1- ' <-A' D'0' D1' 10' <-A' D'0' =1&==110' &' D'0' ?01ℊ '-' & ' # ' 1<0&-' &=' <- ' &=' D1' > 0010 ' -A' D<' D1' 0<>1' @1>1- ' <-A' D'0' D1' 10' D<+1' C? 0?1' C&001A1' 1-D1 ' 1' @< >1' <-A' 1- & 1' <@@ &-&? 0' <0 1@0' & A0D'CC0' <-1 0' D?-A 1A'0' @&-A10' <-A' 1- '0' K' D' D1' ' <CC? 1-<?-B10' <A+&?0BU'0' , -'.D 10' =110' =1 >10' 1>< -A1 0' 1.'&-0' @'# '10' @1 '0' ? '0A'BB&-0' = <?-BD'010' <-A' & D1 ' D1 1A' <>1- '0ℊ .&&A10' <-A' B< <@@10ℊ '-' @'a1' >< ' C-A' =&? >1' <0' D1' <-A' D'0' D1' 10' 0D?@A' D<+1' A&&-' & ' D<+1' D<Aℊ '=' D1' 0<>1' < 1' & ' <Q-B1i' -1 ' D<A' #h' ><A1' < 1-0 ' D1' 01'A' @1>1- ℊ <-A' D1' 01'A' =1&==110' &' D'0' ?01ℊ -A' D<' D1' 0<>1' Q@1' & ' '10' '-' -&' K' 1' #1' ?A'B'<'ℊ & 0D? ' &' D1' 0<>1' @1>1- ' -& ' D'0' D1' 10' -A' D<' # ' D1' 01'A' <?= ' 1' D1' 0<>1' @1>1- ' <-A' D'0' D1' 10' D<+1' D&@A' C&001A' B@< >1' <-A' 1- 1ℊ '@@' <0 1@0@ <-1 0' @&-A10' 1- 10' <-A' D1 1A' <>1- '0' <-A' & D1 ' 0010ℊ KD'BD1' B<>1' &' &? ' D<-A10' & ' &?.D ' &' D<+1' B&>1-' # ' 1<0&-' &=' D1' 01'A' 1' & ' 10' ><A1' < 1-0 ' D1' 01'A' ^1>1>' <-A' D1' 01'A' =1 ==110' &' D'0' ?01ℊ <-A' '- &' D1 >' &' 1- 1' '-' @'a1' >< I '<-A' =&? >1<-A' &=' @'a1' <0 < 1' <-A' B&-A' '&-' D<+1' C&001A1' B@< >1' < A' 1- & 1ℊ <0' D1' 0D?@A' D<+1' D<A' D1>' '=' D1' <>1' =@1' & ' 10' D<A' -1 ' #1' ><A1' < 1-0 ' D ' 01'A' @1>1- ' <-A' D1' 01'A' =1&==110' &' D'0' ?01@@ K' D&?' 0? -.' D1 >'& ' <- ' &=' D1 >' &? ' &=' &? ' D<-A10' # ' C1 'B'&-' @ 1' & ' & D1 K'01' <= ' ' D1' B&? 0' &=' &? ' <K10

. ʼ &' 1, ' &=' &? ' @'1.1' C1&C@1' <-A' D1' ' D1' 10' <-A' 1 ' &=' D1 >ℊ 0?BD1' <BB'&-' '.D ' ' @1' <-A' @<?=? ' '-R11 ' <0' D1 ' & ' <- ' &=' D1 >' D<A' D1' 01'A' '@' 0 ' A< ' &=' ?'-ℊ 7h' <- ' >1' 0' Dℊ & D1 ' D1-' # ' D1' >1<C1' &=' &? ' ' 10' C<=1- 10' ><A1' iaD' D1' 0<>1' ''' W A<'1' ⁝ &A' D<' <@@ ' 10' C< 1 ' ><A1' # ' ? ' '.D 10' &' 1- ' C0 -1' & ' C0&-10' &=' 1- ' &=' D1' C> 0 10' D<' B<>1' &' &? ' D<CA10' # ' 1<0&-' &=' D1' 0<>1' 1' & ' =@10' ><A1' < 1-0 ' A'1' 01'A' @1>1- ℊ #1' +&'A1' <-A' &=' -&-1' 1==1=' = &>' D1' =' 0 ' A< ' &=' D'0' D1'+&'A

' C< @'<>1-

1 ∨

'ʼ D<' ' '#1' & A1 -1A' # ' D1' 0<>1' ?='&' 1ℊ D<' -&&' C0&-1' - ' C0&-10' D<' D<+1' <=& 1' D1' =' 0 ' A<' . ʼ D'0' C01-' C< @'<'D1-' <-A' <= 1 ' D1' 01'A' '' 000 A< ' &='=?'-ℊ <- ' '00?10' 8& ' C!1 '0' &=' <- ' &=' D1' 0010 ' <a1-' <- ' &=' A0' .&&A10' <-A' B< <@@10 ' #1' -& ' 1-C1<BD1A' -& ' BD< .1<#@1' &' D1' 01'A' @1>1- ' <-A' D'0' D1' 10ℊ -1' &' 1- ' 8& @'1 ' =1TR=1' & ' =1&==11 D' &' D1' ?01' &=' D1'0%1'A' @1>1- ℊ # ' K1 ' &=' < B'&-' & ' & D1 K'01ℊ - ' <@0&' D1' =1&==110' &' D1' ?01' &=' D1' 0<>1' @1>1- ' &&-@ ' =& ' &=' <-A' -' D1' C> 0010 KD'BD1' D1' 0<>1' =1&='10' D<A' &' D1' ?01' &=' D1' 01'A' @1>1- ' D1 01'A' '' 00 A< ' & ' <- ' >1' 0' D9 <-A' &? ' 01'A' ?CC='<?- ' 0D<@@ CU ' &' E&A' =& ' D1' 01 <B'&-' &=' &? ' >&&0 ' -C#@1' <-A' &'<@@ <0 < 1

B' <'?<ℊ =& ' >10=1' &=' 0

3 6 ʼ

' 1 1A' F '= '' F < -0=& A1

D1' >&&0 ' D? > #@1' K '01' #101BD' D' &? ' >& 0' -&#@1' E <B1ℊ &D-' BD1#&? -1'ℊ &&-' &=' D1' B&0 -0' <-A' D1' 10' &=' F '@@'<>' F 1 -0=& A'@< 1' &=' &-A&-' 0Td?'1 ℊ D<' '0' &' 01 ℊ 0&-' &=' &D<--1' &&-' &=' @'1' ?0 1 0' &=' D1' 01'A' F '@@'<>ℊ D&>0' &F D' <-A' --1' D'0' F '=1' <-& D1 ' &=' D1' &0 -0' <-A' D1' 10' &=' D1' 01'A' F '@@'<>ℊ D<' '0' &' 01 ℊ A&?.D 1 '&=' @'B1' <-& D1 ' &=' D1' ?0 1 0' -A' D1' 10' &=' D1' 0<>1 F '='' <> ' D<' KD1 1' # ' <-' '&=' C@'<>1- ' ><A1' '-' D1' C@ >1- '&=' AK< A' D1' ''' 0' @< 1' , '- .1' &=' -.@&CAℊ D&@A1-' < ' F 10'd <' D1' ''' 0 ' A< ' &=' &+1> # ' '-' D1' =' 0 ' 1 1' &=' D'0' 1 .-ℊ =& ' D1' ?1' <-A' =1' D=?@@ <@@1.'<?-B1' <-A' R+'B1' D1' KD'BD1' D1' 01'A' F '@@'<>' V&K1A' <-A' A1A1' &' D1' >&&0 ' =<>&?0' <-A' #@'00'A' '-B1' 1- ' D1' 0'L ℊ <1' ' '-.1' &=' -.@<-A' &? ' -B@1' & 1'.< & A@' K<0' & A1 -1A' <-A' A1B@< 1Aℊ D<' D1' 1'A' F '@@'<>' F 1 -0=& A' <>&-.&' & D1 ' CO^-10' 1D?@A' 0 &-A' <-A' #1' B&-+'Q@1A' <-A' < 1 - 1A' &=' '.D' 1<0&-ℊ <-A' =& =1' 1' &' D1' 01'A' AK< A' @< 1' , '- .1' <-A' &'=''0' D1' 10ℊ <@@ <0 1@0' < 0' <-A10' & A0D'C0' 1- '0' 1- '0' +'B10' =110' <A+&?0&- ' D1 1A' <>1- '0' <-A' C&00100'&-0' K' D'ℊ D1' ' <CC? 1-<?-B10ℊ KD'BD1' D1' D<A' &=' 0 < 1' &=' 1-D1 ' <?-B1' & ' 1- ' & D1 ' &' D'0' ?01ℊ D<AA1' D1' ''= 000 A< ' &=' /BD1' D1-' @<0 ℊ C<0 ℊ &&' ' - &' 1D1' KD'BD1' D1' 0<>1' F '' <>' & ' <- ' & D1 ' C0&-1' & ' C0 >10' =1&==110' &' D'0' ?01' & ' #1D&=ℊ D<AA1' D1' 0<>1' '' 'A< 1' &=' < BD1' @<?=?@@ B<?01' &=' 1- 1ℊ K' D'-' -.@<-A' @<-A' F <@10' & ' <@10' & ' '-' D1' < BD10' D1 &=' &? 1' &=' D1' # '1' &=8' D1' '00D&C 'BD1' &=' '' ? =' <>ℊ <0' '-' D1' 0<>1' 1' >& 1' C@1 -@ ' <CC1 ' D;' ' >< ' C@1<01' &? ' '.D-10' &=' &? ' >&&0 ' -&#@1' <-A' D<#?-A<- ' . <B1ℊ '-' B&-0'A1 <B &-' &=' D1' > 0010ℊ # ' D<A+ B1' <-A' <001- ' &=' D1' & A10' 0C?<@@ <-A' 1>C<@@ <-A' D1' &>1-0' &=' D'0' &? ' 01- ' C@'<>1- ' <001> #@1A' <-A' # ' D1' <?Qa& ' 1' &=' D1' 0<>1ℊ &' & A1 -' 10 <#@'00D1' <-A' 1-<=@1ℊ D<' D1' 01'A' 1' <-A' <@@ &=' 1 -A 1' <-A' =& =1' ? 1' ><A1' & ' D<AA1' '-' D1' 01'A' C@'<>1- ' & ' '-' <- ' & D1 ' C@'<>1- ℊ D&@A1-' '-' D1' >1' &=' D1' 01'A' AK< A' @< 1' , '- .' < 1-0 ' D1' 01'A' F '@@'<>' F 1 -0=& Aℊ #1' < 1-0 ' D1' 0<>1' F '@@'<>' D'0' D1' 10' <-A' 1 ' &=' D'0' =1&==110' &' D'0' ?01' <-A' &' D1' ' D1' 10ℊ +&'A1' <-A' <A-?@@1A' <-A' &=' -&&' =& B1' -1' &=' 1=1Q@;1' ' -A' D<' D1' 0<>1' F '@@'<>' <-A' D'0' D1' 10' <-A' @'1' =1&==10' &' D'0' ?01' <-A' D1' ' D1' 10ℊ <-A' D1' 01'A' &D-' BD1#&? -1' <-A' D1' D1' 10' &=' D1' 0<>1' &D-' <-A' D&><0' &K D' <-A' --1' '-' D' ' '.D' <-A' 3 D1' D1' 10' &=' '#1' 0<>1' --1' #1' 10 1A' <-A' 1-D<#@1A' &' 1-D1 ' 1' 1- 1' ='<+1' D&@A1' <-A' C&001A1' 1- & 1ℊ <@@ & A0D'C0' < 0' @&-A10' 1- '0' 1- '0' 1+0B'&-0' 0+'B1'0' =110' <A+&?0&-0' <-A' & D1 ' C&00100'&-0' <-A' D1 1A' <>1- '0ℊ <0K1@@ =& =1' 1A' # ' D1' 01'A' U 1' & ' A 10' <0' <@@ & D1 ' KD< '0&' 1,' D1 ' #1ℊ '-' 0?BD1' D<-1 ' <-A' =&? >1' <-A' '-' <0' @< .1' <-A' <0' <+<'@<@#@1' K '01ℊ <0' D1 ' & ' <- ' &=' D1 >' 0D?@A' & '" @< ʼ '!' ; /' ." /..-'& ' D1' 01'A' <Q@1' & ' <= 10' &=' 1 -A 1' & ' =& =1' ? 1' -1' <- ' &=' D1 >' D<A' -1,' #1' D<A' -1' ><A1ℊ D1' 0<>1

<'-A1 8&=' F > ' F 1 -0=& Aℊ # '<? <' ' = ' ,

' M#7 'Hb ' ' *$Y 65 X

D1' 0<'A' ' <- -?@@1A' <0' <.<'-0 ' D1' 0<'A' F '@@'<>' F 1 -0=& Aℊ <-A' D'0' 1' 0' 1-<#@1A' &' -D1 ' ' <@@ D'0 0 < 10ℊ 11

>?/ (' 0 ’ ! ; .♯ ;Q JT@

..' P,#$ '&3' 7(0' ? #! ' E7' J+$- ' ?6/ ') ' +(' C' &,'.+!$ ') F ' #"6' #..' $"1! '&3' 33+(!C ('!O!,!&3C 6!(.#,!6'2&+6']

G '.+!' #$7'&3'O!7 ' '$&/+0 #67-C $6'0#C #..' 3,! ' :#!$! 'O!,&3' #$6'#$7':(!..'O!,&3' '#6!' E7'O!' !+6'J+$-'?6/#,6C&,'07' +(0#,6'O!' G'.#6'+$'6!6!'#$6'&C+$',+-.+C J+$-!'&3'?$-.#$6!C&,'E7'7&1,' +-0$! C $6'#. &'#..'+$"1+ +(+&$ '#$6'&33+(! '0#6'&,'#)!$ &3'O!'G'7 ! '&,'#:7':(!..'O!,&3C +OC'OG' !+6'#O!7$6,!'#$6'3&,3!+1,!C E!'1X 7'2&+6!'#$6'&3' $&&'3&,(!'$!'!33!3O!0' $6'O#C O!' !+6' #3O!'$!'#3O! ' O+!' #$7'&3'O!7 ' '$!' #$7'O,! ':#!$! ' O#66!'&,' '#6!C $!'#$7'+$"1+ +(+&$':& ! +&$'$!'&33+(!'O#6'&,' O#H!$'E7',!# &$'&,' &((# +&$'&3'O!'G'7 ! '&,'#$7"3'O!'G'7 ! C E!'$&C +$'#$7'/+]!'O1,031..'$!'G16+(+#.2'&'6+!' !+6'A +..+# ' '$!' O&' O+ ' O!+,3+ C $!,' O&' O!' !+6'F&O$'$!'O&' O!' !+6' 0& ' # '#$6' $+!' +$' O!',+-O C &3'O!' !+6' $$!C $!'O&' O!' O!+,! '&3'O!' #'!'F&O$'#$6' $$!C $!' #$7' &3'O!7 ' C $!' O&' !$7' #C' !$7' O7 ' !' 3!&33!!' &,' 3!&33! ' #3&, !+6'&,' #$7'&3'O!7 ' ' O&1(07$-' O!' : '+ ! ' &,' #$7' :#,(!..' O!,&3C EO C E!' #7!$ C O!7O!$'#$6'!G7'&3'O!7 ' '1 X.7'+H&+6!' #$6'&3'$&&'3&,(!' $!' !33!3O!C $6' O#C $&&',!.!! ' 3!&33!' !$C &,' (&$3+$$#(+&$' '#6!' E7'O!' !+6' A +..+# ' ' &3'O!'G'7 ! '&,'#$7' : !..'O!,&3'#3+,' O!' 3&, !+6'#3O!' &,'#3O! '&3' O!7$6,!C E!+$-' +$' :&G+!' '7 !,7'#$6' /,!(O!6$!' E7',!# &$'&3'O!' #'!'#3O!'&,' #3! C E!'$&C +..' !$7' /+!'O1,031..' $!': 16+(+#..' &' O!' !+6' A +..+# ' ' $!'&' O+' O!+,! C $!,'&' O!']+6' F&O$'$!,'&' O!' !+6' 0& ' # '#$6' $$!' +$' O!' ,+-O C &3' O!' #' !' $$!C E1C#7!$ C O!7 ' '#$6' !G7'&3'O!7 ' ' E!' 1O!,.7' 2&+6!' 616'&3' $&' 3&,(!'$!' !33!3O! ' $6' O#C O!' !+6' F&O$'#$6' O!' !+6' 0& ' # '#$6' $$!' +$' O!' ,+-O C &3' O!' #' !C'#$6' O!' O!+,! ' &3' O!' #' !' F&O$'#$6' $$!C #$6'#..' : &$! ' #C' #$7' 7 ' !' 3!&33! ' &' O!' 1 !' &3' O!7 ' ' &,' #$7' &3' O!7 ' C ' #7' 0#2!' 1(0!' #2#11C#-!'+$' !;7 O+$-'0&16++$-' O!' G'7 ! C #$6' E!' +$' #' -&&6' (# !' #' '+3' O!' !+6' #3!' &,' #$7' &3' O!7 ' ' 0#6'!G' E!' 0#66!' $!' '#6!C #$6' O!'!$0,!' !# &$' #$6' :& ! +&$' &3' O!7 ' '+$0&' O!' 3&,G!+6' &,6 O+: ' 8#$!, ' F&$6!'0!$6 ' ,!$+ ',!G(+&$ '#62&1 &$ '#$6' &O!,'G'7 ! ' #$6'!G7':#,C O!,!&3C E!' -&&6'.#131..' #$6'!33!3O1#..'0&' O!7 ' ' /+0&1C#$7'&O!,' 1O!' &3' O!' #' !C'&,' &3' #$7':(!..' O!,&3' 0&' E!' '#6!' (1C &3'7&1,'O#$6!' EG!+-$' &,6C E7' :!0+(+&$'.7G!' &,' &O!,/+!'#3+,' O!' (&1, '&3'7&1,' #/!C #$6' &3'#' -,!0!' 0,!$-O' 3&,(!'#$6' !33!3O!' +$'7&1,' #/!C #'+3'7&1,' !+6' 1:: .#1$0! ' 0#6' O!' #' !' &,6 O+: ' 8#$!, ' .#$6!'0!$6 ' ,!$0+ ' 0!$ +&$ '#62&1 &$ '#$6' &6+!,' O!' G'7 ! ' &,' #$7':(!.' O!,&3C /!,!',&,' E!'O&.6!$'&3'7&1' &G!+-$' &,6' &,' &3' #$7' &3' 7&1,' :-!$+0&1, ' J+$-! ' &3'?$-.#$6C +$' (O+!3' &,' &O!,/+ !0 ' $6' O#C $!+O!,' O!' !+6'F&O$' O&' # '#$6' $$!' $!,'#$7' &3'O!7 ' '$!,'O!' O!+,! '&3'O!' !+6'F&O$'#$6' $$!C $!,'O!' !+6' &,6 O+: ' 8#$!, ' &$6! '#$6' 0!$0+ '$!,' &O!,'&3'O!' : '7 ! '&,' #$7':#,!'O!,&3C E!' +$' #$7' /+ !'(O#,-!6'3&,' #$7' 7&1,' ;..-O$! C 3&,'#$7'+ 1! '&,' :3!O+ '&3'O!' #' !C&,' #$7':(!..'&3'O!' #' !C &,'&3',3&,'#$7'+ 1! ', (7'!$0+ '&,' &O!,' 1 '!#'&3' 8&$!7'61!'3&1,' !' 1!6C E7' :!0+(+&$'&,' E7'61!'#$6'.#131..' .7G!7'&,'&O!,/+ !'&1O!'&3'7&1,' O#$6! C#((&,6+$-'&'7&1,'.#1!! C#$6' #'+3'O!' #' !' #3O!'&,'#3O! '$!' #$7'&3'O!7 ' '0#6'$! ' E!!$'O#66!'$!' '#6!C #$6' #'+3'+C /!,!' 61!.7'(&$O!$C &'7&1C &3'#..' O#C &'7&1' E!.&$-!O'&,' O1.6' E!.&$-!' +$'O#C E!O#.3C O&1' E!' +C O!' #' !' &,6 O+: ' 8#$!, ' .#$6!' O!$0+ ' ,!$0+ ' O!$ +&$ '#62&1 &$ '#$6' &6+!,' O!' G'7 ! ' &,' #$7':(!.' O!,&3C /!,!',&,' E!'O&.6!$'&3'7&1' &G!+-$' &,6' &,' &3' #$7' &3' 7&1,' :-!$+O&1, ' J+$-! ' &3'?$-.#$6C +$' (O+!3' &,' &O!,/+ !0 ' $6' O#C $!+O!,' O!' !+6'F&O$' O&' # '#$6' $$!' $!,'#$7' &3'O!7 ' '$!,'O!' O!+,! '&3'O!' !+6'F&O$'#$6' $$!C $!,'O!' !+6' &,6 O+: ' 8#$!, ' &$6! '#$6' O!$0+ '$!,' &O!,'&3'O!' : '7 ! '&,' #$7':#,!'O!,&3C E!' +$' #$7' /+ !'(O#,-!6' &,' (O#,-!E.!' 7&1,' ;..-O$! C 3&,'#$7'+ 1! '&,' :3!O+ '&3'O!' #' !C &,' #$7':(!..'&3'O!' #' !C &,'&3' #$7' :(!..' &3'O!' #' !C '8&$!7'61!'

□O!,' &33!$(! ' #-#7$ □ 7&1,':!# ' 6&&$'&,'(& ' 7□□!6' E7' 7&1,' !÷6' 1E-!□□ #3&,!' □O!' SS÷' 6#7'&3' &2!' 3!,' ÷$' □O!' S ' 7!,!' &3'7&1,' ' && □ $&E.!' ,!÷-$□ O#□'÷□' / &..' :.!# !' 7&1,' ÷-0$! '&3'7&1,' ' &,!' ! :!(÷#..' -,#(!'#$6'E÷ !6'6÷ :&(÷&$□E7'□O!'#627(('#$6'# !$□&3'7&1,' &,6! ' :1#..' #$6' □! ' :#..' #$6' □O!'%& ' !$ ' ÷$' □O÷ 'F !$□ :.÷# ' !$□ # ! ' E.!6' #$6' E7' #1 3□&,÷□(' &3' □O!' #' !□ □&' &,6!7$' ! □#E.÷ 0' #$6' !$#(□!' □0#□' □O!' !÷6' ÷$6÷□!,#!$□&3' ÷-0' □,!# &$' #$6'#. &' □O!' !÷6'#:::!..□ #$6' #. &' #..' :(! ! '0#66!' '#6!' &,' 1!6'&,'O!,!#3□÷,'□&' E!' 1!6□'&3' &,'1:::&$'□O!' !÷6' ÷$6÷□! ' !$□'&3'0÷-0'□,!# &$' #□□' 7&1,!' 1□!' &G!÷-$' &,6□'#$6'&3'&,'1:&$'□O!' !÷6'#:::!..' #□□'□O!' 1□!'&3'□O!' !÷6' -$! ' 3&,'□O!'6!□0' &3'□O!' !÷6'F&0$'A #.(0!3&,6' .#□!' 0÷,' 01 E&$6' #-#7$ □ 7&1,' !÷6' 1E-!□□!'E7' / 0#□$#' !' &!G'0!'O!'(#..!6' ÷$' □O!' #' !' ÷$6÷□! ' !$□ ,'#:::!..□' E!'2&÷6!'#$6'&3'$&'3&,(!' □,!$-□0'$&,' (3 !3□!'0' #$6'□0#□ #..' &□O!,'÷$6÷□! ' !$□÷ 'G !$□÷ ' !$□÷ ' #$6'÷$"1. ÷(÷&$ '□#H!$' #3&,!'#$7'&3' 7&1,'%&,&$!, '&3'7&1,'%&1$□÷!' &3' B&,H' F1 □÷(! ' &3' ;!# ' F1 □÷(! ' &3' -#&.!' 6!.7G!,' / ÷□0÷$' □O!' A ! □,÷□0÷÷-' □O!'? □,÷□0÷$-' &,'□O!' &,□O,÷□0÷$-' &3' 7&ℓ !÷6'%&1$□÷!□' &,' / ÷□0÷$'7&1,'%÷□÷!' &3' B&,H!□' &,' #3&,!' #$7' &^>9 7&1,'F1 □÷(! ' E7' 7&1,' :!(÷#..'%6 ' 7 ÷&$□' # ÷-$!6'□&' !$"1!,!' &3'3&,' &,' 1:&$' #..' #$6' ! 7'□,!# &$ ' ' 1,6!, ' 3!.&$÷! ' &,' &□O!,' &33!$(! ' #-#7$ □ 7&1,' :!# '6&&$' &,' (&' ÷□□!6' E7' 7&1,' !÷6' 1E-!□□ E7' / 0#□ $#' !' :' O!' E!' (#..÷6□' #3&,!' □O!' SS÷ '6#7'&3' &2!' E,'÷$' □O!' S ' 7!,!' &3'7&1,' ' && □ $&E.!',!÷-$□ #$6' #..' :(! ! '□O!,1:&$'0#6' '#6!'&,' 1!6'&,'O!,!#3□÷,'□&' E!' 0#6' '#6!'&,' 1!6' #□'7&1,' 1□!' &2 !÷-$' &,6□'E!'2&÷6!' #$6' &3' $&'3&,(!' □,!$-□0' $&,' !33!3.' $6' □0#□ #..' 1□.#-#,÷! ' ÷$□&' 7:1,' !÷6' 1E-!□ E7' / 0#□ $#' !' &' O!' E!' $#' !6' &,' (#..÷6□' :' 1.-!6' &3' &,' 1:&$' □O!' !÷6' ÷$6÷□! ' !$□ &3' O÷-0' □,!# &$' &,' &3' &,' 1:&$' □O!' !÷6' #:::!..□ &,' &3' &,' 1:&$' !$7' &3' □O!' !÷6' ÷$6÷□! ' !$□÷ ' :!$□! ' !$□÷ ' &,' ÷$"1÷ ÷(÷&$ ' □#H!$' #3&,!' #$7' &3' 7&1,'%&,&$!, ' &,'F1 □÷(! ' #' ÷ ' #3&,!',!O!,(!6' #$6' !G7' &3' □O!7 ' □ E!' #. &' 2&÷6!' #$6' &3' $&& 3&,(!'□ □,!$-□0' $&,' !.3!6.!□ $6' □0#□ 7&1,' !÷6' 1E-!□ 3&,3!÷□' $&□ #$7' ' #' -&&6! ' (#□#..! ' .&$6!' &,' □!$□÷ ' &,' &□O!,' O!,!6÷□#' !$□÷ ' E7' ,!# &$' &3' #$7' 1(O!' O□.#-#,÷;'÷$□&'0÷' ' :÷$1□-!6' &3' &,'1:&$' !$7'□O!' : ' 7 ! ' $6' □0#□□O!' !÷6'÷$6÷□! ' !$□'&3'0÷-0' □,!# &$' $&,'□O!' !÷6' &□O!,'÷$6÷□! ' !$□÷ ': !$□! ' !$□÷ '&,'÷$"1÷ ÷(÷&$ □'$&,'7!□#$7'1□.#-#,÷!'□O!,1:&$'&,'&3'#$7'&3'□O!7 ' '÷$□&'7&1,' !÷6' 1E-!□: ' 1.-!6□' E7' / 0#□$#' !' &,'$#' ! ' &! '7&1,' !÷6' 1E-!□E!'÷$'□O÷ ' &,' #$7' &3' □O!7 ' ' $#' !6□' E!'O1,□3÷÷..' $&,' ÷$' #$7' / ÷ !'G16÷(÷#..' □&' 7&1,' !÷6' 1E-!□$&,' ON ' O!÷,! □' $&,' □&' #$7': &$!' &,' : :$! ' #□□!$7'□7 ' !' 3!:33!' &,' 3!&33! ' □&' O÷ ' 1 !□' E1□E!' #7!$ □ □O!7 ' '#$6' !G7' &3' □O!7 ' ' 2&÷6!'#$6'&3' $&'3&,(!'ℓ □,!$-□0' $&,' !33!□!

□ ' E7'□O!' #' !' #1G&,÷□!' ÷□' ' #7' E!' :,6!7$!6' ! □#E.÷ O!6' #$6' !$#(□!6□ □O#□7&1,' !÷6' 1E-!□ E!' ÷$#E.!6' □&' O#2!' !$&7!' #$6' :& !6!' #..' #$6' ! 7'O÷ '3÷$O!,÷□#1$(! □' # / !..' E7'O÷' ' :□÷,(O#(!6' #' □:' O7 ' ' 6÷ (!$6!6' ,'□O#□O!,!#3□÷,' O#..' 6÷ (!$6□ #3□÷,'#$6'E7'□O!' 6!□O' &3' !$7' O÷ ' 1$(! □3! ' / O!,!□&' O!' #□□' !$7'□7 ' !' / # ' &,' $&/ !' + ' ÷$O!,÷□#E.!□' ÷$' # ' .#,-!' ' #$!,'#$6' 3&1,' ! ' #' □O&1-0' □O!' !÷6' 1□.#-#,÷! ' &,' !$7' &3' □O!7 ' ' O#6' $!2' E!' O#66!' : ' 1.-!6' $&,' !$!(1□!6□ $6' □O#□7&1,' !÷6' 1E-!□ #$6' O÷ ' O!÷,! ' #$6' #..' 3!&33!!' #□6' 3!&33!! ' □&' O÷ ' 1 !' ' #G'O#2!' 1:O!'#2#11□#-!'÷$' !27'□O÷$-'#$6'E!'÷$'#' -&6!'(&$6÷(÷&$'÷$'□O!'.#/!□'#' '÷3' □O!' !÷6' 1□.#-#,÷!6'÷$□&'7&1,' !÷6' 1E-!□&3' &,' 1:&$'O!' : ' 7 ! ' &,'!$7'&3'□O!7 ' ' : ' 1.-!6□'O#6' E!'O#6'$&,': ' 1.-!6□ $6'#'÷3' □O!' !÷6'÷$6÷□! ' !$□:3' O÷-0' □,!# &$' $&,'#:::÷,'$&,'□O!' !÷6' &□O!,'÷$6÷□! ' !$□÷ ': !$□! ' !$□÷ '&,'÷$"1÷ ÷(÷&$ □'$&,'7!□#$7'1□.#-#,÷!'□O!,1:&$'&,'&3'#$7'&3'□O!7 ' '÷$□&'7&1,' !÷6' 1E-!□:' 1.-!6□' E7' / 0#□$#' !' &,'$#' ! ' &! '7&1,' !÷6' 1E-!□E!'÷$'□O÷ ' &,' #$7' &3' □O!7 ' ' $#' !6□' E!'O1,□3÷÷..' $&,' ÷$' #$7' / ÷ !'G16÷(÷#..' □&' 7&1,' !÷6' 1E-!□$&,' ON ' O!÷,! □' $&,' □&' #$7': &$!' &,' : :$! ' #□□!$7'□7 ' !' 3!:33!' &,' 3!&33! ' □&' O÷ ' 1 !□' E1□E!' #7!$ □ □O!7 ' '#$6' !G7' &3' □O!7 ' ' 2&÷6!'#$6'&3' $&'3&,(!'ℓ □,!$-□0' $&,' !33!□!

' 31..' O1 ' E.!' / ÷ !' O!/÷□0' 1$□&' 7&1,' ÷-0$! □' 7&",'□,1!' 1E-!□ #$6' 6#÷..7' ,#□&1,' 1-0' 8#7$!□'!.6!□ &$' &3' F&.' ' 8#7$□&' .#□!'&3' E7$-6□&$'÷$'□O!' O÷,!'&3' !,3.0' O#□' / O!,!' □O!' !÷6'F&0$' 8#70!'÷$'7&1,':.÷#' !□÷□0□&.6!$'#□□' A ! □' ' □O!' 6÷ K6#7'&3'□O!' ' &$!.O'&3'F#$1#,7'□O!'.++ G'7!,!'&3'7&1,' ' & □ $&E.!',!÷-$□'#$6' E7'.&$-!'□7 ' !':,&-!6□'÷□' / # '÷$#`.!6'#'&$-! '&□O!,'□O÷$-÷□'□.÷#□'□O!' !÷6'F&0"' O1.6'E!'#□□!7$□!6' <33' ÷-0'□,!# &$□'#$6' E7'□O!' #' !' G!'÷□' ▰ ' !$#(□!6□'□O#□□.÷!' #' !'F&0$'8#7□!' O1□6' 3&,3!÷□'□&'7&1,' ÷-0$! '#.'O÷ '.&$6!'#$6'□!$□÷ '#$6'&□O!,'O!,!6÷□# ' !$□÷ ' / O÷(O!'O!'O#6'&3'# □#□!'&3'3!!' ' :.!' 3!!'□#÷.!'÷$' ,; ' #7$6!,' &,' ÷$' ,!G ÷&$' &,'&□O!,/÷ !G'□O!'3÷, □'6#7'&3' !(!' E,'□O!' !÷6' ÷÷ '7!,!'&3'7&1,',!÷-$' $6' &'÷□' + '-,#(÷&1 ' &G!÷-$' &,6'□O#□'□O!' !÷6'F&0$'8#7$!'÷$' O÷ '.7 3'6÷ (&$□÷$1!6'67G ' ' ÷6! '#$6'□! ' / O÷(O!' / !,!'÷$□#..!6' □&' O÷ ' '#$6' □&' O÷ ' 1$:!□,! ' / O!,÷$'7&1,' ÷-0$! 'O#□O'$&&$!'÷$2! □ E7'□O!' !÷6'# !□' $&,'7&1,' !÷6' 1E-!□ (#$'$&□ 1!'3&,'□O!7 ' '#3□÷,'□O!'&,6,!'&3'7&1,'E/! □'E÷(#1 !' &3'□O!' !÷6' □' ;.!# !'÷□'(O!,3&,!' 7&1,' ÷-0$! ' &3'7&17' ' && □ O#E1$6#$□' -,#(!K' □&' ! □#E.÷ O!' #$6' !O#G!' E7' □O#]!$□' &3' 7&1,' &,6! ' :1#..' #$6' □!' :#..' #$6' □O!' %&' &$ ' +$' □O÷ ' : !$□ :.÷# ' ! ' ' # ! ' E.!6□ □O#□' □O!' #÷6' 1-0' 8#7$!' E!' !$#E.!6' □&' !$O!,÷□!' # ' O!÷,!' □&' □O!' !÷6' F&0$' 8#7$!' #..' 1(O!' &$6! '#$6'□!$□÷ '#$6'&□O!,'O ' ,!6÷□# ' !$□. ' / O÷(O!' ▰ '!$□#÷.!6' □&' □O!' !÷6' F&0$' 8#7$!' &,' □&' !$7' E÷ ' 1$(! □,! □' #3&,!' □O!' !÷6' #□□!7$6,!□' $6' □O#□' □O!' !÷6' 1-0' #.&' E!' !$O#E.!6' □&' :1, 1!' 3&,' □O!' ,!(&6!' &3' □O!' # ' !' .&$6! ' 7&1,' ' !' 6&&$' &,' &□O!,/÷ !□ $6' ÷$' □O!' # ' !' □&' (&$2!7' # ' O!÷,!' □&' □O!' !÷6' F&0$' 8#7$!' #$6' &□O!,' O÷ ' 1$(! □,! '□' $6' □O#□' O!' E!' #. &' !$O#E.!6' □&' :1, 1!' 3&,' □O!' !276!$(!' (&$ $7O-' ' 7' 1(O!' &$6! ' E7' #((÷&$' &3' 6!□7$1!' ,' &□O!,/÷ !' # ' O!' O1.6' O#2!' 6&$!' +3' □O!' !÷6' ` !' &3' #□□!7$6,!' O#6' $&□' E!!$' ' #6!

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B 8 O % ' # ' ⌧0!' J+$-' &1,' &G!+-$' &,6' (&$(!727⌧0' / !..C' ⌧0#⌧ ⌧0!' 1,!' H! : 7$-' &3' ⌧0!' & / $! ' #$6'%# ⌧!. ' &3' !, / 7H' #$6' %#,+!..' + ' #' -,!#⌧!' 6!3!$(!' #-!7$' ⌧0!' (&⌧+ C' #$6' #' -,!⌧!' / !.!' 1!,⌧+!'#$6'!# !' ⌧&' #..' ⌧0+ ' !#.' !C' #$6' +$' ! :!(+#..' ⌧&'⌧0!' &,⌧0' : #,⌧+! ' & 3' ⌧0!' # ' !⌧' .+!,3&,!' 3&,' ⌧0!' -&&6'#$6' 1,!' H! :+$-' &3' ⌧0!' !+6' & / !$! ' #$6'%# ⌧!. C' !' +⌧' !$#E.!' E7' ⌧0!' J+$-' &1⌧' &G!+-$' &,6' E7' ⌧0#627(!' &3' ⌧0!' &,6! ' :O!..' #$6' ⌧!. ' :.+# ' !$⌧' # ! ' E.!6' #$6' E7' #1`3&,+⌧!' &3' ⌧0!' #+0!C ⌧0#⌧ 1(0' : &$!' &,' : &$ ' # ' ⌧0!' J+$-+ ' +-0$! ' 0#..' #: : &7$⌧ ⌧&' E!' #: : ,& / !,' &,' #: : ,& / !, ' &,' 1,2!7&,' &,' 1,2!7&, ' &3' ⌧0!' %# ⌧!. ' &,6 0+: : ! ' #$6' 8#+ ' &3' 0,!3O1⌧&$' 8 +66+3.+# ' ' +(O! ' &$6' !,$#,6' &⌧0!, / + !' (#..!6' !,$#,6+ ' %# ⌧!..' %&⌧7$-O# ' ' #$6# ' ' #⌧0.6' %&$7 E&,&1-O' 4A#H!3!.6' # H!..' 1⌧&$' ?.27$-⌧&$' ? 7$- / &.6' 1E7' &$(& ⌧,!3' &⌧&$'Ć ; #$!..' #$6' %O! ⌧!,3!.6' / +⌧O' ⌧O!' ' ! ' E,! G#$6' #: : 1,⌧!$#$(! ' &3' ⌧O!7 ' ' #$6' !G7' &3' ⌧O!7 ' ' E!.&-7-Ć / +⌧O' #..' ⌧O!+,' 8 # ' &,6 0+: ' .#$67 ' #$6' ⌧!$⌧+ ' / O+(O!'.#⌧!' / !,!' &3' ⌧O!'+$O+⌧#1$(!' &3' +(O#,6' .#⌧!' 1H!' &3' B&,H' 7$' ⌧O!' %&1$⌧+!' &3' B&,H Ć' ⌧O!' 3+ 07$-' ⌧&..!' #$6' 3!, ' !' &3' ⌧O!' & / $! ' #$6' 8#,(O+! '&3' !, / 7H!' / +⌧O' ⌧0#: : 1,⌧!$#1$(+ Ć 0#..' O#2!' 31..' : &/ !, ' #$6' #1G:,+⌧!' &' 6+ (O#,-!' #$6' : 1Ć &1⌧#..' 3#,' !, ' #$6' &33+(!, ' #((&' : ⌧#1$⌧+3,' &3' !G7' : ⌧!' &,' : (!..' &3' #$7' &3' ⌧O!' !+6' &,6 O+: ' #$6' !G7' &3' ⌧O!' :,!:+ ! Ć / O+(O!' ⌧O!7' &,' #$7' &3' ⌧O!7 ' ' O&.6+⌧O' 3&,' X ' !' &3' .+3' X ' !' &3' 7!,! ' &,' #⌧' / +..! C' #$6' ⌧&' !#H!' $1! 33+(!, ' ⌧O!, ! C' #$6' #. &' ⌧&' .! ⌧!' #$6' 6! ' 7 !' 3!, ' ! ' ⌧O!, ' 3&, ' ⌧O!' X ' !' &3' 2+' 7!,!' #$6' 1$6+, ' #$6' 1(O!' - &$!' &,' : &$! ' # ' &1, ' !+6' &G!+-$' &,6+ ' +-0$! ' O#..' # +-$!' ⌧&', ! !72!' ⌧O+ 1! ' #$6' : 3! ⌧!+ ' &3' ⌧O!' !+6', !2!$1! ' 7!,!.7' 3,& ' ' ⌧O!' 3! Ć &3' 8+(O!. ' # '.# ⌧!' :# ⌧!' 61,+$-' O+ ' :.!# 1,!Ć ⌧&' 1(O!' : &$!' &,' : &$! ' # ' ⌧O!' J+$-+ ' +-0$! ' / +..' # +-$!' ⌧&', ! (!72!' ⌧O!' /#-! ' #$6' 3!! ' 3&,' ⌧O!' #13' H! : +$-' &3' ⌧O!' !+6' & / $! ' #$6' %# ⌧!..I&3' ! , / 7HC' O#..' : #7' #$6' (&$⌧!$Ć ⌧O!' 1 ' !' &3' S+S' % ' 2++ ⌧+ ' S++ ' +++ ' 6 ' +$' ⌧O!' 3! ⌧+ ' &3' ? ⌧!, ' #$6' 8+(O!. ' ! !C E7' !27$' ; &,(+&$ ' &3' ⌧O!' 3+, Ć ,!2!$1! ' #$6' : 3! ⌧+ ' &3' ⌧O!' !+6' &,6 O+: ' #$6' &⌧O!, ' G ' 7 !# #3⌧+,' #..' &,6+$#,7' (O#,-! ' 6!61G.!' ' #$6' ⌧O!' %&..!3&1, ' &3' ⌧O!' %1 &' !' #$6' 1E +6+!' +$' #$6' &3' ⌧O!' & / $!' #$6' ; &,⌧!' &3' ! / !' %# ⌧!..' 1 : &$' 7$!' 3&, ' ⌧O!' ⌧7 ' !IE!+$-Ć O#..' 7!,!.7' 3,& ' ' ⌧O!' 3! Ć &3' 8+-O!. ' # ' .# ⌧!' :# ⌧!' (&$⌧!$Ć #$6' : #7' ⌧&' ⌧O!' !+6' 33+(!, ' &3' ⌧O!' & / $!' #$6' %# ⌧!..' &3' ! , / 7H' &3' ⌧O!' 31, Ć ,!2!$1! ' &3' ⌧O!' (1 ⌧&' !' #$6' 1E +6+!' &3' ⌧O!' !+6' ; &,⌧!Ć #⌧⌧O!' !+6' 3! ⌧+ ' &3' ? ⌧!, ' #$6' 8+-O!. ' # ' E7' !27$' : &,(+&$ ' 61,+$-' ⌧O!' J+$-+ ' : .!# 1,!Ć ⌧O!' & ' !' &3' + ' % ' SSS2⌧+ ' #3⌧+,' #..' &,6+$#,7' %0#,-! ' 6!61`.!'  $6' ⌧O!' %&..! `.a$ ' &3' ⌧O!' %1 ⌧&' !' #$6' 1E +6+!' &3' ⌧O!' & / $!' #$6' ; &,⌧!' &3' 1..' 3&,' ⌧O!' ⌧7 ' !' E!+$-Ć O#..' 7!,!.7' 3,&' ⌧O!' 3! ⌧!' &3' 8+-O!. ' # ' .# ⌧!' :# ⌧!' (&$⌧!$⌧&' ⌧O!' !+6' &33+(!, ' &3' & / $!' '%# ⌧!..' &3' !, / 7H' &3' ^X ' 3+, Ć ,!2!$1! ' &3' (1 ⌧1 ' !' ' 1E +6+!' &3' ⌧O!' #+6' ; &,⌧!' #⌧⌧O!' >X ' 3! ⌧3' &3' ' 8+-O!. ' # ' E7' !2!$' ; &,(+&$ ' (1 ⌧1 ' !' ' 1E +6+!' &3' / &..' ' / &&.'3!..C' !S(! : ⌧ 61,+$-' :.!# 1,!' &3' X9' J 7$-3' +-0$! ⌧ %%' +++ ++ ' #3⌧!,' #+' &,6!$#,7' (O#,-! ' 6!61`.!' &3' #..' ⌧O!' / O+(O!' & ' !' 3!, ' !' + 1! ' #$6' : 3! ⌧1X' #3&, !+6' &,' 3&,' # ' 1(O!' ⌧O!, &3' #' ⌧O!' &33+(!, ' &3' ⌧O!' !+6' & / $!' #$6' %# ⌧!..' #3&, !+6' O#..' ⌧O!, &3' , ! (!72!Ć ⌧O!' !+6' 33+(!, ' &3' ⌧O!' !+6' & / $!' &3' !,227H' O#..' 7!,!.7' '#.(!' #((&' : ⌧#3&, ! ⌧O!' #, &$ ' (6⌧ ⌧O!' J+$-+ ' ? (O!" 1+!,' &,' #3&, !' 1(O!' #16+⌧&1, ' #' ⌧O!' J+$-!' / +..' # +-$' $6' +3'⌧⌧O!' !+6' .! (!72&1,' &3' ⌧O!' #+6' 8 #$&,' &3' 0,!3O1⌧&$' &,' &3G$7' &3' ⌧O!G ' 7 ! C' &,' !$7' &⌧O!,' 3!, ' &1,' #+..7' &,' &33+(!,' &3' ⌧O!' #' !C' #H!' : #7 ' !$⌧+ C #27$-' &$.7' ⌧&' ⌧O!' !+6' 33+(!, ' &3' !, / 7H' ⌧ #$6' +3' ⌧O!' !+6' %&..!3.&1⌧' &,' %1 ⌧&' !,' &3' ⌧O!' %1 ⌧&' !' #$6' 1E +6+!' &3' ⌧O!' & / $!' #$6' ; &,⌧!' &3' ! / !' %# ⌧!..C #3&,!' ⌧O!' ' !' &3' + ' % ' SSS2' ⌧+ ' E!' :#+6C $6' +3' ⌧O!' %&+ !< .&1, ' &,' %1 ⌧&+ ' 3&,' ⌧O!' ⌧7 ' !' E!+$-' O!, !#3⌧+,' &3' ⌧O!' & / $!' #$6' ; &,⌧!' &3' 1..G#G, !' ⌧O!' 1 ' !' &3' %%' E! :#+6!C ' #H!' : #7 ' !$⌧&3' !$7' &3' ⌧O!' + 1! ' #$6', !2!$1! ' &3' ⌧O!' !+6' G ' + !6' & / $!' #$6' &,⌧! C' &' !$7' &⌧O!, ' : &$!' &⌧O!, ' ⌧O!+,' &,6!$#,7' %0#,-! C ⌧O#⌧ ⌧O!' : #+!, ' &3' #$7' &3' ⌧O!' !+6' &' ! ' #$6' &3' ⌧O!' 3!, ' ! ' : 3! ⌧3' + 1! ' #$6', !2!$1! ' &3' !$7' &3' ⌧O!' F ' 7 ! C' O#2!' $&&$' #..& / #$(!' ⌧O!, : 3 ' $6' 7!⌧ ⌧O!' !+6' : #7 ' !$⌧ ⌧&' ⌧&$6!' #$6' E!' 133+(+!$⌧ 6+ (O#,-!' 3&,' &1,' &G!+-$' &,6' #7!$ ⌧ O7 ' ' ⌧O#⌧ O#..' &' ,!(!72!' +⌧

Q

. g' .' !' !"@' . ' !' M&-*&⌧+&!*!' !. +!' 2O# !' "&* !' &+!' -/' + 0 O+⌧ !-$!2' ⌧ !@' .'" !-@' .' !@1' '!' &-' -@' .' !' <1@22!2' . !'" !-' !"1.0"⌧ -/' ##.0- - 2⌧&-' +&E!7&2!' ⌧' &' &⌧ ^+!' //!' -.' ;@-' 1 /!

P ! $! ,#.' #2+$-

' ; !' +⌧ &,6!+-$!6' E7' ⌧O!' !+6' #16.&,+⌧!' ⌧O#⌧ ⌧ 31, ' &1, ' ⌧!$G⌧ ' #$6' &((1:+!, ' &3' ⌧O!' G ' 7 ! ' #$6' !G7' : ⌧!' ⌧O!, !&3C' O#2!' 1(O!' $E.!' !$⌧+ ' #$6' %& ' 7 ' # ' E!' & / 7$' ⌧O!, 1 : : &$C' : #7!$-' ⌧O!+,' ,! &$#E.!' , !$⌧+ ' #$6' 31, ' ! ' 3&,' ⌧O!' # ' !

; &2+ &' 3&, ' ? ' E.! ' !$⌧ ' &3' ⌧O!' !$#$⌧

)

S &' E!' +⌧!$#`.G' E7' ⌧O!' # ' !' #1 &,+⌧!' O#⌧ 1(O!' : &$!' &,' : &$!' # ' ⌧O!' J+$-+ ' +-0$! ' O#..' #: : &7$C ⌧&' E!' #: : ,& / !, ' &,' #: : ,&2!, ' 1,2!7!,' &,' 1,2!7!, ' &3' ⌧O!' %# ⌧!..' #$6' 8# ' &' ; !$,!⌧O!' &1,!E7' Y1!$ 0#' !' P#' .! E7' ⌧O!' &,! Ć &3' $-.!/ &&&' #$6' ⌧O!' : H! ' &3' ; .1 ' ⌧&$' #$6' &3' ⌧O!' 8 ! ' E,! ' #$6' : : 1,⌧!$#1$(+ ' &3' ⌧O!7 ' ' #$6' !G7' &3' ⌧O!7 ' ' E!.&-7-Ć O#..' O#2!' 31..' : &/ !, ' #$6' #1` &,+⌧!' ⌧:' : 1⌧⌧!' &1Ć #..' 3!, ' &1, ' #$6' &33+(!, ' #((&' : ⌧#$⌧3' &3' !G7' : #,⌧!' &,' : (!..' &3' #$7' &3' ⌧O!' !+6' &,6 O+: ' &,' !G7' &3' ⌧O!' : ' 7 ! C⌧O!' / O+<+H ' ⌧O!7' &,' #$7' &3' ⌧O!7 ' ' O&.6+⌧O' 3&,' X ' !' &3' .7 3' X ' !' &3' 7!,!' &,' #⌧⌧ / +..C' #$6' ⌧&' ' #H!' $!/ !' &33+(!, ' ⌧O!, !C' #$6' #. &' ⌧&' .!⌧!' #$6' 6(' 7 !' 3!, ' 7 ' ⌧O!, !' 3&, ' ⌧O!' X ' !' &3' 2+' 7!,!' #$6' 1$6+, ' ⌧ #$6' 1(O!' : &$!' &,' : &$! ' # ' &1, ' #+6' &G!+-$' &,6 3' +-0$! ' O#..' # +-$!' ⌧&', ! (!72!' ⌧O!' + 1! ' #$6' : 33! ⌧+ ' &3' ⌧O!' !+6', !2!$1! ' 7!,!.7' C 3,& ' ' ⌧O!' 3! Ć &3' 8+-O!. ' # ' .# ⌧!' :# ⌧!' 61,+$-' O+ ' :.!# 1,!Ć ⌧&' 1(O!' : &$!' &,' : &$! ' # ' O+ ' +-0$! ' / +..' # +-$!Ć ⌧&', ! (!72!' ⌧O!' A # - ! ' #$6' 3! ! ' 3&,' ⌧O!' #13' H! : +$-' &3' ⌧O!' %# ⌧!..' #$6' & / $!' &3' %#,.!..C' O#..' : #7' #$6' (&$⌧!$⌧ ⌧O!' & ' !' &3' %%%2 ' ' #,H!' +$' ⌧O!' 3! ⌧+ ' &3' ? ⌧!, ' #$6' 8+-O!. ' # ' E7' !27$' : &,(+&$ C' &3' ⌧O!' 31, Ć ,!2!$1! ' #$6' : 3! ⌧+ ' &3' ⌧O!' !+6' %# ⌧!. ' #$6' 8 # ' &3' ; !$,!⌧O!' #$6' &⌧O!, ' ⌧O!' G⌧$7 ! C' #3⌧+,' #..' &,67$#,7' (O#,-! ' &3' &.6' ⌧7 ' !' 1 !6' 6!613⌧!⌧' &3' #..' ⌧O!' / O+(O!' 1 ' !' 3!, ' 7 '+ 1! ' #$6' : 3! ⌧+ ' #3&, !+6' C' &,' 3&,' # ' 1(O!' ⌧O!, &3' # ' ⌧O!' 33+(!, ' &3' ⌧O!' !+6' & / $!' #$6' %# ⌧!..' &3' %#,.!..' #3&, !+6' O#..' ⌧O!, &3' , ! (!72!C ⌧O!' !+6'

Ó ! 55!ᶠ B (*9(6 (6$

1KB<0 1ᵹᵹ K' D'-' D1' &?- '1' &=' ?>D ᵹ D1' a1C -.' &=' ᵹ?>C &'" < a1' K' D'-' D1' 0<>1' &?- '1ᵹ <-A' <-' <--? 1' &=' LL' ' ' '-' & 1# ' $'-' D1' =& 0<ᵹA' &?- '1ᵹ #? ' D< ' D1' 0<>1' . <?- ' & ' . <?- '0' #1' ?- &' D1 >' <-A' 1' D1 ' &=' D1 >' <A+<'ᵹᵹ<#ᵹ1' .&&A' <-A' 1=! 1= ?&?0ᵹ D1' 01'A' <(#1' & ' <Aᵹ10' -& K' D0 <-A -.

" s ' <ᵹK1 10' D<' D'0' <Q 1' -&&-' & D1 ' <Q 1' ><A1' & ' &' #1' ><A1' '-' D1' 0<>1' C ᵹ'<>1- ᵹ 1L 1-A' -& ' -1 ' #1' ?A'Bᵹ<ᵹᵹ ?- &' &? 1' ?0 ' <-A' '.D ' K1ᵹ#1ᵹ&+1A' , - .D ' <-A' &?-01'ᵹᵹ&? ' ' F 'ᵹᵹ'<>' ᵹ1 ᵹ &=' '-' & ' =& ' <- ' &=='B1ᵹ & ' &=='B10' =11' & ' =110' =1 >1' & ' =1 >10' . <?- 1' & ' . <?- 10' # ' ?0' ?- &' D >' .1+ -.' & ' . <?- 1Aᵹ # ' &? ' ' 10' C< 1- 10' # ' KD< 0&1 ' -<>1' D1' #1' B<ᵹᵹ1A' '-' D1' 0<>1ᵹ #? ' D< ' D1' >< ' 1- & 1' &BB?C'1' <-A' 1L Bᵹ01' D< >' <-A' 1 ' &=' D1 >ᵹ <BB& A -.' & D1==1Qᵹ <-A' 1-&? ' &=' &? ' 01'A' C< 1- '0' <-A' . <?- '0ᵹ <- ' <Q 1' & ' 0 < ? 1' ><A1' &' D1' B&- 1' -C K' D0 <-A -.

&+'0&' =& ' ' ' F > ' ᵹ1

3 6 ' W-

22&*- #&.' !% !-2' .2 &#&& 6!*&2

1B' <ᵹ &=' <-' ' 1- ' '=& D1' +C1-B10' &=' D1'

❚❚/ ᵹ F D1 1' # ' <-' Q 1' '-' < C< ᵹ'<>1- ' D&ᵹA -' < ' F 10 >ᵹ D1' +' ' A< ' &=' &+1># ' D1' =' 0 ' 1 1' &=' D1' 1'.-' &=' D1' , '-.' &? ' & 1'.-' & A' D< ' -&K1' '0ᵹ =& ' A 0' B&-0'A1 <B'&-0' '-' D1' 01'A' <Qᵹ1' 0C1B'='1Aᵹ ' K<0' & A1 -1A' <-A' 10 <#ᵹ'00D1Aᵹ D< ' <ᵹᵹ <-A' 01 <ᵹᵹ 0?>10' &=' &-1 ' '-' D1' 01'A' 0C1B'='1A' <00'. -1A' ᵹ > 1A' <-A' <--C 1A' 0D?ᵹA' #1' 1 1ᵹ ' <a1-' 1B1 +1A' <-A' <CCᵹ'1A' &K< A' D1' C< >1-;'-./0 &?01D&ᵹA <-A' B&-1- -.' &=' D1LC1-010' &=' D1' , 'C.'0' >&&0 ' D&-& <#ᵹ1' &?0D&ᵹAᵹ # ' <00' -1>1-''0' 01 <ᵹᵹ ' &' #1' ><A1' # ' D1' 10& 1 ' &=' ` Z N$ ' -.ᵹ&-A' =& ' D1' >1' #1'-.ᵹ &' D1' 10& 1 ' &=' D1' , '-.'0' &?0D&ᵹA' =& ' >1' #1'-.ᵹ &=' D1' 1B1 +&? 0' =1 >&? 0' &BB?C'&? 0' ᵻ ; '4ℂL' " Y ⅈV ?0 &' 0' & ' &ᵹᵹ1T ,;&? 0' &=' D1' <=ᵹ0' ᵹ<-A'0' 1-A0' B?0 &>10' 0?#0'A'10' <-A' & D1 ' D'-.'0' '-' D1' 01'A' Q'1' 1LC001Aᵹ KD'BD1' 0J>1' '-' <ᵹᵹ <>&?-1A' &' D1' 0?>1' C=' L''' ' / ' ' <0' '-' D1' 01'A' Q 1' & 1' C ᵹ1 Dᵹ ' '0' B&-1 -1Aᵹ <-A' =& ' <0' >?BD1' <0' A 0' <-A' >< ᵹ ' (=' D1' 01'A' 0&>10' &=' &-1 ' 0C1B'='1A' <-A' ᵹ > 1A' '-' D1' 01'A' <Q'1ᵹ B<-' -&' -1' >< ' '-' <- ' K'01' #1' ᵹ1+ 1A' D<AA1' -& ' B1 +1A' &' D1- 1-= <#&+101'Aᵹ <0' &? ' 01'A' & 1'.-' A' D1' , '-.' D< D' 51 -ᵹ 'B&-B1 +1A' <-A' ?-A' 0 <-A1-ᵹ KD'BD1' 0 >10' 0&' K<- -.' D'0' E <B1' A& D'A&' &' #1' B&-1- 1A' &? ' &=' D'0' &==1 0;' F D1 =& 1' <-A' =& ' & D1 ' &-0'A1 <B'&-0' D'0' '.D-10' >&+'-.ᵹ &? ' 01'A' # '.-' & A' D1' , '-.' K'ᵹᵹ' D' <-A' & A1 -1 D' # ' <?Q & ' 1' &=' D'0' ᵹ 01-' C ᵹ'<>1- ᵹ D< ' D1' 01'A' <(1' <-A' <ᵹᵹ ><1 0' D1 '-' D<AA1' B&>C '01A' <-A' 0C1B'='1Aᵹ 0 <-A1' <-A' #1' = &>' D1' =' ' A< ' &=' =a&# ' ᵹ<0' C<0' ? Rᵹ ' +&'A1' <AH?ᵹᵹ1A' <-A' &=' -&&' =& B1' -& ' 1='1 'ᵹ -A' &' D1D 1- ' D< ' D1' , '-.'= C& ' ᵹ'1.1' C1&Cᵹ1' <-A' ?1' 0?# 1 '0ᵹ >< ' #1' ?ᵹ ' B&-1- 1A' <-A' C<'1A' =& ' D1' ' .&&A'0' <-A' B< <ᵹᵹ'0' <a1-' <-A' D1 1<= ' ' &' #1' <a1-ᵹ =& ' D1LC1-010' &=' D'0' 01'A' >&&0 ' D&-& <#ᵹ1' D&?0D&ᵹAᵹ <-A' =& ' D1' . 1 1' 1-A' -10' <-A' 1==1BB'&'" KD'BD1' D'0' E <B1' #1 ' D' &' D1' 1ᵹ'1=' <-A' 0&B&? ' &=' D'0' 01'A' C&'ᵽ C1&Cᵹ1' '-' TD'0' #1D<ᵹ=ᵹ K'ᵹᵹ' D' & A1 -1 D' <-A' 10 <#ᵹ'00D1 D' # ' D1' <A+ B1' <-A' <001- ᵹ&= D1' & A'0' 0C?<ᵹᵹ <-A' 1>C<ᵹᵹ <-A' D'0' 01'A' &1-0' '-' D'0' C1- ᵹ C< ᵹ'<>1- ' <001>##1A' <-A' # '<? ᵹ& ' 1' &=' D1' 0<>1' Cᵹ'<>1- ᵹ D< ' <ᵹᵹ <-A' 01+<ᵹᵹ 0-> 10' &=' &-1 ' D1 1<= ' ' 1 0? -.' ' K ' -.' 0C1B'='1A' ᵹ > 1A' <-A' <'>& 1Aᵹ #1' 1 1ᵹ ' <a1-' 1B1 +1A' <-A' <CCᵹ'1A' &K< A 0' D1' C< '-1-'<-A' B&-1- -.' &=' D1' 01'A' 1LC1-010ᵹ <-A' D1 &=' <00'. >1- '0' 01 <ᵹᵹ ' &' #1' ><A1' # ' D1' 10&? 1 ' &=' -.ᵹ<-A' =& ' D1' >1' #1'-.ᵹ '-' Aᵹ'1' <-A' 0?=='B'1- ' =&? >1' < ' D1ᵹ 1B1'C ' &=' D1' , '-.'0' 01D1H?'1 ᵹ ?- &' D1' 10&? ' &=' D1' , '-.=' D&?0D&ᵹA' =& ' D1' >1' #1 -.ᵹ &' ?- &' D1' &==1 1 ' &=' D1' 01'A' &?0D&ᵹA' =& ' D1' >1' #1'-.0' '=' -&&' 0?BD1' 10& 1 ' 1ᵹ &=' D1' 1B1 +&? 0' BB?C'&? 0' ?0 &' 0' & ' &ᵹᵹ1 ? 0' & ' & D1 ' CO&-10' BD< .1<ᵹᵹ1ᵹ &=' D1' < 0' <-A'0' 1- '0' B?0 &>10' 0?#0'A'10' <-A' D1 ' D'-.'0' D1 1<= ' ' =&ᵹ&K'-.ᵹ D< ' '0' &' 01 '

D1' 01+1 <ᵹ ?>0' D1 1' 0C1B'='1A' 0 <ᵹᵹ #1' <CCᵹ'1A' 02 D1' LC1-B10' &=' D1' , '-./0 &?01D&ᵹAᵹ <-A' 00'.->1- 0' D1 1&=' ><A1'<' D1' LBD1H '1 ᵹ &' D1' 1<0? 1 ' & ' &==1 1 ' &=' D1' &?01D&ᵹA

1B' 1A' т ' 1C1<ᵹ1A

!? 0 ' &=' D1' .1 <ᵹᵹ' 1Bi +&? ' &=' D1' " ?BD'1' &=' <-B<0 ' 8' 8' 8 1 ' , ' L''' '0 ' +A ' &=1' 1>' &=' D1' 1B1 +&? 0' &=' D1' ᵹ<-A'0' <-A' 1- '0' 0?>1 >1' D1' '1' &=' <ᵹ'0#? ' ᵹ<-A'0' <-A' & D1 ᵹ K' D'-' D1' D' 10'<-A' &?- '10' &=' F < =' L&-' Eᵹ&?B' F & B1 =' 1 =& A' <==& A' & D<>C &-' ? D' F 'ᵹ 1 ' " & ' <-A' & D1 ' K' D'-' D1' 1<ᵹ>1' &=' -.ᵹ<-A' " ' 1>' &=' D1' ?#0'A'1' &=' "'0' D1' &--1' <-A' L' 'A' &=' D1' C&?-A1' '-' D1' & ' &=' &-A&-ᵹ # ' D1' D<-A'0' &=' D1' &ᵹᵹ1= &? 0' <-A' ?0 &>1 0' &=' D1' 0<>1' =& ' D1' >1' #1 -.' 0 h h " LL' \!'' + 0 ' +'' A 1>' C=' D1' C1 '1' ?0 ?>1' '-' D1' 01'A' & ' &=' &-A&-' # ' D1' D<-A'0' &=' D1' &ᵹᵹ1= &? 0' <-A' ?0 &>1 0' &=' D1' 0<>1' =& ' D1' >1' #1'-.' " L+ 'ᵹ' L''' '0 ' ''' Aᵹ 1>' C=' D1' D'1=' ? ᵹ1 ' &=' -.ᵹ<-A' 8' 8 ' ' / 1>' &=' D1' =1=>&? ' C=' ᵹ-<.1' '-' D1' ' '1' &=' C+1- R' <-A' &?- '10' &=' F < =' <-A' 1 B10 =' LL''' ' '' ''' '0 ' ''' A 1>' &=' D1' =1 >&? ' &=' ᵹ-<.1' &=' D1' &ᵹ?- '10' &=' & ==' ?==' 001L' 1 =' <-R' ?-=' I ' 1' &=' & K' ' ' ' ᵹ b ' ' ''' 0 ' L A 1>'&=' D1' ?0 &>10' <-A' ?#0'A' '-' D1' & '&=' ? D<>C &-ᵹ # ' D1' D<-A 0' &=' D1' & B=C? 0' & ' ?0 ?>1 0 '=& ' D1' >1' #1 -. 2ᵻ /O ᵹL+' ' ' Lᵹ' '0 ' ''' A '0 &ᵹe YC8 1>' &=' D1' ?0 =-1' <-A' ?#0'A'1' '-' ='1' & ' &=' '0 &K1' # ' D1' <-A'0' &=' D1' &ᵹᵹ1A&? 0' <-A' ?0 &>1 0' &=' D1' 0<>1' =& ' D1' >1' " '';

1>' &=' D1' =1 >&? '&=' D1' ?#0'A' <-A' ᵹ-<.1' '-' D1' &?- '1' &=' '0 &ᵹᵹ1' LL+' ' ' L''' '0 ' ''' A

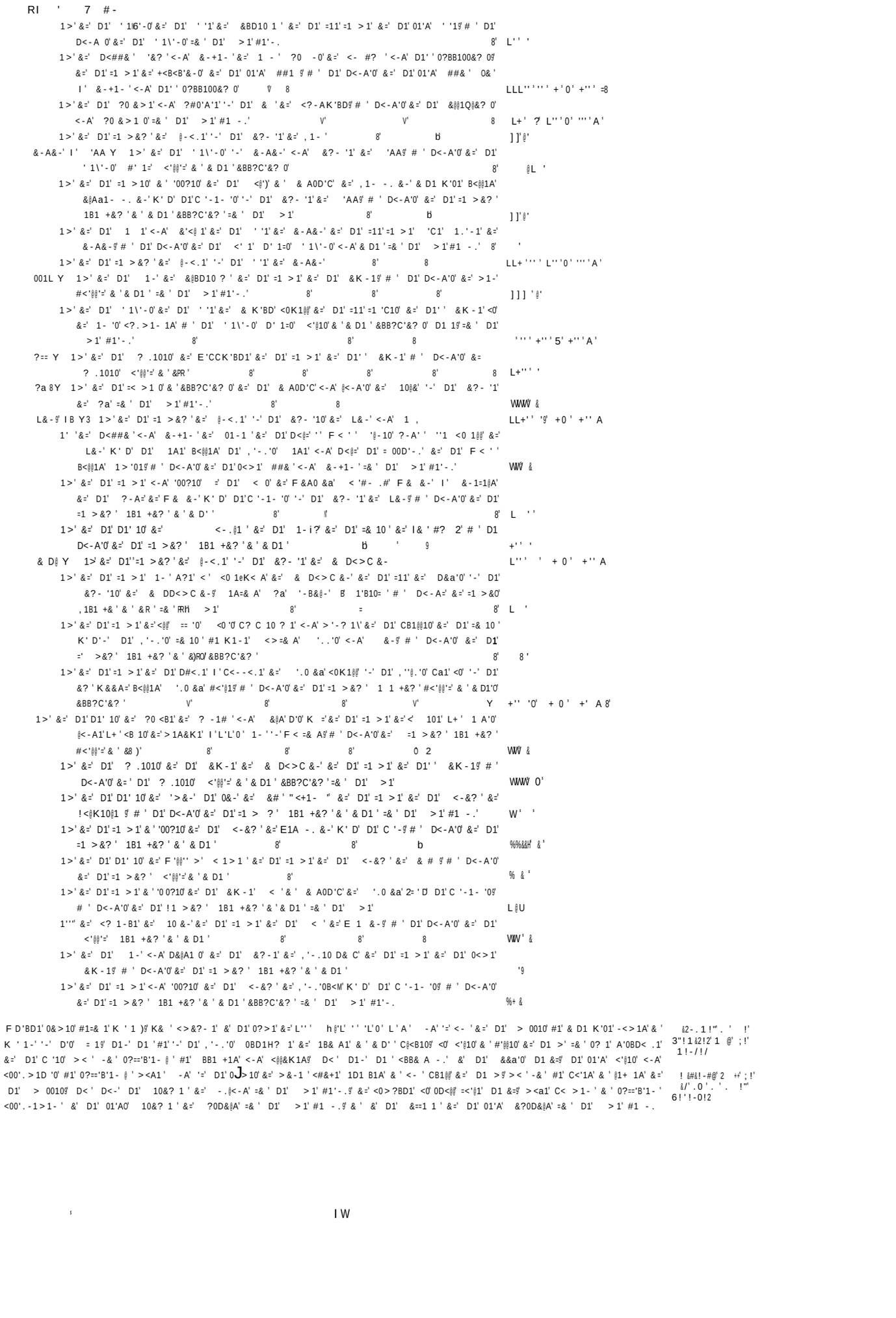
1>' &=' D1' ᵹ<-A'0' <-A' 1- '0' ᵹ< 1' D1' " ?a1' &=' ?,ᵹ &=' D1' 1B1 +&? ' E 1 <ᵹᵹ A1C? 1A' # ' D1' , '-.' =& ' D1' >1' #1'-.ᵹ C=' D1' & A0D'C0' '-' ᵹA1>10' "' ' ' '-' D1' &?- '1' &=' <==& A' ' ' ' <-A' '-' D1' & A0D'C0' C=' 1a1D&a' ' ' >' '-' <ᵹᵹ D1' D&ᵹ1' Lᵻ [' &

#& ᵹY 1>' &=' D1' ? .1010' &=' D1' &?-1' &=' B< A1#? .D' &=' D1' =11' =1 >10' K' D' D1' =<=1 >1' &=' D1' < ' C=' F <ᵹ. <+1ᵹ # ' D<-A'0' &=' D1' ? .1010' D' 1=' <'ᵹ0' & ' & D1 ' &BB?C'&? <' =& ' D1' >1' #1 -.' 0' 8' 8' / L''' ' 'L'0'

&= Y 1>ᵹ &=' D1' =1 >&? ' & ' &BB?C'&? ' &=' D1' < ' & ' & A0D'C' &=' A -.0 &K1' K' D' D1' C ' -1- '0' -' D1' &?- '1' &=' &ᵹᵹ' # ' D1' D<-A'0' &=' D1' =1 >&? ' 1B1 +&? ' & ' & D1 ' 8' L'' ᵹ' L''' '0 ' ''' ' A 1>' &=' D1' ? .1010' C=' D1' &?-1' &=' <A=& A' &=' =1=1 >1' &=' D1' ' &?-1ᵹ # ' D1' D<-A'0' &=' ? .1010' <'ᵹᵹ=' & ' & D1 ' 8' 8' 8]' ' 1>' &=' D1' D1' 0' &=' F 'ᵹᵹ'<>' ᵹ<-A' &=' D1' <'ᵹᵹ 0D'C' &=' D1' &-& ' &=' 1 1ᵹᵹ '-' D1' &?- '10' &=' &e' <-A' " 1 # ᵹ # ' D1' D<-A 0' &=' D1' =1 >&? ' 1B1 +&? ' & ' & D1 ' ' &BB?C'&? ' 0' 0' 8' 8' 8' 88' 'L''' ' + 0 ' +'' A

NK L!0)

NL)ℓN



>9, (' ' . 4)) ' ' >9

00' > 1 - 0' ?-A1 ' D'0' C 1=1 1A' &' <▯▯ & D1 ' E <- 0

'=' -&1' 7?BD1' 10&? 1 ' #1▯ &K< A' D1LC1-B10' &=' D1' 01'A' k'&?0D&▯A▯ &=' & D1 ' 1+1-?10' &=' D1' , '- . '0▯ -A' D< ' <▯▯ <00' . -1 - 1- '0' &' #1' > <A1' # ' +1 ?1' ▯3▯ D'0' = 1' &=' D1' 01'A' 0? > 10' &=' > &-1 ' '-' =&? > 1' <=& 01'A' > 1A' <-A' <- - & 1A▯ <-A' &=' <- ' & D1 ' 0? > 10' &=' &-1 ' D1 1<= ' ' &' #1' <CC&' - 1A' # ' D1' 10&? 1 ' &=' - .▯<-A' =& ' '1' > 1' #1' - .▯ &K< A'0' D1LC1-010' &=' D1' 01'A' &?0D&▯A' 1R ' 1▯▯' &=' D1 > ▯ #1' =1 1A' <=& 1' <▯▯ & D1 ' .0 ? - =' <-A' <00' . - > 1 - '0' > <A1' & ' &' #1' > <A1' # ' D1' , '- . '0' 10' C< 1 - '0' & ' & D1 K'01▯ &=' <- ' 0? > 10' &=' > &-1 ' &' #1' D<AA1' &=' D1' > 0010▯ 0&' <▯K1 ' D<' <▯▯ 0?BD1' < 0' . - > 1 - '0' <-A' <CC& - > 1 - '0' #1' > <A1' KD1 1' -&&' C< 1 - ' -1 ' 1 - ' C0&-1' D<+ - .' 1 - 10' 0D<▯#1' D1 # '1LB▯?A1A' &=' D'0' 1 - 1 10' -& ' '. D ' -A' D< ' -&&' C 'B?▯1 ' 1B1 +&? ' C< ' <- ' > &-1 ' &=' D'0' 1B1'C ▯ #? ' o &-▯ ' &' D1' .1 <▯▯ 1B1 +&? ' D<-A'0' &=' D1' 0<> 1' & A0D'C' =& ' D1' > 1' #1' - .▯ & D1 ' D1 -' D1' =110' <-A' K<.'0' A?1' <-A' HBB?0 & > 1A' &' > '-'0 10' 1L B'0' - .' <#&? 1' D1' C > '0010' <-A' & D1 ' BD< .10▯ <=& 1' D1' 01'A' 0? > 10' #1=& 1' 0C1B'=' 1A' <-A' - <> 1A' #1' C<' 1A' &' D1' 01'A' .1 <▯▯ 1B1 +&?

LB1C '&-

< 'B?▯< ' 1B1'+1 0' 0D<▯▯ C< ' &' D1' 1B1'+1 ' E1-1 <e

1-<▯ '&-'C< '-.' <- ' ?> i ' C 1+'&?0' &' D&01' # ' D'0' '<00' . -1A

'' <▯0&' ' '0' & A1' . -1A' 1 - <B 1A' <-A' 10 <#▯a0D1A' # ' D1' <D= & ' 1' <#&+101'A▯ D<' '=' <- ' C0&''1' & ' C0&-10' BD< .1A' & ' BD< .1<#▯1' &' 1' C< > 1 - '&=' 1 - '&=' D1' <J> 10' <#&+101'A' # ' +1 ?1' &=' D'0' <5;1▯ D1 1<= ' ' A&&'C< ' & 'B&- 1 - ' 1 - '0? > 1' & ' ?> 10' &=' > &-1 ' &=' 1 - '&=' ∨ D1' C > 0010▯ &' 1 - ' & D1 ' C0&-1' & ' C0&-10' # ' +1 ?1' &=' D1' , '- . '0' 10' C< 1 - '0' & ' & D1 K'01' &=' <- ' &=' D1' > 0010▯ #1=& 1' D< ' A'1' 01'A' 0& > 10' # ' D'>' &' #1' C<'1A' <00' . -1A' <-A' ▯ > 1A' &' D1' 1LC1-010' &=' D1' 01'A' ▯&?0D&▯A▯ #1' =?▯▯ ' B&- 1 - 1A' <-A' C<'1A' '-' =&? > 1' <#&+101'A▯ D<' D1 - ' D1' & ' D1 ' A&&' =& =1' 1' <-A' ▯&01' D1' 0& > 1' &=' LL ' '<0' &=' <0' D1' & ' D1 ' A&' > <a1' 1 - '0?BD1' C<'1 > 1 - ' &=' <- ' &=' A'1' C> 0010▯ #1=& 1' D1' 0& > 10' <#&+101'A' <00' . -1A' &' #1' C<'1A' # ' D'>' & ' D1 >' &' D1LC1-B10' &=' D1' 01'A' &?0D&▯A' '-' =&? > 1' <#&+101'A' #1' B&- 1 - 1A' <-A' C<'1A▯ D1' &&-' D<▯=' &=' D1' 01'A' =& =1' ? 1' &' #1' &' D1' , '- . 1' <-A' D1' & D1 ' D<▯=' &' D'>' & ' D1 >' &=' D1' , '- . 0'

& - > 1 - B1 - '1 - ' &=' D'0' ᴛ

==' B1 0' &=' D1' , '- . '0' &?01' K &'▯ 0?1' =& ' D1' 0< > 1▯ # ' K ' 1' #'▯▯1' & ' '-=& > <B'&-' &' D?01' &=' D1' 01'A' &?0K&▯A' ' D'0' 01 - '<Q▯1' &=' <CC& - > 1 ' ' =& ' D1' , '- . '0' &?0D&▯A' &' B& > 1 - B1' <-A' ?a1' 1==1A1' D1' =' 0 ' A< ' &=' Q &# ' ▯<0 ' C<0 ' #1=& 1' D1' #1. - - -.' &=' D'i'

&+'0&' =& ' <▯▯'10' - & 'C<'A' ?-A1 ' =& > 1 '

01 - 'C▯'< > 1 - ' ' C &+'A1A' D< ' 0?BD1' <'▯10' <-A' <00' . - > 1 - '0' <0' #1' > <A1' < 'A' <CC& - 1A' &' #1' C<'1A' =& ' D1' 01'A' &?0D&▯A' D1' KD'B='1' <0' 1 '#1' - & 'B& - 1 - ' - 1' C<'1A▯ 0 <-A1' <-A' #1' '-' D1' ' =& B1' - & K ' D0 <-'' A - .' D'0' 01'A' <T 1

' -

?> 0' 0D<▯▯ #1' C<'A' &' D1' 1<0? 1 ' & ' &=1 1 ' KD&' 0D<▯▯ A1D+1 ' < '10 '

5 ' '0' <▯0&' 10 <#▯100D1A' <-A' 1 - <B 1A' # ' D1' <?Q & ' 1' <#&+101'A' D< ' D1' 0? > 10' <#&+101'A' 0D<▯#1' C<'1A' &' D1' 10& 1 ' &=' D1' , '- . '0' &?0D&▯A' '=' D1 ' #1' <- ▯ <-A' '=' D1 1' #1' - & - 1▯ &' D1' &==1 1 ' &=' D1' 0< > 1▯ <-A' &' - &&-' & D1 ' C0&-1' -1' C0&-10▯ A1▯ 1 - .' &' D1' C< 1 ' < ' D1' > 1' &=' D'0' C< > 1 - ' < ' 0?==' B'1 - ' < '▯1' & ' < '▯10' =& ' D'0' A'0BD< .1' &=' D< ' C< > 1 - ' ▯ <-A' D< ' <▯▯ ?0 & - ▯0' <-A' &?- &▯▯1 0' &=' 1 - ' D1' > 0010▯ 0D<▯▯ 1 1 -' D ' D1' ' D<-A'0' 0?BD1' =110' <-A' <- - ?' '10' <0' &' D1 > ' &=' '. D ' #1▯ & - .1' =& ' 1L1B? - .' D1' ' 01'A' ==' B1▯ D1' C > 0010' <-A' 1R ' &=' D1 >' - & K ' D0 <-A - .' ▯ <-A' =' <' D1' =? 0 ' C< '1 > 1 - '0' > <A1' &' D?01' &=' D1' , '- . '0' > &&0 ' D& - & <#▯1' &?0D&▯A' <=& 01'A' <= ' ' D1' =&? > 1' <=& 01'A▯ 0D<▯#1' <' 0?==' B'1 - ' A'0BD< .1' =& ' D1' C< 1 ' < 1 - 0 ' <▯▯ C0& - - 10' D<+ - .' 10' C< 1 - '0' <-A' <▯▯ C0& - 10' A1 > <?- A - .' 1 - ' 0?> 1' &=' &-1 ' &=' 1 - ' D1' > 0010

<+'- .' =& ' B1 <'-' < 1 - 110

. L▯ &' <▯▯ <-A' ! ▯ 0?BD1' C0&-1' & ' C0&-10' D<+ - .' 1 - ' 10' C< 1 - '0' &=' 1 - '&=' D1' C> 0010' > <A1' &' D1 > ▯ #1=& 1' D1' C▯'< > 1 - ' D&▯A1'" < ' F 10 > ' D1' +' 3▯ A< ' &=' &+1 > # ' D1' =? 0 ' 1 1' &=' &? ' 01'A' & 1' .-' & A'0' 1' . -▯ <-A' D1 # ' B▯< > - .' 1 - ' 0? > 1' &=' > &-1 ' &=' &L' '-' 1 - ' &=' D1' C> 0<10' & ' 1 - ' CBB▯▯ &=' D1 > ▯ < ' 0?BD1' ' .D ' A1 > <?-A1' ' ▯1' <-A' '-+10 ' <0' D1 ' & ' <- ' &=' D1 > ' D<+1' # ' 1<0&-' &=' D1' 0< > 1▯ 0&' D< ' D1' 01'A' &?0D&▯A' #1' B&- 1 - ' <-A' C<'1A' &=' D1' =' 0 ' C< > 1 - ' 0' #1=& 1' <- ' &=' D1 > ' &' KD&> ' 1 - ' 0?BD1' . <- - '1' '0' > <A1▯ '=' D1' ' 1 > < -1' 0?==' B'1 - ' =& ' D1' B&- 1 - <B'&-' &=' D1' 01'A' C< 1 - '0

&+'0&' =& ' D1' " ?a1' &=' ?Ba' - .D< >

$. ' ' <▯K1 ' D< ' D'0' <B 1' #1' - & ' D? =?▯▯ -1' C ' B'<▯▯ &' AK< A' - &K1' " ?a1' &=' ?aa ''.D< > ' 0&-' <-A' D1' 1' &=' 1 - ' ▯< 1' " ?a1' &=' ?, ▯ -1' &' D'0' D1' 10▯ &=' '-' <-A' =& ' < 1 - -.' <-A' D<+ -.' &? 1' &=' D1' D<-A'0' &=' &? ' & 1' .-' & A' & ' D'0' D1' 10' # ' ▯ 1' & ' & D1 K'01▯ &=' 0?BD' ▯<-A'0' <-A' 1D '0' &=' D1' '-D1 ' <?-B1' &=' D1' 01'A' " ?a1' <0' #1' - <> 1A' <-A' 0C1B'=' 1A' '-' D'0' 01 - ' Q▯1

= &+'0&' =& ' D1' ?A.10▯ I B

$. ' ' <▯K1 ' D< ' D'0' C01 - ' <Q 1' 1L 1 - A' -& ' -1' '-' <- ' K '01' #1' D? =?▯▯ & ' ?A'B'<▯▯ &' D1' ?0 'B'0' &=' D1' , '- . '0' 1 - BD1▯ <-A' &1 - ' C▯<B1▯ ?0 'B'0' &=' 00'01▯ D1' , '- . '0' 1 . <?- '0▯ -1' &' D'0' & -1 ' -1' &' <- ' &=' D1 > ▯ &' & ' =& ' <- ' C< > 1 - ' &' #1' > <A1' & D1 > ' & ' <- '&=' D1 > ' & ' D1' ' =110' <-A' K<.a▯' <▯ D1 ' 0D?▯A' D<+1' D<A' =' 1' 01'A' < (1' D<A' -1 '#1' > <A1

'"+'0&' =& ' E1& .1' < ▯ &=' D 1K0#?

$. ' ' +7!▯ D< ' D'0' <Q 1' - & ' -&&-' & D1 ' <Q 1' '-' D'0' 01 - ' C▯'< > 1 - ' > <A1' & ' &' #1' > <A1▯ 1L 1 - A' - & ' - 1' '-' <- ' K '01' #1' D? =' ▯▯ -1' C ?A'B'<▯▯ &' E1& .1' '1' &=' D 1K10#? ▯ &?BD' - .' <- ' <- - ?' 11' . <?- 1A' &' 1 - ' &=' D'0' ?-B10 10▯ '-' =& ' & ' ?CC&-' D1' B 1 <0'&-' &=' '1' &=' <- ' =' D1 > ▯ #? ' D< ' D1' 0< > 1' . <?- 1' & ' . =?- '0' <-A' 1 , ' D' - .' '-' D1 > ' B&- 1 -1A' <-A' 1LC 1001A▯ 0 <-A1' 1 > < -1' <-A' #1' &=' =?▯▯ 0 1 - .D ' 1==1Q' ▯?1▯▯ <-A' <0' <+<' ▯▯<#▯1' &' D1' 01'A' E1& .1' <BB& A' - .' &' D1' C//C& '1==1Q# <-A' 1 - ? 1' &=' D1' 0< > 1▯ <0' D1 ' <-A' 1 ' #=' D1 > ' 0D?▯A' D<+1' #11 - ' '=' D1' 01'A' <= 1' D<A' - & ' #1 - ' > <A1' ▯ D1' 01'A' <= 1' & ' <- ' & D1 ' D' - .' B&- 1 -1A' '-' D1' 0< > 1▯ & ' <- ' &PR ' <#▯1' & ' <#▯10' '-' D'0' 01 - ' C▯'< > 1 - ' > <A1' & ' &' #1' > <A1' - & K ' D0 <-A -.

&+'0&' =& ' D& > <0' < H?'0' " & 01

$. ' ' <▯K1 ' D< ' D'0' <#▯1' - & ' - &&-' & D1 ' <#▯1' '-' D'0' C01 - ' C▯'< > 1 - ' > <A1' & ' &' #1' > <A1▯ 1L 1 - A' - & ' - 1' '-' <- ' K '01' #1' D? =?▯▯ - 1' C ?A'B'<▯▯ &' D& > <0' < H?10' " & 01 ▯ &?BD' - .' <- ' <'' - ?' 1' . <?- 1A' &' D1' 01'A' < H?10▯ '-' =& ' & ' ?CC&-' D1' B 1 <B'&-#=' D' > ' '- &' < H?'0' " & ' #? ' D< ' D1' 0< > 1' . <?- '0' <-A' 1 , ' D' - .' '-' D1 > ' B&- 1 -1A' <-A' 1L 001A▯ 0 <-A' 1 > < -1' i - A' #i' &=' =?▯▯ 0 1 - .D ' <-A' <0' 1=!1#▯?1'▯ <-A' <+<' ▯▯<#▯1' &' D1' 01'A' D& > <0' <BB& A' - .' &' D1' C /I' & ' 1 1==1#▯1' <-A' 1 - ? 1' &=' D1' 0< > 1▯ <0' D1 ' <-A' 1 ' &=' D1 > ' K1 1' & ' 0D?▯A' D<+1' #11 - ' '=' D1' 01'A' <#▯1' & ' <#▯1\' -1' <- ' &=' D1 > ' D<A' - & ' #11 - ' D<A' - 1' > <A1▯' D1' <#▯1' " <- ' D' - .' & - 1 -1A' '-' D1' 0< > 1 ' & ' <- ' & D1 ' <#▯1' & ' <#▯'0' '-' D'0' 01 - ' C▯'< > 1 - ' > <A1' & ' &' #1' > <A1' - & K ' D0 <-A -.

3 6 ' W&

C ' #. - '&#((▯2 B" - /2#&' -0 ' &# .' !++

1<0&-0' &=' &D-' < ▯ &=' '-B&▯-' ! <-B'0' ▯< 1' & A' &+1▯▯' 0' <=▯ ' <' 1 &=' +' D' C0&-10▯' < ' &a1' '-' D1' 01'A' &?- '1' &=' & - .D < > ' D1' LL\\ A< ' &=' ?-' ' D1' ' 1 1' &=' D1' 1' .-' &=' &? ' 01'A' & 1' .-' & A' D1' , '- .1' D< ' -&K1' '0▯ -A' D1 -' <-A' D1 1' =& ' D1' C=& > <?-0' &=' D1' ' B? 01A' > 0BD1+&?0' <' A' K 1BD1A' C? C&01▯ '-' C▯1 -1' =1▯A' < ' D1' 0< > 1' &a1' '-' D1' 01'A' &?- '1' K ' D' D1' 1' <-1 0' A'0C▯< 1A' B&- ' &' D1' ' <▯▯'.1<?-B1▯' < 1-0 ' D1' , '- .' &? ' <-A' D1' ' -< ? <▯▯ & 1' .-' & A' ▯1+'1A' <-A' 1 1A' F < 1▯ <-A' > <A1' < <'▯▯ < 1-0 ' D' > ▯ ' =& ' KD'BD' <' & &?0' <-A' ?--< ? <▯▯ A1A1' D1' 01'A' &D-' '1' &=' '-B&▯-' K ' D' A' 0' & D1 ▯ D1-' <-A' D1 1' <' 1 &?0▯ ' &==1-A -.▯ K 1 1' ▯< 1' # ' <?#▯& '=1' &=' C▯'< > 1 -

! ' ' <0' &D-' ▯< 1' '1' &=' '-B&▯-' ! <?-B10' &+1▯▯ ▯< 1' & A' &+1▯▯ <-A' A' ,0' & D1 ' K ' D' D1 > ▯ < =& &? ▯ ' > <. - -.' <-A' B& > C<00 -.' D1' A1 D' <-A' A10 ?BB'&-' &=' &? ' & 1'.-' L2LA' D1' , '- .▯' <001 > #▯1A' D1 > ' 01▯=' K ' D' & D1 ' 1+1▯▯ A'0C&01A' C1C?▯▯ &' D1' -?> # 1' &=' +' D' C0&-10▯' < ' &a1' '-' D1' &?- '1' &=' & -.D < > ' D1' LL\\ A< ' &=' ?-' ' D1' ' 1 1' &=' D1' 1' .-' &=' &? ' 01'A' & 1' .-' & A' D1' , '- .1' D< ' -&K1' '0▯ -A' D1 -' <-A' D1 1' =& ' D1' C=& > <?-0' &=' D1' ' B? 01A' > 0BD1+&?0' <' A' K 1BD1A' C? C&01▯ '-' C▯1 -1' =1▯A' < ' D1' 0< > 1' &a1' '-' D1' 01'A' &?- '1' K ' D' D1' 1' <-1 0' A'0C▯< 1A' B&- ' &' D1' ' <▯▯'.1<?-B1▯' < 1-0 ' D1' , '- .' &? ' <-A' D1' ' -< ? <▯▯ & 1' .-' & A' ▯1+'1A' <-A' 1 1A' F < 1▯ <-A' > <A1' < <'▯▯ < 1-0 ' D' > ▯ ' =& ' KD'BD' <' & &?0' <-A' ?--< ? <▯▯ A1A1' D1' 01'A' &D-' '1' &=' '-B&▯-' K ' D' A' 0' & D1 ▯ D1-' <-A' D1 1' <' 1 &?0▯ ' &==1-A -.▯ K 1 1' ▯< 1' # ' <?#▯& '=1' &=' C▯'< > 1 -

E (' ' . 4)) ' 6; >9-

' - ' <' C ' <> 1 - ' D & A1 - ' < ' F 10 >' D1' 1 1' &=' D1' 1' . - 1' &=' D1' , ' - .' &? ' & 1' . - ' & A' D< ' - & K ' 0 A1 > 1A' B & - + ' = ' <- A' < 1 - ' &=' '. D' 1<0& - ' '- ' D1' K D ' BD' = 1' &=' 1 - A 1' D1' 01' A' ! <- B' 0' &+1 K<0' '. - & <?- 1' &? 1' <- A' & > ' 1A &' D1' > &&0 ' C &?0' 1 - 0 < > C 1' &=' & D1 ' #1' - .' &=' 0?BD1' <' 1 &?0' > - A10' F D1 =& 1' #1' ' ' & A1 - 1A' 1 - <B 1A' <- A' 10 <## 100D1A ' # ' D1' & A' 0' 0C?<=' <- A' 1 > C< =' <- A' D1' & > 1 - 0' ' - ' D' 0' 01 - ' C ' < > 1 - ' <001 > ##1A' <- A' # ' <?A & ' 1' &=' D1' 0< > 1 D< ' D1' 01' A' ! <?- B10' 0 & - A1' <- A' #1' A1 > 1A' <A ?. 1A' B & - + ' Q=1' <- A' < 1 - ' &=' '. D' 1<0& - ' =& ' D' 0' 1D1 B1A' < & &?0' A1A1 <- A' =& =1' 1' &' D1' , ' - .1' &? ' & 1' . - ' & A' <=' D & - & ? 0' <0 1 0' < 0' & A0D' C0' ?- A 1A' 0' ! <?- BD1010' =1 '10' + ' 1. ' 0' <A+&?0& - 0' - &' <B' & - 0' C01 - <B' & - 0' , - '. D '0' =110' - <- A' 0' 1 - '0' 1 - '0' , + ' B' 0' 1 - 0' & - 0' 1 > < - A1 0' C& B' & - 0' <- - ?' 10' C1 - B' & - 0' '. D '0' C&00100' & - 0' <- A' & D1 ' D1 1A' < > 1 - '0 ' - ' - . - A' 1 <- A' F <10' <10' & ' < BD10' &=' D1' 0 < > 1 KD1 &=' D1' & ' 1 - ' & D1 ' C0? - 1' & ' C0& - 10' &' D'0' ?01 K1 1' 01 <01A' &=' <0 < 1' &=' ' - D' <?- 0' D1' LL 0' A< ' &=' ?- ' ' D1' 01B? - A' 1 1' &=' D1' 1' . - ' &=' D1' , ' - .' &? ' &+01' . - ' & A' & ' ' - &' KD' BD1' D1' & ' <- ' &=' D1 >' D<AA1' <?=?<= B<?01' &=' 1 - 1' D1' 01' A' L] W' A< ' &=' ?- ' & ' <- ' > 1' <= ' ' - A' D< ' <= ' & D1 ' D & - & ? 0' <0 1 0' < 0' & A0D' C0' ?- A 1A' 0' ! <?- BD1010' <' # '10' C +1 0 1. '0' <A+&?0& - 0' - &' <B' & - 0' 01 - <B' & - 0' , - '. D '0' =110' - <- A' 0' 1 - '0' 1 - A0' 1 0' & - 0' 1 > < - A1 0' +' B' 0' C& B' & - 0' <- - ?' 10' C1 - B' & - 0' '. D '0' C&00100' & - 0' <- A' D1 ' D1 1A' < > 1 - '0 ' D< ' & ' D1' 01' A' ! <?- B10' & ' D' 0' D1' 10' 0D? A' & ' > '. D ' D< +1' . & K1 - ' A10B1 - A1A' 1 > < - 1A' & ' 1 - 1A' <= ' ' < A' # ' D1' " 1 D' & =' <- ' & =' D' 0' ?- B10 '0' 0)' <0' '= D1' D<AA1' - & ' A&& - ' - 1' B& > ' 1A' D1' 01' A' D1' . D - & ?0' 1<0& - 1 <- A' D< ' D1' 01' A' ! <?- B10' & ' D' 0' D1' 10' K1 1' '- ' C 1 - 1' = ' KD1 - ' D1' 01' A' A10B1 - ' 1 > < - A1 ' & ' 1 ? 1' 0D< > & K1' =< ' & ' . & K1 <- A' & ' D1 > ' & ' - ' &=' D1 > ' 0D? A' & ' > . D ' D< +1' A&& - ' '= D' 0' C01 - ' A 1' - 1' - && - ' & D1 ' (1' &=' 1 ''A1 ' .1 - 0 ' D > ' D<AA1' - 1 , #1 - ' D<AA1' - 1' > <A1

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$. ' - ' <K 1 ' D< ' <' 10' C< 1 - '0' > <A1' # ' D1' , ' - . '0' '. D - 10' &' 1 - ' C0& - 1' & ' C0& - 10' &=' D1' V > '0010' & ' . ' 1 - ' C ' D1 &=' & ' &=' <- ' <- - ?' 110' & ' &==' B1' . 0? - 1A' # ' D' 0' ' 10' C< 1 - '0' &' 1 - ' C0& - 1' & ' C0& - 10' &? ' &=' D1' 0< > 1' D< ' - & K1' # 1' ' - ' 0 1 - . ' <- A' =& B1' & ' D< ' K 1 1' ' - ' 0 1 - . D ' <- A' =A B1' D1' L' 000 A< ' &=' &# ' K<0 ' C<0 ' 0 <- A' <- A' # 1' . & & A' <- A' 1==1= ?1' - ' D1' =' K1' <= ' ' D1' 1 - ? 10' <- A' C? P) & '0' &=' D1' <> 1' D' 0' 01 - ' T ; 1' - ' <- ' K ' 01' - & K ' D0 <- A - .

= & + ' " " ' <0& ' D< ' # ' D' 0' 8 A0 1' A' 1' , ' - . ' D< +1' - & ' 0? BD1' ' . D ' <- A' ' 1' &=' <- ' &=' D1' > 0010' D< ' # 1' & ' D1 1 <= ' ' 0D< ' A10B1 - A' 1 > < ' & ' 1R 1' = & > ' <- ' ?- 110 &? ' & ' &0 - ' B=' D1' 01' A' ! R ?- B10' KD' BD1' ' . D ' <- A' ' 1' #1' & ' 0D<B=B1' - ' D1' 01' A' ?- B10 &H ' & ' &0 - ' && - P ' ' - ' <BB' & - ' = 1' &=' D ' TR' D1' ' A1B10010' KD1 &=' D1' ' 1 - 10' <' ' D1' > 1' = D1' 0< > 1' A1B100B0' 0D< #1' &1A' <- A' <a1 - ' ?K< ' # ' D1' &? 01' &=' D1' <' K 1' &=' D' 0' <- A

(' ' ' & A1 1A' # ' D1' 01' A' <?A' 1' &=' D1' 01' A' ' - . 0' 1. 1' C1& C1' D1' ' 0?CB100& ? 0' D1' 10' <- A' <00' . - 11' D< +1' < - A' 1 - & 1' < > < ' 1 - '0' A?1' <- A' &=' '. D ' &' D1 > ' D1' ' ?- B1 &? 0' C ' A1 100& ? 0' #1 & - . - . ' <=& 1' D1' > <a - . ' &=' D' 0' < 1' &=' 1 - ' &=' D1' > 0010' A? - . ' D1' > 1' D< ' D1 0< > C' > 0010' 1 > < - 1' <- A' <#' A1' '- ' DC' C&00100' &- ' &=' &? '01' A' & 1' . - ' & A' & ' D' 0' D1' 10' <- A' ' =' <- ' &=' D1' > 0010' D1 1<= ' ' #1' . <?- 1A' # ' D1' , ' - . ' & ' 1 - ' &=' D' 0' D1' 10' # ' 10' C< 1 - '0' & ' D< ' ' ' #1' . <?- 1A' # ' < '1' &=' < ' < > 1 - ' & ' 'R D1 K '01' &' <- ' C0& - 1' ' C i & - 10' =& ' 1 ' &=' = ' - ' =11' 0 'C' 1' & ' ' - ' =11' <' 1' D< ' D1 - ' D&&0' C0& - 10' 0& ' 01 <01A' D & A' D1' 0< '1' < 0' & - A' 0' 1 - '0' & ' & D1 ' > 0010' &=' D1' , ' - . ' <- A' D' 0' D1' 10' =& ' A1=1 - 01' &=' D1' - A' <0& ' &=' 0?BD1' C0& - 10' D1' ' D1' 10' <- A' 0 - BB100& ? 0' <- A' # ' D1' 0< > 1' +' B1' <0' D1' 0< > 1' < 0' - A' 0' <- A' 1 - '0' <- A' &=D1 ' > '0010' K 1 1' & ' 0D? A' D< 1' #11' = D & A1 - ' <- A' BD< .1A' K ' D' <- A' D< ' D1 ' > < ' A' 0 - 1' =& ' D1' 0< - B' 1 - '0' <- A' 'B10' <- A' D<+1' <' & D1 ' - <?= ?' 1 > 1A ' =& ' 1B & ' & ' " && - C< > 1 - ' & ' && ' " A& - . ' &=' D1' 0< > 1' <i' D1 ' < ' <- ' &=' D1 > ' > '. D ' D< +1' D< A' #1=& 1' D1' > <a' - . ' &=' Dd0' 01 - ' <T ; 1' D& > < . 1' &=' 1 - <?- '0' =& ' R > 1' &=' - ' && - - ' 1LB1C '

$. ' - ' <K 1 ' D ' D' 0' <A 1' . ' < 1 - A 10' - 1' <- ' & D1 ' <Q' 1' & ' <A 10' > <A1' & ' D1 1<= 1 ' &' #1' > <A1' ' - ' D' 0' 01 - ' C ' < > 1 - ' 1L 1 - A' - & ' - 1' #1' - & #' K' 01' C ?A' B' <- ' 1' ? =?' &' - - 1' '0B&?- 10' &+1 ' < 1' F ' ==1' &=' D1' 01' A' ! <?- B10' < 1' '0B&?- ' &+1 ' &' & ' =& ' <- ' <0 < 1' > <A1' &=' <- ' &=' D1' > 0010' &' D1' 01' A' < 1' '0A&?- ' <- A' D1' 01' A' - - 1' - 1' &' <- ' & D1 ' C0& - 1' & ' C0& - 10' &' & ' = - ' <- ' <0 < 1' > <A1' &=' 1 ' &=' D1' > 001 i ' # ' D1' 01' A' < 1' '0B&?- ' & ' <- ' & D1 ' &' D? 01' &=' D1' 01' A' - - 1' & ' ?BD1' & D1 ' C0& - 1' & ' C0& - 10' &' KD & > ' <- ' <?BD1' <0 < 1' & ' <0 < 10' D< D' #1 - ' > <A1' &' D? 01' &=' D1' 0< > 1' - - 1' &=' <- ' &=' D1' C > i 0100D<+1' <- A' 1 - & 1' 0? BD' C ' . ' DC ' 0010' <0' <- ' ?BD1' <0 < 1' D< D' #1 - ' > <A1' &=' <0' D1 ' 0D? A' D<+1' A&& - ' =' D' 0' <A' 1' & ' <- ' & D1 ' <=' 1' ' - ' D' 0' 01 - ' < ' < > 1 - ' D< A' - 1+1 ' #1' D< A' - 1' > <A1

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$. ' - ' <K < ' D< ' <Q' 1L 1 - A' - & ' C& ' #1' ?A' B' <' ?- &' ' ' D& > <0' &+1' , - '. D ' & =& ' &' . <?- 1' . ' . <?- 10' &' D' > ' > <A1' # ' D1' ' - . 1' =' <- ' &==' B1' & ' &==' B10' ' - ' <- ' &=' D1' C > 0010' # ? ' D< ' D1' 0< > 1' . <?- ' <- A' . <?- '0' #1' <- A' 0 <- A1' &' D1' 01' A' ' ' D& > <0' # ' KD< 0& 1 ' - < > 1' & ' - < > 10' D1' #1' B < ' 1A' ' - ' D1' 0< > 1' . & & A' <CA' 1 == 1A ? 1' D1' 01' A' <A' 1' - & K ' D0 <- A - .

' D1 1' <CC1< ' <- ' > '00' & - ' &=' 0& > 1' 1 - 1 - B1' ' - ' D'0' < B1' KD' BD' 1 - A1 0' D'0' < ?01' ? - ' - 1' . '

& ' D< +1' #11 - ' '. - & <- ' & > ' 1A N$ ' ' ' < ' % H 9 ' - K '

D1' 0<' A' ! <- B' 0' A1B < 1A' B & - + ' B 1A' <- A' < <' - 1A' &=' 1<0& - ' <- A' 0D< ' =& =1 ' ' <' - A0' I B ' = & > ' <& ? - 1< 1 -

E1 - 1 <' <+' - .

' &+'0&' =& ' E ' > 0 ' # ' D1' , ' - .

&+'0&' =& ' ' B10' ' - ' B ' & -

&+'0&' =& ' , 1 - 0' <- A' 1 + ' B10

&+'0&' =& ' - - ' '0B&?- 100' &+1 ' F ' A& K ' &=' D1' 0< A' ! <- B' 0

&+'0&' =& ' D& > <0' < ' &=' > & - A' <0' <- A0' 10 & 1A' &' D' > N$ ' ' 6 ' ' B (& D ' &+'0&' =& ' ' ' D& 0' &+1

' D1 1' <CC1< ' <- ' > '00' & - ' &=' 0& > 1' 1 - 1 - B1' ' - ' D'0' < B1' KD' BD' 1 - A1 0' D'0' < ?01' ? - ' - 1' . ' #1

>9? (' ʾ . 4)) ʾ *ʾ>/ @< , J

3 6 ʾ W

C ' B&-+'B=&'0ʹ R < " C0&-<

&-+'B '&"' <-AOʹ <'-A1 '=& ' 1<0&-' &=' F > ʹ <-ᵬ1 ʹ ᵬ '>&-' &?- =& Z' F 'ᵬᵬ' <K#1-1 ʹ <-A' &#' < Bᵬ'=:' KD1 1# ' 0 < 10' D1ᵬA'=& ' D1' ' 01' A'A' -& ' #1B&>1' =& =1'

1<0&-0' &=' '' E'ᵬ# ' "1#1-D<>' <-A' A' ' <+<.1' '-' <00'0 '-.' '1 0' F < #1Baʹ KD1 1?C&-' D1 ' K1 1' '-A'B 1Aʹ <-A' D<+'-.' =ᵬ1A' K1 1' &? ᵬ<K1A' <-A' < <'- 1A' # ' &B100' =' <KX

F ` Q' F 'ᵬᵬ'<>' <-ᵬ1 ' ᵬ< 1' &=' D1' &K-1' &=' F 10 >' '-' D1' &?- '1' &=' 'AA' , -'.D ʹ& D1 K'01' B<ᵬᵬ1A' F 'ᵬᵬ'<>' <-ᵬ1 ' ᵬ< 1' &=' D1' C< '00D1' &=' 1 -' ' < -' '-' D1' =1ᵬA' #' 'A10' ED< -.' &001' '-' D1' 0<>1' &?- ' , -'.D ʹ > &-A' &?- =& ' ᵬ< 1' &=' E&'0D?ᵬᵬ '-' D1' &?- '1' (=' F < K a1' , -'.D ʹ F 'ᵬᵬ'<>' "<K#1-1 ' ᵬ< 1' &=' &-A&-' E1- 'ᵬ <<-ʹ &# ' < B =' ᵬ< 1' &=' &-A&-' H?'1 ʹ =& ' 51 -' 1<0&-0' >< .1-1A' <-A' B&>C<01A' <' 1 &?0ᵬ ʹ &' D1' A10 =?BB'&-' &=' D1' >&&0' &'<ᵬᵬ C0&-1' &=' D1' , '-.'B? 1' & 1'.-' & A' <-A' 0?# ,0'&-' &=' D'0' D'0' 1<ᵬ 1ʹ #1=& 1' D'0 ?0 'B10' <-A' & ''00'&D1 0' '-' 01 <ᵬᵬ " 1 0' <-A' "1R> -1 0' # ' D'>' '-' D<'C '1' <00'.-1Aʹ <0K1ᵬᵬ '-' D1' ' '1' &=' &-A&-' <0' '-' D1' D' 1' &=' 'AAʹ # 'A?1' & A 1' <DA' CB1001' &=' D1' ᵬ<'K1' K1 1' =& 'A 0' 0&-A ' 1<0&-0'# a >' i1R<ᵬᵬ ' B& > 1A' <-A' A& "B&-+'=ᵬ ' <-A' < 1 - 1A' &=' '.D' 1<0&-ʹ <0' '-' D1' 01 <ᵬᵬ 1B& A'0' D1 &=' > & 1' C ᵬ1 -ᵬ ' <CC1 ' D' ' # ' D1' KD'BD' < 1 -A&? 0' D1' 01'A' C0&-10' < 1 - 1Aʹ =& =<' 1A' -& ' -1' > .D ' =& =1' ʹ <- ' < 0' ᵬ<-A'0' 1- '0' C&00100'&-0' -1' D1 1A' <>1- ' KD1 &=' & D1 ' C0&-10' K1 1' 01<01A' &' D1' ' 01+ <ᵬᵬ ?010ʹ :' -A' KD1 1' <ᵬ0&' E'ᵬ#1 ' "1#1-D<>' ᵬ< 1' &=' D1' &?-1' &=' F 10 >' '-' D1' &?- '1' &=' ᵬ d'AA' , -'.D ʹ <-A' ?>= 1 ' <+<.1' ᵬ< 1' &=' D1' &K-1' &=' FTR5 >' '-' D1' 01'A' &?- '1' , -'.D ʹ <0' =<ᵬ0' < &?0' <-A' 1#1ᵬᵬ10' &=' D1' , '-.' &? ' & 1'.-' & Aʹ D1' L000 &=' !1+01 1' D1' +'' /0D 1 1' &=' D'0' >&&0' -&#ᵬ1' 1'.-' < ' F 10 >' <=& 01'Aʹ =<ᵬ0ᵬ ' <-A' <' 1 &?0ᵬ ' >< .1-1A' B&-=1A1 1A' <-A' B&>C<001A' D1' A1 D' <-A' A'0 ?BB'&-' &=' &? ' 01'A' & 1ᵬ.A' & A' <-A' ?# 0'&-' &=' D'0' D'0' 1<ᵬ>1ʹ <-A' & <BB&>Cᵬ'00D1' <-A' C=&? >(' D1' 0<>1' =<ᵬ0' C? C&01ʹ D1' 0<>1' E'ᵬ#1 ' <-A' ?>= 1 'a-&K -.' &&-' '1 0' F < #1a' 1-1> 1' &=' &? ''01'A' & 1'.-' & A')' <-A' & D1 'D'0' 1#1ᵬᵬ10' #1 -.' #1 &-A1' D1' 011ʹ <AD1 1- '0' &' D1' 0<>1' '1 0ʹ &' ᵬ1+'1' F 1 1' <.1 -0 '&? ' 01'A' & 1'.-' & Aʹ 1B1 +1A' <' F 10 >' <=& 101'A' >100<.1' # ' R 1 -' C0&-10' = &>' D1' 01'A' 1 0' <-A' & D1 ' D'0' 01'A' <AD1 1- '0ʹ <-A' &' D1' 0<>1' 1- 1-' 01- ' 100<.1' <.< -' &? 1' &=' D'0' 1<ᵬ>1' &' D1' 01'A' 1 0' <-A' &' D'0' 01'A' <AD1 1- '0ʹ D<' D1' 01'A' E'ᵬ#1 ' K' D'-' 0D& 1' >C0 <= ' ' K&ᵬA' B&>1' &' D1' 0<>1' 1 0' <-A' &' D'0' 01'A' <AD1 1 1- '0' #1 &-A1' D1' 11ʹ <-A' <a1' D'0' C '1' <.1 -0 ' &? ' 01'A' &+/1'.=' & A' '-' ᵬ1+1 -.' K1 1' <.1 -0 ' D'>ʹ <-A' B&>1' '- &' -.ᵬ&-A' K' D' D1' 01'A' 1 0' <-A' D'0' 01'A' <AD1 1- '0ʹ =<ᵬ01ᵬ ' <-A' <' 1 &?0ᵬ ' &' D'0' C&K1 ' &' D1ᵬC1' & A1C&01' <-A' C? ' A&K-1' B? 1' 01'A &+ 1'.-' & A'ʹ <-A' D<' D1' 01'A' ?>= 1 ' <+<.1' =& ' D1' >& 1' 1ᵬ1=' <-A' D1ᵬC1' &=' D1' 01'A' 1 I ' <-A' D'0' <AD1 1- '0' '-' D<' #1D<ᵬ=ʹ 0D?ᵬA' <#'A1' 0 'ᵬ'1' '-' D'0' 1<ᵬ>1' ?- &' D1' B& > -.' &=' D1' 0<>1' '1 0' <-A' D'0' 01'A' <AD1 1- '0ʹ <-A' D1 >ʹ D1-' <-A' D1 ' K' D' <'ᵬ D'0' > .D ' <-A' C&K1 ' K&ᵬA' D1ᵬC1' <-A' <00'0 1' &' D1ᵬC1' &' 1L1B? 1' <ᵬᵬ D1' > 00=1 ʹ <-A' 0&' D1' 01'A' E'ᵬ#1 ' <-A' ?>= 1 ' D1' 01'A' A< ' < ' F 10 >' <=& 01'Aʹ <' 1 &?0ᵬ ' K1 1' <AD1 1- 10' D1ᵬC'-.'B&?-B1ᵬᵬ'-.' <-A' B&>=& -.' &' D1' 01'A' '1 0' <-A' D'0' <AD1 1- 10ʹ 1-1> 10' &' &?' 01'A' & 1'.-' & Aʹ &' ᵬ1+'1' F 1 1' < 1-0 ' D >ʹ F D1 ?CC&-' D1 ' K1 1' <-A' 1 '0 <-A1' <-A' #1' '-A' 1A' &=' '.D' 1<0&-' :' <-A' =& ' D<' D1 ' K1ᵬA' -&' D1 ?CC&-' <CC1 1' &' #1' ?0 '='1A' <= ' ' D1' <K10' &=' ' ' ᵬ<-A' #?' ='1AA1' &' 1 - K< '10ʹ C &B1001' K<0' <K< A1A' <.1 -0 ' D1 >' 'ᵬᵬ D1 ' K1 1' &? ᵬ<K1Aʹ <-A' 0&' D1 ' 0 <-A1' <-A' 1' 1>< -' <-A' #1' D1 ?C&-' &? ᵬ<K1A' <-A' < 1 - 1A' # ' D1' CB1001' &=' D1' <K1ʹ &=' <-A' ?C&-' D1' 01'A' 1<0&-ʹ # ' D1' KD'BD' <ᵬ0&' 1 -A&? ' D1' 01'A' E'ᵬ#1 ' <-A' ?>= 1 ' 0&' < 1 - 1Aʹ =& =<' 1A' -& ' -1' > .D ' =& =1' 1' <- ' < 0' ᵬ<-A'0' 1- '0' C&00100'&-0' -1' D1 1A' <>1- ' KD1 &=' & D1 ' C0&-0' K1 1' 01<01A' &' D1' ' 01 <ᵬᵬ ?010ʹ -A' KD1 1' <ᵬ0&' &D-' < Bᵬ'=' &=' 'ᵬ#& &?.D' '-' D1' &?- '1' &=' & =:' , -'.D ʹ & D1 K'01' B<ᵬᵬ1A' &D-' < Bᵬ'=' !' \K< 1 '&=' 'ᵬ#& &?.D' '-' D1' &?- ᵬ1' &=' & =:' , -'.D ʹ F 'ᵬᵬ'<>' < ᵬ1 'ᵬ< 1' &=' ᵬ#? ''-' D1' &?- '1' &=' 1 =' H?'1 ʹ <-A' D&><0' <>C &-'ᵬ< 1' &=' D1' 0<''1' &?-1' '-' D1' 0<>1' &?- '1' E1- 'ᵬ><-ʹ =<ᵬ01ᵬ ' <-A' <' 1 &?0ᵬ ' B&-0C 1A' <-A' >< .1A' D1' A1 D' <-A' A'0 ?BB'&-' &=' D1' , '-.' &? ' & 1'.-' & A' <-A' D1' ?# 0'&-' &=' D'0' D'0' 1<ᵬ>1' &=' -.ᵬ&-Aʹ <-A' D1' 0<>1' &? ' 01'A' & 1'.-' & Aʹ # ' F 1 10' <.1 -0 ' D'>ʹ '-' D'0' D'0' 01'A' 1<ᵬ>1' &=' -.ᵬ&-A' &' #1' ᵬ1+'1A' 1< 1A' <-A' ><A1' <.1 -0 ' D'>ʹ &=' D'0' & &-1' <-A' 1.<ᵬᵬ'1' 1- 1-A1A' &' A1C '+1' A1C&01' <-A' C? ' A&K-ᵬ <-A' &' 1L1B? 1' <-A' C=&? >1' D1' 01'A' > 0BD1+&?0' C? C&01' < ;'0' <-A' <' 1 &?01' "1A'0ʹ D1' 01'A' &D-' < Bᵬ =' F 'ᵬᵬ'<>' ' < ᵬ1 ' <-A' D&><0' <>C &-' < '01+0<ᵬᵬ >10' K1 1' &' D1' 01'A' 1 0' B&-=1A1 < '0' < 01- 10' <00'0 -.' <AD1 1- '0' =<+&? -.' <-A' D1ᵬC -.ʹ KD1 &=' D1 ' #1' 01+<ᵬᵬ ' '-A' 1Aʹ <0' '-' ᵬ'1' 01'A' 01 <ᵬᵬ '-A' 1>1- '0' >& 1' C ᵬ1 -ᵬ ' <CC1 ' D' ' F D'BD1' '-A' 1>1- '0' K1 1' D<AA1' ?C&-' 1' >< 1 '0?=='B'1- ᵬ ' <-A' &C1-ᵬ ' 0D1K1A' <-A' A1Bᵬ< 1A' ?C&-' D1' <a -.' &=' D1' 01'A' '-A' 1>1- '0' '-' D<' #1D<ᵬ=' ' -A' KD1 1' <ᵬ0&' D<' D1' 01'A' F < #1a' &=' ᵬ< 1' = &>' D1' C ᵬ10' &=' #1 &-A1' D1' 11' K' D' . 1 ' >?ᵬ ' ?A1' &=' C1&C ᵬ1' &=' D1' , '-.'0' 1#1ᵬᵬ'0' 1- -1> 10' <-A' < &? 0ʹ '-' D'CC10' K' D' <ᵬᵬ <#'ᵬ'>1- '0' &=' F 1 1' -1B100< '1' =& ' D1' 0<>1ʹ '- & D'0' D'0' 1<ᵬ>1' &=' -.ᵬ<-A' 1- 1-A -.' &' < +1' < ' "11ᵬ1' '-' D1' &?- '1' &=' , 1 - ʹ <-A' D1-' <-A' D1 1' . 1 1' C '1' &=' D1' , '-.'0' 01'A' 1-1> 10' 1#1ᵬᵬ=' <-A' <' &? 0' K' D' D'>' D1-' <BB&>C<-1Aʹ D<' 'ᵬ &' 01 ' D1' A< ' &=' ?ᵬ' D1' 1 1' &=' D1' 1'.-' &=' &? '01'A' & 1'.-' & Aʹ 1- 1A' <-A' ᵬ<-A1A' < ' "11ᵬ1' <=& 01'Aʹ <-A' D1 1' <-A' D1-' <' 1 &?0ᵬ ' 1< 1A' <-A' ᵬ1+'1A' #< 1ᵬᵬ <-A' K1 1' '-' Cᵬ1 -1' =1ᵬA' <.1 -0 ' &? ' 01'A' & 1'.-' & Aʹ K' D' #<-1 0' A'0Cᵬ< 1A' <-A' K' D' >&? 0' "1=1-0'+10ʹ <0' <aa10' <ᵬ1 '0' '.<-A -10' &K10' 'ᵬᵬ10' <?#1 '0' ? 10010' E&--10' C1 10' < 10C'a'0' &0#&K10' <-A' & D1 ' 1-D<#'ᵬ>1- '0' &=' F 1 10ʹ B&>C<00 -.' D1' A1 D' <-A' A10 ?BB'&-' &=' &? ' 01'A' &+1'.-' & Aʹ <-A' D1' 0?# B'&-' &=' D'0' D'0' 1<ᵬ>1ʹ KD1 1' D1-' <-A' D1 1' K1 1' A 0' &=' D1' C0&-10' =&ᵬ&? -.' 01- ʹ <-A' A 01' & D1 ' &=' D1' 0<>1' C0&-10' <=& 1' D<' >1' &' D'01' =<ᵬ01' <-A' <' 1 &?0' C? C&01' &' D1' 01'A' 1 0' <-A' & D1 ' &=' D1' , '-.'0' 01'A' 1-1> 10' 1#1ᵬᵬ'0' <-A' <' &? 0' K' D' D'>' <BB& <C<- 1A' K1 1' <AD1 1- '0' <00'0 1-B'0' B&-=1A1 < '0' =<+&? 1 0' . A<- '0' D1ᵬC1 0' 0&B&? 1 0' <-A' B&>=& R'0ᵬ D<' '0' &' 01 ʹ E1& .1' 1+'ᵬᵬ1' ᵬ< 1' &=' &-A&-' , -'.D ' & D1 K'01' B<ᵬᵬ1A' E1& .1' 1+'ᵬᵬ1' #<0 < Aʹ B&>1-ᵬ ' B<ᵬᵬ1A' <0 < A' 0&-1' &' ' D&><0' 1+'ᵬ1ʹ &D-' 1 &-' ᵬ< 1' &=' &-A&-' BD<?-' 'BD< A' < ᵬ10 &-' ᵬ< 1' &=' &-A&-' , -'.D ʹ AK< A' 00D1ᵬ1 ' ᵬ< 1' &=' <ᵬ10' E1- 'ᵬ><-ʹ 'BD< A' F 'ᵬᵬ'<>0&-' ᵬ< 1' &=' & a1' >< BD<?-ʹ &. ' F &A1D&?01' ᵬ< 1' &=' &C -A<ᵬ1' '-' D1' &?- '1' &=' D10R' E1- 'ᵬ><-ʹ &D-' <C?ᵬ&-' ᵬ< 1' &=' B<ᵬᵬ1# ''-' D1' &?- '1' &=' ?>#1 ᵬ<-A' & > <''ʹ &D-' <?-A10K1ᵬᵬ ᵬ< 1' &=' E <- D<>' '-' D1' &?- '1' &=' '-B&ᵬ-' < BD<?-ʹ &D-' <>C &-' ᵬ< 1' &=' ᵬ#? ''-' D1' &?- '1' =' 1 =' H?'1 ʹ <>10ʹ , 1 D'-.' ᵬ< 1' '&?' &=' D1' &?01' <-A' &0C' <ᵬᵬ' &=' D1' '& ' &=', ᵬ>< -<-' '-' ᵬ<-Aʹ D&><0' &ᵬ<-A' ᵬ< 1' &=' &-A&-' E1- 'ᵬ><-ʹ AK< A' a1ᵬ &-' ᵬ< 1' &=' F 10 >' '-' D1' &?- '1' &=' 'AA' E1- 'ᵬ><-ʹ &D-' < ᵬ&? ' ᵬ< 1' &=' LB10 ='-' D1' &?- '1' &=' "1+&-' < BD<?-ʹ <-A' A>&-A1' F &A1' ᵬ< 1' &=' <ᵬ10' < BD<?-ʹ -' &-0'A1 <B'&'" KD1 1&=' ' #1' & A1 -1 '1-<#ᵬ1A' <-A' 10 <#ᵬ'00D1A' # ' D<A+ B1' <-A' <001-' &=' D1' & A'0' 0C?<ᵬᵬ'0' <-A' 1>C<ᵬ0' <-A' D1' &>1-0' '-' D'0' 6 01-' C'ᵬ<>1-' <001>#ᵬ1A' <-A' # '<?B=ᵬ& ' 1' &=' D1' 0<>1ʹ D<' 1 ' &=' D1' 01'A' F 'ᵬᵬ'<>' <-ᵬ1 ' >&-A' &?- =& ' F 'ᵬᵬ'<>' "<K#1-1 ' &# ' < Bᵬ'=' E'ᵬ#1 ' "1#1-D<>' ?>= 1 ' <+<.1' &D-' < Bᵬ =' F 'ᵬᵬ'<>' < ᵬ1 ' &D-' <>C &-' D&><0' <>C &-' E1& .1' 1+'ᵬᵬ1' &D-' 1 &-' 'BD< A' < ᵬ10 &-' AK< A' 00Dᵬ1 ' 'BD< A' F 'ᵬᵬ'<>0&-' &.1 ' F &A1D&?01' &D-' <C?ᵬ&-' &D-' <?-A10K1ᵬᵬ <>10' ᵬ< 1' '&?' &=', ᵬ>< -<-' #&>< 0' &ᵬ<-A' AK< A' a1ᵬ &-' &D-' <'' &?' ' <-A' A>&-A' F &A1' # ' KD<' 0&' 1+1 ' -<>1' &' -<>10' D1 ' &' <- ' &=' D1 >' #1' -<>1A' &' B<ᵬᵬ1Aʹ 0 &-A1' <-A' #1' B&-+'Q 1' <A ?.1A' <-A < 1 - ' &=' '.D' 1<0&-ʹ <-A' D<' 1 ' &=' D1' 01'A' F 'ᵬᵬ'<>' <-ᵬ1 ' >&-A' &?- =& ' F 'ᵬᵬ'<>' "<?#1-1 ' &=1 ' <ᵬ1 ' "1#1-D<>' ?>= 1 ' <+<.1' &D-' < Bᵬ'=' E'ᵬ#1 ' "1#1-D<>' ?>= 1 ' <+<.1' <-A' D&><0' <>C &-' =& =1' 1' &' D1' , '-.' &? ' 01'A' &+1'.-' & A' <-A' D'0' D1' 10ʹ <ᵬᵬ &-&? 0' <0 1ᵬ0' < 0' & A0D'C0' ?-A 1A'0' = <?-BD1010' ᵬ'=1 '10' C '+'ᵬ1.'0' <A+&?0&-0

0 < 10' D1ᵬA' =& ' D1' ' 01ʹ -&' =& =1' 1A

1<0&-0' &=' ' ' ' < Bᵬ'=:'&=' !' \K< 1 ᵬ F >' < ᵬ1 ʹ <-A' D&0' <>C &-ʹ KD1 1&=' D1 ' 0 <-A' '-A'B 1A

<-A'-.' &=' D1'0<'A' D1'

1<0)-<#ᵬ 'ᵬ1+'1A' F < '<.<'-0' D1' , '-.ᵬ KD1 1' K1 1' C 101-' ' 'E1& .1' 1+'ᵬᵬ &D-' 1 &-ʹ <-A' A'+1 0' & D1 ' 1 0&-0' D1 1' -<>1A

D1' '& ' &=' , '᷊ << -<-ᵬ ¼ !" . - '] ' ' (' , %' · '] ' $! !! :

ᵬᵬ' D1' 1 0&-0' #1=& 1' -<>1A' A1Bᵬ< 1A' &' #1' B&-+'B ʹ <A ?A.1Aʹ <-A'< <'- 1A' &=' '.D' 1<0&-' ᵬ <-A' 0D<ᵬᵬ =& =1' ' <ᵬᵬ <-AO' KD1 1&=' D1 ' K1 1' 01'01Aᵬ '& D1 0' &' D1' ' 01ᵬ '-' ! 11' '> C᷊1ʹ ! 11' <'ᵬᵬ & ' =& ' '=1' ' < ' D1' '> 1' '=' D1' ' 1<0&-Z' & - >' 1Aʹ I B

D1 1' <CC1< 0' &' #1' 0& > 1' > '00'&-' D1 1' ᵬ [' # ' &' D1' ' - 1 - ' &' ' -B' 1' D1' 0<'A' '1 0' F < #1Ba' 1-1> ' &=' &? ' 0<'A

. ' !"!&*-' ."/ ?

-&'<B'C-0' 01- <B'&-0' , -'. D '0' =110' §<-A'0' 1- '0' 1-A0' +'B 0' 1-0'&-0' 1>< -A1 0' C& B'&-0' <- - ?' 110' C1-B'&-0' '. D '0' C&00100'&-0' D1 1A' < > 1- '0' .&&A'0' B< <§§'0' <-A' A1 '0' KD1 &=' D1 ' & ' <- ' & D1 ' & D1' ' ?010' & ' & D1' ?01' &=' 1- '&=' D1 > ⁋ K1 1' 01-01A' & ' C&001001A' D1' 01 <§§' A<§10' &=' D1' ' 01 <§§' 1<0&-0' B& < 1A' <-A' A&&-' 0C1B'='1A' '-' D1' 01'A' '-A' 1 > 1- '0' & ' <- ' > 1' <= ' ⁋ K' D'-' D1' 1<§> 1' &=' -.§&-A' §<-A' F <§10' - 10' & ' '-' D1' < BD10' &=' D1' 0<> 1 ' '-' =11' 0 > C§1' =11' <'§1' & ' R <1' &=' § =' & ' §'==10' & ' '- &' KD'BD1' <- ' &=' D1 >' D<A' D1-' & ' <- ' > 1' <= ' ' §<?=?§§' B<?01' &=' 1- 11⁋ K' D'-8' -.§<-A' 1§<-A' F <§10' E<§10' & ' '-' D1' < BD10' &=' D1' 0<> 1 -A' ' D< ' 1 ' &=' D1' 0 'A' E1& .1' 1+'§§1' &D-' 1 &-' 'BD< A' < §10 &-' AK< A' 00D1§1 ' 'BD< A' F '§§'<> 0&-' &.1 ' F &A1D&?01' &D-' <C?§ &-' &D-' <?-A10K1§§' &D-' <> C &-' <> 10' §< 1' '& ' &=' , '> < -<-' D&> <0' &§<-A' AK< A' a1§ &-' &D-' < §&? ' A > &-A' F &CA1⁋ =& =1 ' ' &' D1' , 2 .' &? ' 01'A' &+ 1'.-' 8' A'<-A' D'0' D1' 10' <§§' &-&? 0' <0 1§0' < 0' & A0D'C0' ?-A 1A'0' = <?-BD1010' 5 1- ' ' §'# '10' C '+'§1 .'=<A+&?0&-0' -&'<B'&-0' 01- <B'&-0' , -'. D '0' =110' §<-A'0' 1- '0' 1- '0' +'B'0' 1-0'&-0' 1> < -A1 0' C& B'&-0' <- - ?' 110' C1-B'&-0' '. D ' ' C&00100'&-0' D1 1A' < > 1- '0' .&& '0' B< <§§'0' <-A' A1 '0' KD1 &=' D1 8' & ' 1- ' & D1 ' & D1' ' ?010' & ' & D1' ?01' &=' 1- ' &=' D1 >' K 1 1' 01<01A' & ' C&001001A' D1' LL ' A< ' &=' C '§1' D1' +'' 00\' 1 1' &=' &? ' 01'A' & ,1'. -' & A'0' 1'. -' K' D'-' D1' 1<§ > 1' &=' -.§&-A' §<-A' F <§10' E<§10' & ' '-' D1' < BD10' &=' D1' 0<> 1' '-' =11' 0 > C§1' =11' <'§1' & ' R > 1' &=' § =' & ' §'===' & ' '- &' KD'BD1' <- ' &=' D1 >' D<AA1' D1-' & ' <- ' > 1' <= ' ' §<?=?§§' B<?01' &=' 1- 11⁋ K' D'-' -.§ -A' §<-A' F <§10' E<§10' & ' '-' D1' < BD10' &=' D1' 0<> 1

B." !& 0"!2' ; @' !' & -/' . !"2' ". 1' 5 ' "&+ 5 1- ' '

!5 9' .' !,@ 2.-!' -/' 2.-!2' -/' !&'' !&"!2' . !'' !-' 20# !' 2.-!2' -/' !&'' !&"!2' 2' ;!!-' ;@ &2' ^ !' !@-!/' -/' 20# !' . !'' 2.-!' -/' 2.-!2' -/' !&'' !&"!2' @-*' .'' #+ @1@-*' -@' ' . ' !' <1@22!2' .' !&'' 02!2' .'' .' !' 02!' . '!-@ . ' !&'' !&"!2'20# !' "&* ' & +!' #+ @1!' ###&.-' !-"!!' -/' &-'!2'&+' . ' -/' 0 .-' !'<1@22!2' -/' !3@ "' !". ' 2' !@ //!' 2 0+/' .'' 1&* ' '!' //!'&' &2' < !' //!' -!<' ;!-' //!' -!' 1 /!

b!-!" +' '&-*

'' <§0&' ='1' ' ' & A1 -1A' <-A' 10 <#§'00D1 ' # ' D1' 01'A' <A+ 01' <001- ' <-A' <?Q & ' 1⁋ D< ' '=' <- ' &=' D1' 01'A' C0&-10' # ' D'0' a ' < 1 - 1A' D<+1' > <A1' <- ' <0 < 1' =1=!1> i - ' & ' A 0B&- -?<?-B1' &=' 1- ' §<-A'0' 1- '0' 1- '0' C&00100'&-0' <-A' & D1 ' D1 1A' < > 1- '0' KD1 &=' D1 ' #1' & ' <- ' &=' D1 > ' K 1 1' 01<01A' & ' C&001001A' '-' D1' '. D ' &=' 1- ' &=' D1' ' F '=10⁋ < ' D1' > 1' &=' 0 1D1' <0 < 1' =1&='1 > 1- '0' & ' A'0B&- -?<?''B'0' > <A1' &' 1- ' C0&-1' & ' C0&-10' '-' <- ' K '01⁋ D< ' D1' 01'A' §<-A'0' 1- '0' 1- '0' C&00100'&-0' <-A' D1 1A' < > 1- '0' #1' -& ' &>C '01A' '-' D'0' 1' #? ' ? 1 § ' #1' 1LB1C 1A' <-A' =& C '01A' &? 1' &=' D1' 0<> 1' ' <-A' D< ' D1' ' .D ' <-A' ' §1' &=' 1 , ' &=' D1' 0&§A' K '=10' &=' <-A' '-' <§§' 0?BD1' §<-A'0' 1- '0' 1- '0' C&00100'&-0' <-A' & D 1' 1-D1 ' <> 1- '0' #1' <-A' 10 ' '-' 1 '&=' D1' 01'A' F '=' 0⁋ <-A' D1 ' & ' #1' < ' D1' ' <BB'&-0' <-A' 1B&A10' T2= D1' 0<> 1' <-A' 1 , ' CB1=' D1 1&=' <BB& 8A'- ' &' D1' B&? 0' &=' D1' BC -' <K 1' &=' -. &CA⁋ D'0' = 1' & ' <- ' D1 ' Q§;1' &§' A1-<?-B ' '-' D'0' 01- ' C< §'<> 1- ' > <A1' & ' &' #1' > <A1' -& K' D0 <-A' -.' ' -A' <§0&' D<' ' ' #1' §1=?§§' &' ' ' ' D1' 01'A' F '=10' <?A' F & > 1-' -A' &' 1 ' &=' D1' ' D1' 10' # ' D'0' Q 1' -& ' < 1 - 1A⁋ &' 1-= B' '- &' D1' 0<> 1' < 0' §<-A'0' 1- '0' 1- '0' C&00100'&-0' <-A' &A'1 ' 1-D1 ' <> 1- '0' '- &' KD&01' C&00100'&-' 0&' 1 , ' D1 ' #1' 01-01A' & ' B& > 1⁋ <0K1'§ ?C&-' D1' C&00100'&-' &=' D1' , '- .' &? ' Q & 1'.-' & A' <0' ?C -' D1' C&00100'&-' ' 1- ' & D1 ' C0&-1' & ' C0&-10' ₄ ›' D'0' ᴡ ᴇ' -& ' < 1 - 1A⁋ <-A' D1 > ' <-A' 1 , ' &=' D1 -' D&F 1' <-A' 1- & 1' &' D1 >' <-A' &' D1' ' D1' 10' # ' D'0' Q 1' -& ' < 1 - 1A⁋ <BB& A -.' &' D1' ' ' §1' <-A' '-R10 ' '-' D1' 0<> 1

<+'-.'=& ' 1- 0' <-A' 1 +'B10

*' <§0&' #1' ' ' A1 -1A' ;@' D1' 01'A' <?Q§ ' 1' D< ' 1+ ' &=' D1' , ' .'0' 1.1' C1&C§1' D1' ' 0?HB100C? 0' D1' 10' <-A' <00' .-10' D'+1' <-A' 1- & 1' <§§' > < ' 1- '0' A?1' <-A' &=' '.D ' &' D1 >' #1§& - -.' <=& 1' D1' > <a'-.' &=' D'0' <A'0⁋ &' D1 >' &=' 1- ' &=' D1' > 0110' A? '-.' D1' > 1' D< ' D1' 0<> 1' > '0010' 1> < -1' <-A' <#'A1' '-' D1' C&00100'&-' &=' ? ' 01'A' & 1 .-' & A' & ' D'0' D1' 10⁋ -A' '=' <- ' &=' D1' = > 0010' D1 1<= ' ' #1' <? - 1A' # ' D1' , '- .' ' 1- ' &=' D'0' D1' 10' # ' 10' C< 1D 10' &' 1- ' C0&-1' =& ' R > 1' &=' § =' '-' =11' 0 > C§1' & ' =11' <'§1⁋ D< ' '§1-' D&01' C0&-10' 0&' 01<01A' D&§A' D1' 0<> 1' < 0' §&-A'0' <-A' 1 '0' & ' & D1 ' > 0010' &=' D1' , '- .1' <AA' D'0' D1' 10' =& ' A1=1-B1' &=' D1']%<-A⁋ <-A' <§0&' &=' 0?BD1' C0&-10' D1' ' D1' 10' <-A' 0?BB100&? 0' <-A' # ' D1' 0<> 1' +'B1' <i' D1' 0<> 1' <D§0' §<-A'0' <-A' 1C '0' <-A' & D1 ' > 0010' K 1' <-A' 0D?§A' D<+1' #1-⁋ D&§A1-' <-A' BD< .1A' K' D' <=& 1' D1' > <a'-.' &=⁋ D'0' C01-' < =1' & > <.1' &=' CC<?- 10' =& ' R > 1' &=' § =' && -§ ' 1LB1C 0

<E1-1 <§§ <+'-.' #1 1&"

. :9⁋ &' 1 ' C0&-1' <-A' D1' ' D1' 10' & D1 ' D1-' 0?BD1' C0&-10' <0' #1-' # ' D'0' ' < 1 - 1A' <-A' D1' ' D1' 10' & ' 1- ' &=' D1 >' &= & ' -' 1- ' &=' > 00 09' 0?BD1' '.D ' ' §1' <BB'&-' & ' '-=10 ' '-' & ' &=' D1' > 0010' <0' D1 ' 0D?§A' D<+1' D<A' '=' D'0' = 1' D<A' - 1=' #1' > <A1

<+'-.'=& ' 0 < 10' D&§A1-' &' D1' 01' &=' <-' 1 0&-0' -& ' D1 1# ' < <'- 1A

C /' <§0&' #1' ' ' & A1 - A' # ' 1' 01'A' <A+'01' <001- ' <-A' <?Q=& § 1⁋ D<1' <§§' <0 1'0' < 0' & A0D'C0' &K-10' &K-10D'CC10' &-&? 0' <-A' 0' 1- '0' 1- '0' 'B10' ! 11' =1 > 10' --?' 10' , -'. D '0' =110' A+&?0&-0' 1=0'&-0' 1'C< -A1 0' <-A' & D1 ' 1 1A' < > 1 =' K' D' D1' ' <CC? '1-<?-B'0⁋ &=' KD'BD1' 1- ' C0&-1' & ' C0&-10' <=& 1' -< > 1A⁋ # ' D'0' 01- ' ' < 1 - 1A⁋ K1 1' 01< 1A' & ' D<A' 1=§ ' <0 < 1' ' §1' '.D ' '-=10 ' & ' C&00100'&-' 0&§1' # ' D'>' & ' D1 >' 01§=⁋ & ' & - § ' K ' D' &A1 ' D1' A< ' &=' D1' ' 01=<§§' '-A' 1 > 1- '0' & ' < 1 -A&? 0' &' D?01' C=' 1' & ' #1D&=1' &='<- ' C = 1' & ' C0&-10' # ' '0' '1' -& '< 1 - 1A' -1 ' ?-<#§1A⁋ #1' -& ' =& =1' 1A' -1 ' =& =1' <#§1' '-' 1- ' K '01' &' D1' , -.' -1 ' D'0' D1' 10' -& ' #1' 01<0' #§1' '- &' D'0' D<-A'0' # ' D'0§C0B- ' <B'1⁋ #? ' ? 1 § ' #1' 1LB1C ' <-A' =& C '01A' &? B' &=' D1' 0<> 1' Qa1⁋ -A' D< ' <'⁋ 0?BD1' <0 < 1' '.D ' ' §1' '-=10 ' <-A' C&00100'&-' KD=&D18<- ' &=' D1' 01'A' C0&-1' & ' C0&-10' # ' D'08 Q=1' < 1 - 1A' D<A' D1' A< ' &=' D1' ' 01 <§§' '-A' 1 > 1- '0' & ' < 1 -A&? 0' <#&+ 01'A⁋ '-' 1- ' &=' D1' 01'A' <0 1§0' < 0' & A0D'CC10' &K-10' &K-10D'C0' &-&? 0' §<-A'<' =1-a'0' 1- '0' =+'010' =11' =& > 10' <--?' 110' -'. D '<' =110' <A+&-0&-0' 1.'&-0' 1> < -A1 0' <-A' & §'1 ' 1-D1 1A' <> 1- '0' K' D' ''1' ' <CC? 1-<?-B'0⁋ &' §'?01' C=' 1' & ' #1D&+1' &=' 1- ' C0&-1' & ' C0&-10' # ' D'0' <Q=1' <-&' < 1 - 1A' -& ' ?-<#§1A⁋ . &K1' B& > 1' <-A' #1' &' 1 ' &=' D1' 0<> 1' C0&-1' (' C0#-10' # ' D'0' 1' 8= & ' < 1 - 1A' -& ' ?-<#§1A' <-A' &' DU' ' D1' 10⁋ -A' '-' D1' 0<> 1' &-1' & ' C0&-10' <-A' D1' ' D1' 10' #1' +10 1A⁋ <-A' D1 ' D1 '-' #1' 1- ' §1A' '-' 0?BD1' K '01' > < ' I ' =&? > 1' &=' <0 < 1' '. D ' ' §1' I ' C&00100'&-' <-A' '=' 0<'A' C0&-1' & ' C0&-10' # ' D'0' < 1 - 1A' D<A' #1' -< ? <§§ ' A1A1' -& ' < 1 - 1A' -& ' ?-D<#' 1A⁋ <-A' D<' '=' #1' §1=?§§' &' 1 ' C0&-1' & ' C0&-10' #1 - .' - § ' 01<01A' TR' C#001001A' K ' D'<- ' &=' D1' C0&-10' # ' D'0' 1' < 1 - 1A' & ' ?-D<#§1A' D1' =& 01'A' A< ' &=' D1' ' 01+ '§§ ' 'A' 1 > 1D '0' & ' < 1 -A&? 0' &' D'0' & ' D1' ' &K-1' ?01' & ' &' D?01' &=' 1- ' & D1 ' C0&-1' & ' C0&-10' # ' D'0' ' -& ' < 1 - 1A' -& ' ?-<#§1A' '- &' D1' 0<> 1' <0 1§0' < 0' & A0D'C0' <-A' & D1 ' D1' C> 0010' &' 1- 1⁋ '- &' KD&0' C&00100'&-' 0&' 1C' D1 ' #1' 01<01A' & ' B& > 1' <0K1§§' ?C&-' D1' , '- .'0' C&00100'&-' <0' ?C&-' D1' C&00100'&-' =' 1- ' & D1 ' C0&-1' & ' C0&-10' # ' D'0' Q 1' -& ' < 1 - 1A' -& ' ?-<#§1A⁋ <-A' D1 >' D<+1' < 'A' 1- & 1' <0' '=' D1' 1'A' C0&-1' & ' C0&-10' <0' '0' <=& 01'A' # ' D'0' (1' < 1 - 1A' & ' ?-<#§1A⁋ D<A' #1-' -< ? <§§ ' A1A1' <-A' -& ' < - 1A' ' ?-<#§1A

b!-!" +' '&-*'

.5:L' +2.' .' !<@ 2.-!' -/' 2.-!2' -/' !&'' !&"!2' . !'' !-' 20# !' 2.-!2' 2' ;!%' ;@ &2' <!' !@-!/' -/' !&'' !&"!2' . ' .'' &-' !-@ . ' !' 1@22!2' _0# !' "&* ' & +!' ##&.-' !-"!' -/' !-$!2' &-' .'' . ' !' "@22!2' -/' ! @ . ' !@1' 2' !@ 2 0+/' '!' /' &' +&!"!. -
<!' -!<' //!' ;!' 1 /!

'' > & 1&+' #1' ' ' & A1 -1⁋ # ' D ' 01'A' <?A'& ' 1⁋ D< ' 1+ ' &=' D1' F '=10' &=' 1 , '&=' D1' 01'A' C0&-10' -&K1' §'+ -.' # ' D'0' A'1 < 1 - 1A' & ' ?-<#§1A⁋ <-A' 1 '0?BD1' F C > <-' 0?BD1' <0' K<0' D1' F '=1' &=' 1- ' &=' D1' 01'A'C0&-10' -&K1' A1A1⁋ # ' D'0' A 1' < 1 - 1A' & ' 01C< < 1' -D1 ' <-B1 ?D<#§1A⁋ = 1§ 81' & 1' D<+1' <-A' C&001A1' <= ' ' D1' A1 D' &=' D' ' D?0#&-A' <= ' D1 ' CK-' 1-D1 ' <-B1' &' D1 ' <-A' &' D1 ' D1' 10' & D1 ' D1-' #1-' < 1 - 1A' & ' -<#§1A' # ' D'0' A '1⁋ -A' <§§' <0 1§0' & A0D'C0' <D)0' §<-A'0' 1- '0' <-A' & D1 ' D1' C> 0010' KD1 &=' 0D1' <- ' A< ' &=' §'1' D1 1# ' < <'- 1A 01 ,<§§' '-A' I<-A '080&' < 1 -A&? 0' =& 01'A' '-' <- ' K '01' K<0' 01<01A' & ' C&001001A' '-D' '&K-1' '. D ' 0 < 1' & ' C&00100'&-⁋ & ' &- § ' K ' D' D1

? 0 E (' ‘ 0 ‘ ! >/‘ >; >9;

D< D' '-' D1' 01'A' < 'i' &=' ' -1D<>' I ' " ? - > &K1‘ <-A' <‗0&' '-' D1' 01'A' A+&?0&-' &=' D1' '& ' &=' " ? - > &K1' <-A' '-' &=' D1 > ' #1' &' D1' 01'A' & A' " -D< > ' =& ' R > 1' &=' D'0' ' =' <0' .&&A' <-A' <+<'‗<#‗1‘ <-A' <‗0&' &=' ‗ a1' =& B1‘ <0' D'0' = 1' &=' 1 -A 1' -1' -&&-' & D1 ' D<AA1' -1 '#1-' D<A' -& ' > <A1

" s ' <‗K1 ' D< ' D'0' Q 1' &=' 1 -A 1' <-A' =& =1' ? 1' -1' <- '& D1 ' <A 1' > <A1' & ' &' #1' > <A1' '-' D'0' 01- ' C <>1- ‘ #1' -& ' '-' <- 'K'01' D? =?‗‗ -1' C ?A'B'<‗‗ &' 1- ' B &C' 0H?'1 ' <-A' ‗'B1' D'0' K '=1‘ A&?.D 1 ' <-A' D1' 1' &' D& > <0' ‗< 1' & A' B &C' , -'.D ' -1 ' &' D'0' D1' 10‘ &' & ' &?BD'-.' ' '<B 10' &=' > 1A&K1' K' D' D<CC? 1-<?-B'0' B<‗‗1A' '‗‗0' B 10' #1'-.' '-' &‗BD10 ' '-' D1' &?- '1' &=' 001L‘ #1 K'L ' D1' +1 ' D< ' 1- - D' = &' 1aA1-' < a1' &' D1' '‗‗1' B<‗‗1A' B &C0' '‗‗1' &-' D1' &-' C '1‘ <-A' D1' > 1A&K1' &=' &D-' < B‗'=' &=' ! ' \' F < ' ' ‗< 1' &=' '‗#? .D' '-' D1' &?- '1' &=' & =-' , -'.D ' &-' D1' & D1 ' C '1‘ <-A' D1' &-' DBA1' <##? A D' ?C&-' D1' 01'A' < a1' <-A' D1' & D1 ' D1A1' ?C&-' D1' ‗A1 a1 ' ‗< 1' D1' 01'A' & A' B &C‘ #? ' D< ' D1' 01'A' 1- ' <-A' ‗'B1' <-A' D1' D1' 10' &=' D1' 01'A' ‗'B1‘ 0?BD1' '.D ' ‗1' <-A' 1- 1' '- &' D1' 01'A' ' ' <B 10' &=' > 1A&K1' <0K1‗ ?C&-' D1' C&00100'&-' &=' &?' &+ 1'.-' & A' <-A' &=' &? ' D1' 10' , '-.' ‘ <0' ?C&-' D1' C&00100'&-' &=' <- ' & D1 ' C0&-1' <BB& A'-.' &' 0?BD1' '.D ' <-A' ' ‗1' <0' D1 ' D<+1‘ & ' 0D?‗A' D<+1' D<A' '-' D1' 0<>1' ' ' <B 10' '=' D'0' <Q‗1' &=' 1 -A 1' D<A' -1 ' #1' D<A' -& ' > <A1

W ".'‗2.' .'" .="/' #". ! .'" 7 .' #"!2'. ' ! /.7'‗-' .+# !2 !"

" s ' <‗K1 ' D< ' D'0' <(1' > <A1' & ' &' #1' > <A1' '-' D'0' C01- ' C‗'<>1- ‘ #1' -& ' C‗ ?A'B'<‗‗ -1 ' D? =?‗‗ ?- &' ' ' &.1 ' & &-' , -'.D ' &=' <- ' . <?- 1'& ' .'= ' > <A1' ?- &' D'>' # ' D1' , '- .1' &? ' & 1'.-' & A‘ &=' <- ' <-A10' <-A' 1- '0' ‗< 1' #1‗&-.'-.' ?- &' 3F '‗‗<>' < ‗1 ' H?'1 ‘ #?' D< ' D1' 01'A' ' ' &.1 ' > < 'D<+1' &BB?C'1' <-A' 1- & 1' D1' 01'A' <-A10' <-A' 1- '0' <BB& A'-.' &' D1' 01'A' . <?- ‘ D'0' 01'A' <A=1' & ' <- ' & D1 ' -& K' D0 <-A -.

W ' 3".'‗2.' .'" ‗" 6.*!'" . .-

Ł 3 6 ' W)

‗' ' #.- !"-‗-*!' !' 3! #!' ; ! 7!-!' !' M‗-*!' . ' -*+ -/' C' M‗-*!' . ' B" 0-#!

% '] -' 0'0‘ I B ' 0< R > ' ? > ' '-' =1A1 ' C<TR'0' I ' < > 'B'B'< ' B<C' ?‗'0' '-R' -=&0' <B' '‗‗?0 '00' > " 'B'C'0' ==' 0' I ' &-0<-.?-1" -=" B< '00' > " 1.'0' , < &‗" ! <-B‘ > #<00'< 10' < & 10' & ? < & 10' & > '00< '&0' I ' ?-B'&0‘ C' -&#' 5B 'C&' ==1' &-0<-.?'-1&H‘ -=&' B< '00' > &' < H' 1.-0' C< ''0' A-‗'0' I ' 0?#A' '0' <B' +<0<‗‗'0' ? '?0H 'C -)‘ A'1' RB'<' > 1-0'0' &+1 > # ' - -&' " -" '‗=' > &' H?<A '-.1- 10' C' -&0‘ 1 01L &' A 1' ' -1- i 0' " 1B1 > # ' 1L ?-B' CL' 01H?1-' C' AB > ' &-0<-.?D'1?' - '‘ ? < '0‘ -1B-&-' AB&' 01L &' A'1' &+1 > # ' - '0' <B' 0?'0' ' '0' C< 1- '#' B&-D- - < & ''0' - & ' -J#‘ CC D0' ? '?0H‘ -=>' > 0-'# ' 0<#0B 'CB&1' 0?C'-A1' > ?-' '0' I ' &#& < '0‘ = ' ' -R' B1R<' B&-+1- ?>' B&-B& A< ?>' B' B&-B‗?0? > ‘ HA' -&0' AB?0' ' &-0<-.?'-1?0' - ' '-= <' A?&A1B'>' > 1-010' 1L ?-B' CL' 01H?1-‘ ? > '<' AB<' =1A1 ' C<B 0' I ' <>'B'B'< ' B<C' ?‗<' 0'B' C' -&0' 5B 1?-A1>' &- <-.?'-1?'- >' B -=' > < <' ? < <' <B' C< 1- '#4' ? '?0H‘ -=>' ' '0' 0?#0B 'C &'# H‘ I '0'.'‗‗'0' ? ' =1 =' > ?-' <' I ' &#& < <‘ C' 10' 0 < #0' ? '?0B ' 1.-&d ' -.'' B ! <-B' ' 1' A1#' 1H' B&-+&B< &0‘ +'A1' ' C' 1‗< 10' 5B ‗1 ? >' &#'‗10' B' &' < 1 > ' 1& A1-' 1.-& ' <?A & ' < 1' < '<>1- T2d" -=& " < '=' B< " <CC &#< " B' B&-A > < " =< 1> ‘ C ? ' '-' 'C'0' ' '0' C‗1-'?0' <CC< 1 1' C&R' ' ? > H' C&0 1<' -&0' I ' AB?0' = <R' <B0' &-0<-.?'-1?0' -=' B< '00' > ' <'<AR 1- 10' HA' D? ?0 > &A" > ' 0 < ??' ? '?0Td 1.-" 1&-+8&B<B &' B' B&-. 1.<B'&' '-= <' AB&0' A?&A1B'>' > 1-010' &#' <0' B<?0<0' B' B&-0'A1 <Q(10' &#0 <- 10' B& > A1' =' 1 " -&-' C&R'- ‘ ' > ' R > '-?' <#0 f' <‗'H?<' '-' &+<B&1' A1 &.<B&1' 01?' A'00&‗?B&1' B? ?0+'0' <‗R'?0' =1A1 ' C<B 0' 5B' <>'B'B‗< ' B<C' ?‗" '-' C=< '0' ' 0' B&- 1- e‗ U1A' 'C'0' B<C' ? 0' I ' 1& R' H?&' ' '-' 0?'0' &#& 1' +'.& 1H‘ -'BD'‗&>'-?0' <<-0? '0‘ > ? &' -=&' <I 01-0?' C< 'R' I ' B&-01-0?' ?0 ' <A' CL' > <0' D? ?0 > &A" '?' 0 < ??' B&-. 1.<B&10' H?<0' -&0' ' 'C1' &-0<-.?'-1?0' -=' &#' <‗'<' -=<' B' 0?<' 1.-& +1' -=& ' <? ' 0?#L' -1. B'<‗ 0 < ?1 ' > ?0' 01?' =' 1 " & A'-< 1> ‘ C‗&-.<+' > h' A'0 ?‗' > ' < H' C & .<+L > <' <>1-' HA' D? ?0 > &A" '?' 0 < ??' ? '?0H‘ CAB& ' 1.-& ' B&-. 1.<B'&' '-= <' '1 - -'?' ?-B' CL' 01H?1-' =' 1 1 ' ' C? ' '-' ' '0' =' < 1- '#)' -=' 0' I ' C'?0' ==' 0' <B' &-0<-.?' 1" -=" 0?C' D? ?0 > &A" C & .<B'&-1' B&- =1‗'0' C‗1-'?0' ‗'H?1 ' B' B&- '-1=‚ &0' AB<' B<C' ?‗<' AC&" =1A1 ' C<A0' I ' <>'B'B'< ' -1B-&-' & > '<' B' 0'-.?‗<' B&-+1-B&10' <CC?-Q ?<>1- <' I ' 1&-B‗?0'&-10' '-R' 'C > ' ==1 > ' I ' &-0J.?'-1E' -=>' ? ' > a '=' '-' <' I ' B&-=' > < <‗H?<- ?>' '-' -&#3' =5 ' 5B' <A' -&0' < '-1 ‗ &#01 +< 1' C' > C‗1 1' <B' '-+'&‗<#'‗'R' C? ' '-' C=< '0' ' '0' 0C1B'='B<-=' 1-1 1' +&‗1- 10‗ A1' <+'0<>1- &' <001-0?' I ' B&-01-0?' " -&P ' < -' 0C?<‗'?' H0>' 1 > C& <‗'?‗ I ' &' < '0' D? ?0' 1.-" - -' .'" '-' 01- " !< ‗'<> -= &' -=&' 1L'0 1-A?' I ' <?A'& ' < 1' 1 ?0A1 > ' < ‗'<> 1- e‗ A?L' > ' <CC &#<-A' < '=' B<-A' 5 I B&<=' > <-A' 'H?< 'H?'A1 > ' ᴇ ı ' 1-& ' 01H?' ' '10' <‗'0‗ 1- 'B?0‗ I B ' &0' <? 1 > ' <0' AB<0' <B' & > '<' 5B 0'-.?‗<' B<C' ?‗< B&-+1- 10' C< B&10' <CC?-A;?<>1-B<' ? < > 1- <' &#‗'.< &10' & > '<H‗ <‗'<' -' 1'0A1 > ' '<' B&? 1- <' B' 0C1A='B< <‗ C' -&#' DB 1A' -='0' H <- ?>' '-' -&#' 10 ‗ <?A& ' < 1' 1- '0' < ‗'<> 1- " -=" H‗'< &' A1B'>' &' '1' A&# ' <> ' CL' C 'R' <C?A' F 10 > ' '-BD&< " I ' ?-B' 1> '‗ A1' <+'0<>1- &' I ' <001-0?' " -& '0C?<‗'?' I ' 1> C& <‗'?' <B' &' < '0' 1.-" - -' -.'" '-' 1&A1 > ' C<= '<>1- &‗ 1L'0 1-A?‗ <BB1C <> ' <CC &#<> ' -1B-&-' 1-& 1' 01-B'?' < '=' B<> ' 5B' B&-=' > <> ‗ 'C<HZ' <C' ?‗< C<BK10' B&'‗+1-K10' <CC? - ‗?<>1- <' ? < > 1- <' &'D'<H‗ <‗'<' -' 1'0A1 > ' '0' B&- 1- <' 5B 0C1A='B< <' C' 1" 0 < ?0' 1.-" -='‗ ' 1' I ' A1#' 1' B&-+&B< &0‗ +'A1' ' C' ‗< &0' I ' ‗1 ? >' &#'‗10' B' &' < 10' 1 ?0A1 > ' 1.-'‗ <BB1C < " <CC &#< " < '=' B< " I ' B&-=' > < " =1B' > 0

!' 3! #!' . ' 2 +!2' 1 /!' L ' . ' ' ,5 ' ?!&7 ! !-' ! ‗ ‗#*2' . ' -*+ -/' -/' B" -#! '#.- ‗"1 ! /' ; @' M‗-*' ! - ' ‗-' 3 "+‗ 1 ! - ' ##."/‗-*' .' !' ‗ 0+ ‗.-2 !"!.

D1' =&‗‗&K'-.' - &A?A'&-' '0' C 1='L1A' &' 0' A' ?C&-' D1' &‗‗' '-' D<-B1 ‚ 1> ' H?1A< > ' < '=' B<A&' <BB1C <B'&' <CC &#<B'&' I ' B&-=' > <A&' 1?.1' '-R' 8AB>' " >' 1.1 -' 1 ' &-0<-.?'-1?' 0??' ! <-A1' '-' 1‗ 1A'‗<' 10 ' '-' < ‗'<> 1- &' B & ‗' B? ?0' 1-&' B?>' 10C&-0'&-1' =<1='1'A1>' 1H-' ' I ' 1 ' <‗'0 J r ' D1' -A' '0' D1' & <‗ 001- ' U' 1' & ' ‗1' +?1‗ J

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. !1 E&-* .&/! . 0 #.- -&-* "& &#!"2 C ..! ;."!"2

/@'<2 -/ 1 -@"!2.- ;+! #.-2&/!" #&.-2 -/ # 02!2 !M&-*&2 &* -!2 1.!'&-* -/ ." !#.!-V !+ . +2 C2 1 /! ! .0!" "& &#!"2 2 "!! 1 2.-2 # "!-!"2 -/ . "! 2.-!2 -!#!22 "&! -/ #.-'!-&!-' ." !" "! " #&.-2 [-/ ;&+ &&-*!2 -/ . !" ;."!"2 -/ c' 0-&2 . 02;.-/"@!-; ;! &' ;@ /'&2! . ! ."/!2 2 0 +2 -/ !1 ." +2 "& &#)'C#' -/ .!-2&-' &2)2!-'3 "+& 1!-' 22!1;+!/ -/ ;@ 0 ."& !. ! 2 1!'."/!@-!/ !2 ;+&22 !/ -/!- +!/ +2 +&2. '3 "+& 1!-'1 /!&-' !3 "+& 1!-' .+/!-' V !2&-' !%&&&HF0 / @ . . !" !%H[0@!"!' . ! M&-*!' + .7'&2' .0# &-*.-!+@ !7 *&2 " & &#!"2 ;."!"2 -/ ,' 0-!2 . 02;.-/"&!' -/ !,@ . !@1';!" .1' !-2." '.&/!' -/ . '-..' ."#!'-!&!/+!

4 !

. !1 E&-* . V .+!-' +. !2

3 6 A ! . &&!-2 &-' &2 X32(-'3 "+& 1 -' 22!1;+!/ 7 !"!&-' !3 "+& 1!-' .+/!-' !V !2 & ! %%&&&H[F/ @ . -0 "@ ! &"2'@!"!' . ! "!&*-' . '6&# "/' ! &"/!'+ !&-' /!/!' -/'-.'&-'"&* M&-*!' . -*+.-/!' -' ^+!'7 2 1 /!'#.- &@-*' !1 E&-*!' -/ /" @-*' . V .+!-' +. !2 B."21.# !2 !2!&/' !&2 &-'20# !'.0" &!' ! +. &!" /.@-*' &2 "0!' /&+&*!-#!' # --.';2!"'!' !2 1!G'& .0' . ! -/ 1 -@ @1!2 . !-/&-* *!@-2' !'2!&/' !'&-'7 &# !';!'2.'2"!&!' -/ *"! !' !- +&!2 -/ ." !&0"!2 *!@ 2' !'2!&/' +. &!"2' ! ' 0& *!' -/ 0@ !' 7 !". '&2 *!'!-' -/ +@ -@ !';@ !' 2!&/' +!' 27!+ .'. "!' 2.-!2 2 .' !'M&-*&2 &* -!2 ." !,@'/! 0 !'&-' !'2!&/' +!'+@1@ !/'7 &# !' !' +. &!" # --.'!2# !7!' .!' ! 1."!' "!'. ' +. &!"2 7& &-' &2 6! +1!'# -' &H!' / "!' 02!' !@12!+'&-' 1 E&-* -/ /" &-* . V .+!-' +. !2 2 !@ '!' /..-'&-' @1!' 22!/' ;@'"! 2.-'7 !". '@.0" .,' 0;H! &2& '*"! !' &.0-;"!'7 & !';! ."!'@1!' '!' /';@ EK '1 E&-* !&"!'. #0 /.-' -/ +&'&-* ;!' -.7!'+&E!' .' ++!'&-.' *"! ' .' !' -/ &/!+-!2 7 !". '><-'*"! ' &- .-'!-&!-2'!'2 0+/' -/'1 @ !-20!= V !" ."!' ;!'&'!- !/';@ !'2!&/' 0 ."& !' !'M&-*!'.0" .3!&*-' ."/'-." !&0"!2' ;@ .!" 2.-!' E!' '0- * . !@ !'. ' -@ !- +!!2'." ." !&0"!2';@ !'2!&/' ,!'1 /!' !'2!&/' %%&&H('/ @' . -0 "@'*&'!-'+@1@ !/'." 2" *-!/' ."-@ +. !'1 /!'." .';!'1 /!' ."!' !' !*@- @-*' . !'-!%'3 "+& 1!- .'3!- +@'< ++ ;!'!- ."#!/'0-/!'" 2&/' # '&-'"!2 !#' . ' +. 2'1 /!' ;! ."!' !'-!%' 3 "+& & !-

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. !" V @* -/ ! 20"!2

[6 ' ."!' &2 @1!' !'M&-*!'.0" .3!&*-' ."/'&- !-/&-*' !'#.!-'7!+!' . ' &2 !. +!' -/' .' '.&/!' 6!## =' . ' !' *"! ' /& #!&.' . ' V !&* &2 -/' !20"!$' +.-*!' @1!' 02!/'7& &-' &2 &2 6!/+1!'#.-" "&!' .' !2 0!' . ' < <7&&* 2< *-' " ' -/' . "!'!2R 0!2 !". '1 /!' ;@'Z ,2 . ' &2 -.;+!' *!-&.0"2' ' &2*"! '# "*!' -/'#.2!'/&/' /..' -/ ! 20"!2= 1 E!'7!&* &2 -/' 1!20"!2 . ' ;" 22!' ##."/1*' .' . /!'2 -/ "/!2 !". ' "!1 @-@-*' &-' ;&2 "!2."@!= -/' ." ' ...-!'7!&* ' -/' .#1!' 1!2&&"!' 2 0+/' ;!'02!/' "0* ' .0!' &2 &2 6! +1!' &-' '.&/&-*' +2 " 0/!' -/' /&2#."/!'&-' ';! + '&'7 2 ' !'+2' "+& 1!-' .+/!-' !'%&&S<X</ @' /+.;"&-' !'%HF'@!"!' .'.0" 2!&/' .'!&*-' ."/&2 "!&*-!' ."/!@-!/' ' !'2!&/' 1!20"!2 -/'7!&* &2 0+/';!'/!+@3!/' .' !'M-@* !2 -/' &!j&-2 . '!,@' &"!' -/)' &&!' 22!H ;+!/'&-' !'2 1!'3 "+& 1!-'4 ."-2 R&' !'' ." !2 -/'5D!@= 40"*!&2!2 . '40"* ' .7-!2'20"!+@' ;@' !@1' .';!'#.-'!@!/' .' V@' &&!2 40"* 2 -/' .7-!2 2 !#&&!/'&-' ' !/0+!' 0- .' !'2 1!' ^+!' --!%!/' !"!' ."!1 @-!' ." !, ' .' !- !-'&-' !'2 1!' 9!'1."!' + "*!+@' /!#+ "!/= 7 &# !'7!&* &2 -/' 1!20"!2 0 .-'1."!'/&+&*!-' V!&* 2' !% 1@- #&.-' /' @-j' !'1 E&-*' . ' !' _!&/' !2 0!' ;!!-' '!/' /! ! &'!' -/' -.' 1 /!' ##."/&-*' .' !'.+/'+ 7!2 -/'2 0!2 !". '."/!@-!/'7& &-' !'2!&/"! +1!'= V !" ."!' !'M&-*!'.0" .'!&*-' ."/' ;@' 22!-' . ' &2 ."/&2 /! !#&'!>' 2H&0 +' -/' !1 ." +' -/' .1!-2&-' &2 2!-' +& 1!-' 22!1;+!/' -/' ;@' 0 +."& !' . ' !'2 1!' ."/!@-! ' !2 ;+&22 ! ' /' !- ! ' ' !'1!20"!' . ' !' ; 22 !+' # -!@-' '&&H * +.-2 . ' 7 ! !' -/' '!3@' * +.-' #.- !@-' '&&H ' . '7 ! !' 3.0-/(0-#! (. ' ".&7!&* ' -/' ! @'& ' #.- !@-!'%&H' 0-#!2 . ' ".@7!&* ' -/' ! @' 04#!' #.- !@-'%%' 2 !"+&-*!2' -/' !'@' 2 !"+&-*' ;!' . ' !'7!&* ' . '%%%&H' #."H !2 . '7 ! !' *"!7!'&-' !'1@//!2 . ' !' "!' . ' !'7 ! !' ##."/&-*' .' !' .+/' 7!2 . ' &2 -/' -/' '&' +! 2! ' !' M&-*&2' &* -!2 .' 1 E!' '2 -/ "/' . ' ';022 !+' -/' '* +.-' &" !'2!&/' -!7!' ;022 !+2 -/' * +.-2 + !+@'2!-' ." !' <-/! ###m"/&-* s(22&2!' .' "!1 @-!'&-' &2'2!&/' "!2."@' ." !',-' -/' ".1' !-2 ." ' !'2!&/' -!7!' ;022 !+2 -/' * +.-2 + !+@'2!-' ." !' ;!' -.' 02!/' -.'" .##0 &!/' ." -.!' 1!20"!2';0' ' !@' ;!' 2!-' * @-' 0- .' !' M&-*&2' "!#!& !' ;@' !' !2' . ' 2F# ' 22&2!' 2 +' V &2.-&/!' -!%'#.1@-*' ' !' #.2+2 -/' ! "*&2 . ' !' 2!&/' &&!2 40"* 2 -/' .7-!2 '@-*' !' 2!&/' 4022 !+2 "<2 @[' -/' * +.-2&-' E! @-*'0 .-' @-' . '%' &' .';!' ." .& !/' .' !' M&-*!-= !'2 1!';022 !+2 -/' * +.-2 2.'2!-' *!@-!'&-.' ! 20"!2'2!- --/!'" !' M&-*&2 "!#!& !' U';!'; .E!-' -/' V& ' !'2 0 !' -/' 1! +' . ' !'2 1!';02 !+2 -/' * +.-2 . "!' -!7!' ;022 !+2 ;!<+L!+ "<<; @<!' -/' * +.-2';@' /'@2!' . ' !' "!2."!" -/'0-/&" "!2."!" . ' -*+.-/' ." !' @1!';!&-*' ;! ."!' !L !2' . ' +' !@-&2 2!'!" = & !2'C#' -!%' #.1@-*' .';!'1 /!' -/' 2&2!/' ##."/&-*' .' !'2!&/' ;022 !+' -/' * +.-'7 &# &!';@' &2 !-' +!'&2 ."/!@-!/' .';!' "!Z !&'< 7 -!7!'1 /!' -/' .'"!" @-'&-' !'2!&/' "!2."@' ' !' #.2 &2 -/'# "*!2 . ' !'2 1!' &&!2 40"* 2 -/' .7-!2'= -/ -/ "/

'&-#.-'!-&!- &2' +

' !,@' &&!' 40"* ' -/' .7!-!' 7& &-' &2' 6! +1!' 7 &# !' &.7!' ' !' .'" 2 0+/' ' !' //!' ;@' "! 2.-' . ' !' 2] /' ^ !' 1 /!' &-' !' 2!&/' %H))' @!"!' -@' . ' !' 2!&/' -!7!' ;022 !+' ZK" * +.-' /.!' #.-'!@' -/' # "&!' ;! ."!' !' !2' . ' !@-' -/"!7!' -!%' #.1@-*'&-.' !"@' . ' !'2 1!' &&!' 40"* ' -/' .7!-' ;02<!+' -/'* +.-'-!7!+@' .';!' 1 /!' 2' &2' ;"2!&/' ' !' #.2 !2' -/' # "*!2' . ' !' 2 1!' &&!' 40"* ' -/' .7-!' !"!' .' "!1 @-' -/' +' . !'" ;022 !+ ' * +.-2' -/' 1!20"!2' 7 &# !' ;!' .' ;! / !' +'" !' &0"1!' ;@' !' & !' . /!@-!/' ;!' 1 "E!/' -/' ."/"!/' !'" !' .0"1!' -/' ! !+!' . ' !' 2!&/' C!' 1 /!' !' 2!&/' %H' @!"!-' -/'&-' !' 1! -!' 2! 2.-' .'02!' 20# !' ;022 !&2' -/'* +.-2' 2' ' ;!!-' 02</' + 2' ."!' !' .1@-*'/.74!' . ' !' 2!&/' -!7!';02/ /2' -/'* +.-2' -/' ;! ."!' !' 1 E&-*' . ' !' 2!&/' 2 0 !'&-' !' 2!&/' S[)' @!"!-' -/' ' +' !- +&!2' &-' !' ("2' +-.' !% 2 !/' ;!' . ' -. .-' !+ ! !' 0-.' !' !2' . ' -/&+1 22!' 7 &# !' 2 +' ;!'&-'/ !' @!"!' . ' .0'" ."/' b./' U ' %%%%'&H' -/' !'" !'2 1!' !2' !'2 1!' !' 1 /!'&-' !' 2!&/' %H[' @!"!' .' -/'&-' 0+' 2 "!-* ' 7& ' &2' !- +&!2' 0 . ' !' 2!&/' ;022 !&2' -/'* +.-2' -!7!' .' ;!' 1 /!' 2' &' 2 0+/' ' !' /..-' .-' !' 2!&/' -!7!';022 !&2' -/'* +.-2' 1 /!' ."!' !' 1 E&-*' . ' &2' 2!-' ! '& ' &2' +-!' //!'-.';!' 1 /!

C ' '&';!'."/!@-!/';@' !' 2!&/' 0 ."&!' ' &'" !' 2!&/' -!7!';022 !&2' -/'* +.-2';!' 1 /!' ##."/&-*' .' &2' 2!-' ^0!' ' +' . !'" ;022 !&2' -/'* +.-2' . ';" 22!' "!1 @-@-*' 27!+' &-' !' 2!&/' "!2."@!' 2'&-' +' . "!' + #!2'. ' -*+.-/';!';!."!' !' !2' . ' "&2 1 2' -!%' #.1@-*' / 1 -!/' -/';".E!-' 0 .-' @-' . '%%'+&' .';!'+!'@!/' 0 .-' !<@' &&!' 40"* ' .'" .7-!' .'" -@' . !'" + #!' '@-*' !' E! &-*' . ' !' #J!-' 1!20"!2' 'E! !' 2&+' -@' . !'" ;022&!+' .'" * +.-' 0-;".E!-' -/'-.'/ 1 -!/'.';" 22!' -' &2' ."/!@-!/' .';!' 1 /!';@' &2' 32!-' !

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!"# 0-&2' /'!-0"!"2

1 ' '&-'&-' D1' 1 BD<- 0@ A 1- '' 1 0@ AK1@@'-.'&?' &-' .-/.-H

' !'/&2#"! !' .1!-2'&-' &2' Y' 2!-'('(l' 3 "+& 1!-' 22!1;+!/'-' 2 !7& ' 0-.' @.0'" Y'/&2#"! !')l' V&2!/." !2' !' "# 0-!2' /'!-0"!"2'&- ;&!' -/'/7!++&-*' &-' /&,2' "&!2'. ' &2' 6! +1!' . ' -*+.-/' .0!' . ' !' &&!'. ' .-/.-' ' 7 !"!' !@' '!' !&'" "!!' 22 *!' "!2." !' #.0"2' -/' "!#.0"2' 7& ' !&'" *..&2' 7 "!2' -/'& # -/&2!' &-.' /&,2' #.2&2' -/' ""&!2' ;!@.-/' !' !!' 27!+' &-.' @-!' 3." @-* +!' 4&& &*-' 2+ -/' ."" -/@!' B" 0-#!' &'&+!' !-@#!' -2E!' 2+ -/' B"&2!+.-/'-/'. !'" /& 2' -/'1 -@' + #!2' "!*&.-2' -/'#!- "!2';!&-*'&-'+! *!' -/' 1@&!' 7& ' !)M&-*!' .0'" .3!&*-' ."/' !"!' .';@!' -/' 2!+' -/' 1 E!' !&'" !%# 0-*!2' 7& ' !&'" 2!&/' *./!2' 7 "!2' -/' 1 '# 0-/&2!$ ##."/@-*' .' !' + 7!' -/'#02 01!' 02!/'&-' !')@ .' !'2!&/' "!*&.-2' -/' + #!2' -/' !"!' !,@' 2.& ' "!+@' .'02!' !@1'2!+' .' &2' 1..2' ' 0- *!' 7& .0!' !% # &.-' @-!' &1 .2&#&.-' .'" #.-"&;0#&.-' .';!' /' ." E!-' . ' !@1'.'" . ' !-@' . ' !@1' .' ." ." ;@' -@' -*+&22 !' 2.-!' ." 2.-!2 -/'&-' 2!1;+ ;+!' 7&2!' !@' ;!."!' &2' @1!' ' !' //!'02!/' -/' . "&* ' .7!-' .' ' !' -/' 02!' !&"!' "!!' 22 *!' "!2." !' -/' "!#.0"2' &-' .' !' #.2 !2' . ' B+ 0-/!"2' .+ -/' !+ -/'4" ; -/' -/' . !'" + #!2' !" .' -@* ' /H.@-@-*' 0-/&'" !'.;!&2 0-#!'. ' !' "# !/0E!'. ' 40"*.@-' -' 7 &# !' + #!2' !' 0-& 2 +' 1 "!2' ;!' #.1!-+@' E! !' -/' .+/!-' &&&H @1!2'&-' !' @!"!' .' 7 &# !' 1 "&2 +' -*+&22 !' 1!-' -/' /@ 2' . !'" - #&.-2'&-' @1!' 22!/' '!'02!/' ."!2." !' !"!' .' 2!+' -/'0 "!' !' #.1./& !!2' . ' !&'" .-"!&!2' -/' "!+@' .' ;@!' *!@-' 20# !' &-*!2' 2' 2!1!/' !@1' 1..2'-!#!22 "&!' -/'!% !/&!-' .'" !&'" +& !' -/' !' 7!+!' . ' !' .-"!@' -/' "&!2' ' !@';!'#.1!' ".1'-' &+' -.7!' . '+ !' ' ;@' !' !+&2 &' . ' !' !"#!"2' -/' . "!' 1 "# 0-!2' -/' /'!-0"!"2' /7!++@-*' -/' ;!&-*' "!!' 7& &-' !' &&!' . ' .-/.-';@' #.-!/!" #&!' 1 /!' 1.-*!' !@1' 2!+' . ' !&'" 0-# "& ;+!' -/' &-./&- !' #.'!&2!' ." !&'" 2&-*0+!'" & !' -/'+0#"!' #.-" "+!' .' !<@' -*+&22 !1 -' +&; &!' -/' .' !'+&; &!' . ' !' 2!&/' " !' !"!' 7 &# !' &2' !,@' 2.-!' . ' 7 '- #&.-' ' !' ;!' . ' 2 0+/' ' !' !&'" "!!' +&; &!' !"!' .' ;@!' 2!+' -/' 1 E!' !' #.10 #&.-2' 7& ' !' 7 "!2' *./!2' -/' 1 "# 0-/&2!2' !&"!' +! 20"!' ' !' #.-" "+!' .' +' + 7!"! 2.-'# "& !"&* ' -/'#.-2#&!-#!' 1.-*!2' !@1'2!+' .' !' HO/&#!'. ' +' -*+&22 1!-' 1 /!' -' "/&- 0-#!' -/' .-2&0#&.-' ' &2' .'2!@' '-.!' -*+&2 1 -'"!2." @-*' .' !'2!&/' "!2' 2 +' -!& !'" ;@!' -!'2!+' -@' *./!2' 7 "!2' ." 1 "# 0-/&2!2' !"!' !%#! !' !' &"2' #.1 .-/!' -/' 1 E]' @-!'7& ' !' 2!&/' !+&2 &' 1 "# 0-!2' . ' .-/.-' -/' !&'" 2!&/' #.- !/!" &2' ' !&'" +! 20"!' 0 .-' @-' . ' ." !&0"!' .' !'2!&/' !+&2 &' "# 0-!2' . ' .-/.-' -/' .' !&'" 2!&/' .- !/!" &2' . '20# !' 1 "# -/&2!2' *./!2' "7 "!2' 2.';@' &1' ;.0* ' .'" 2.+/' !"!' 7 &# !' @-!'&1 .2&#&.-' -/'!% ###&.-' ' !' ;!*@--@-*' 7 !-'&' 7 2' &"2' E!-' 7 2' /!1 0-/!/';@#.+.0'" . ' " !"-&!'. ' !@-' .1 2'. ' 0- !";0"@' ' 7 &# !' @1!' !'2!&/' @-!' 7 2';0' !' ' +0!'. ' + !' '.+/!'-.;+!' 2 !"+&-*' -/'2.!';@#.+.0'". '20# !' !@-!/' .+@-!22!'&' ';!'20 "!/'.';!' E!-' .'" ' !7!'@!"&2' 22&/' -/' &"7 "/' &' 7 2' !-#"! #!/' .' 2' B+!11@2 ' -/' -.7!'&' &2' 2.!' ' !' 2!&/' !+&2 &' -/' "# 0-!2'. ' .-/.-' E!' .' !'@ -*+&2 ' 1 -' .'" @.-*!'& # 0-!';!@-*' !"!' ' &2' &"2'#.1@-*' %%'&&' 2 !"+&-*' ." ' @-!' .' 20 "!' &1' .';@!' -/' 2!+' &2' 7!-' "!'*../!2' 7 "!2' -/' 1 "# 0-/&2!2' ' !' ' !"!-' 4@'.## 2&.-' 7 !". ' +' 1 "# 0-&2'-.';!@-*'. ' !'2!&/' !+&2 &' -/'#.- !/!" #&!' 7& /" 7' !@1'2!+' ".1' !'2!&/' "&2-' 7 !";@' !'7.++!-' +. !'. ' &2' 6! +1!' 7 &# ' &2' ..-' . ' !' *"! ' #.1./& !!2' . ' !' 2 1!' ;@' 1 E&-*' 7 !". ' !'M&-*&2' "0!' 0;H! +2';!' 0' &-'.##0 #&.-' -/' !' .')' ! 0+' !' 1.2 !' 0-&,2 ++@' !&'" +!'&-*' -/' +2.' . !'" /&')2' #.1./& &!2' . ' /&')2!' -/'2!< +' "&!2' . ' &2' 2 1!' 6! +1!' &2' -.'2.+/'-!0 !"!/' 2' &' ' ;!'&-' @1!' 22!/';0' ." + #E!' . ' 0 !" 0-#!' . ' !' 2 1!'&-'/+,2!' "&!2' 7 "!'20# !' #+. !2';!' 1 /!' !@';!' #.-'!&!/' .' .-/.-)' 7 !"!' !@';!' 2.+/' !""!'0-/&'" !' "&#!' ' !@' ';!'7." !' -/' ' !@'#.2 !' .' !' 1 E!"2' . ' !' 2 1!' -/' '2.1!' @1!' !@';!'+!-!' .'+.-*!'/ +!2' -/' !' 1.-!@' !". ' '/&,2' @1!2'-!,' &!/'-/'.,' ' !'#.1./&!2' -/' &5# 0-/&2!2' . ' " &!2' 7 &# !' !' 2!&/' !+&2 &' 1 "# 0-&2' . ' .-/.-' -/' . "!' !&'" #.-!/!" &2' ;"@-*'&-' &2' + -/!' &2' 2.'2.+/!' .'@.0'" 2!&/' #.1 + @-- ' -/' . "!

A' -<-B1'&-' 1 BD<- 0' A GR- ? 1 5'&-' &-A&-9' '>C&0'-.' !'-10' &-' 1 0&-0' A1<@'-.'<' !& 1'. -' < 0'

!' 0' 1 1L '&-' 0?BD' !'-10G

-B 1<01@ #?01@ <-A' @@ ==1B 0' &-' -' 1D' !'-10' d

B9/.3 &23 . 4)) ' *'>V . >9Q

!' M&-*!2' "0!'20;*! ' +'2.'/!"!' -/' &* '!%#!/&-*' "&#!' ' !' ;&!'". ' !'2 1!'# -' -.'+@'!' !"0 .-' ;@' "! 2.-' 7 !". ' +' !' &/!2' .7-!2' -/'40"* 2' . ' &2' 6! -!' &-' ! ! !';!' ! !' &- .' *"! ' .,/!' "0@-!' -/'/!# @!' -/' 2' 4.7!'&-' 1 - L' !@' ;!' 7& .- !' . !' . '#.1 H" !' .'" "!+&! ' -/' !' M&-*&2' 02 . -!2' -/' 0;2&/&!2' -/' !' '&!' . ' !'+ -/'*"! +@' /!#"! 2!/' -/'1@-@22 !/' -/'/ &+@' !@' ;!' +&E!' 1."!' -/' 1."!' .' /!# @!' & '/0!' "! ."1 /.-' ;!' -. ' /' &-' &2' ;! + =' 4!' &' !" ."!' !- &/' ;@' !' M&-*!' .0 ' .3!&*-' ."/' ;@' /'@2!' -/' 22!-' . ' !' ."/&2' <0 +&' -/' !1 ." +' -/' . ' !' .1!-2' &-' &2' "!2!-' +& 1!-' 22!1;+!/' -/';@' 0 ."& !' . ' !'2 1!' ' !,@' -*+&22 1 -' ;!@-*' !' M&-*&2' "0!' +&!*!1 -' ".1' !-2 ." ' '!' "!!' 22 *!' "!2." !' #.0"2' -/' "!#.0"2!' &- .' !'2!+/' #..2 &2' . 'B+ 0-/!"2' .+ -/' !+ /' 4" ; -/' -/' . "!' + #!2' ! .'-@* ' /H.@-@-*' 0-/&" .;!&2 0-#!' . ' !'2!&/' "# !/0E!' .' !' " !2' !"!' !"!' &" .';!' .+/!-'7' &2' ." !&" &# 0-/&2!2' *../!2' -/'7 "!2' !"!' .';@!' -/' 2!+' L -/' 1 E!' !&" !2# 0-*!2' "!+@' ' &2' ." !& !' +! 20"!' 7& .0 !' !% ##&.-' @-!' &1 .2&/.-' !% ."/.-&' ." #.-"&;0/.-' .' ;!' //!' +!'&!/' E!-' "' #!@'!/' . ' !@1' ." . ' -@' . ' !@1' .' ." ." ;@' -@' -*+&22 ' 2.-!' ." 2.-!2' .' &2' ." !&" .7-!' 02!' ." .' !' 02!' . ' !'2//' " !1&!' .@ !+&2 & ' ." . ' -@' . !" +&E!' !%#! !' .-!+@' W 1 " ' 2 !"+&-*' -/' ' -..' 2.-!' -*+&22 ' 2' &_' ."!' "! !"#!/' !"! &" E!' .' &2' .7-' 02!' ." .' 02!' . ' !'2!&/' " !1& !' ." !+&2 & ' !"!' . ' -@' . !" -*+&22 ' 2.-!' '7 ' !2 !' /!*"!' ." #.-/&#&.-' ' !' ;!' . ' 2.!' +7!@' ' !' ;!' !' M&-*!' . " .')!&*-' ."/&2' "0!' +&!*!1 -' -@' @-!' !% ##&.-' &1 .2&#&.-' ." #.-"&;0#&.-' ." &2' +&; &!' ." "!/.1!' .' ;@!' -/' <!+' -@' *../!2' 7 "!2' ." &# 0-/&2!2' &-' ." ' -@' . ' !'_!&/' "!2' 1 ."!' ." ;.'!' !' 2.1!' . ' W 1 "d'2!"+&-*' ..-+@' =' 0 .-' @-' . ' ." !& 0"!' .' .0" 2!&/' .,!&*-' ."/' ." ' @1!' ' !' /. !' !' #.-" "&!' . ' &2' ^+!'%%' &' -/' +2.' ' ." !& 2' .' !' "&!' *"!'!/' &-' &2' ;! + '%' @1!2' 2.' 1 .# !' 2' !' #.-" "&!' .' &2' 2!-' !' < ' . ' @1=' -/' ' !'2!&/' "&!2' 2.' *"!'!/'2 +' '!'&-' &2' ;! + ' -' #/.-' . ' /! !' ." !'2!&/' ." !& 0"!' . ' W @1!2'&-' -@' . ' !' M&-*' .0" !2' V& &-' &2' 6! +1!' ;@' 7"@ !' + @- !' ;&+' ." &- ."1 #&.-' -/' 20# !' #!22!' .' ;!' 1 /!&-' !'2 1!' 2' &2' " .0* ' .' ;!' 1 /!'&-' ."0 .-' -' #/.-' . ' /! !' 'R 8' #.!-'+ 7!' /'R !' "& +' !". ' .' ;!' ; /' &-' 20# !' &"!' &&!' 7-!' ." +3#!< 7 !"!' !'2!&/' #!&. ' &2' #.1!-#!/' ." 20!/' -/' ' !' /! !-/ 0-'&-' -@' 20# ' #/.-' ;!' -. ' /1@ !/' .' V *!' &2' + 7!' -." ' -...-' !22.-' ." !###&.-' ;!' ." 20# !' /! !-/ 0-' /1@ !/' ." ++.7!/' &-' ' ;! +

*4 0 7 ' !

C ' C ' &' ><a1'0&>1'&==1-B=' C1 ' 1<0&-

C 6 ' ; .1&- ;+!' -/<7&+ 0+' 0" !-2!/'10"/!"2' ;!';@' !' 7!2' . ' b./' -/'. ' - +0" +' "! 2.-' . ;!/!-' -/' "' .';!' !2# !7!/'@!' - ' !' +!2 !' 1 -@' -/' /&32' 0-"!2.4 ;+!' -/'/! !2 ;+!' . !2' + #E&-*' *" #!' 7&+ 0+@'#.1E !'10"/"!' .' !' &* '/&2 +! 20"!' . 'b./' -/'#. " "&!' .' +' ' !' 7!2' ;.'!2 &/' -/'1.". ' @!-2' !&" - 0" +' -/'.;+&!*!/' /0 &!' 7&+ 0+@' #.1@M!' 0" !-2!/' 10"/"!' &-' 2+!@-*' !&" 2 !" ." !&" &11!/& ' .'!&*-' 0-/&" 7 .1!' !' " !@';!'." .7!' .;!/&!-#!' &-' "02' .' ! #!7!' !' "! +' -/' !%!#0#&.-' . ' !' + 7!';@' !';!-! &!' . ' !&"#+!"*&!=' -' . . !' 7 !" ' . '+ !' .-' 1!2' b" 1!' + !' . ' .-/.-' A.1 -' 7&+ 0+@' 22!-&/' -/' 0" !-2!/' !' 10"/"!' . ' ..-' 6&# "/' " #@' b!-&+1 -' !-' &2' 1 &2 !"';@' @1' -/' &2' 0" !-2!/' 22!-' !' &%' / @' . 'B!;"0 "@' + 2' 2' '4"!-7./!'&-' !' .0-&!' . ' 22!%'10"/"!/' -/'2+ @-!' .' !'"&* ' &+.02' !-2 1 +!' . '. "!'&+' /&2 .2!/=' V !" ."!' -/'&-' '.&/&-*'. '+&E!' 1@2# !'!2' .'!-2!7!<;@' !' 22!-' . ' !' ."/#2' 2 0 ' -/' !1 ." +' -/' !' ." !-2' &-' &2' K2]&' +!1!-' 22!1;+!/' -/';@' 0/&."&!' . ' !'2 1!' 4!'&'!- /&!/' &' !'2!&/' 1!2' R " 1!' .'" !' 10"/"!' . ' !'2!&/' 6&# "/' " #@' &2' + !' &2 !"' ;!' 7@-!/' . ' !'2!&/' 10"/"!' 2' ' !+.-' ' . !-/&/'&-' !@' "! 2.-' -/' ' !'2 1!' 1!2' ." !'2 1!' 10"/!"' 2 +;!' /" 7!-' -/' -*!/'&-' 20# !' 1 -!" -/' .0"1!' 2' ;@' !' 7!' . ' &2' -/!' ';!!-'02!/'&-' 0# !'# 2!2' 2' 2. ! ';!&-*'-..'#+!"E&2' /;@-*'+&E!' 10"/"!' '!' ." .7!' .';!' 0-@22 !/=' @' "&'&+!*!' . ' &2' #+!"*&!'-." &2' /!1 0-/!' . ' !'2 1!'-. 7& 2 -/&-*

+2.';!'&'."/!@-!/';@' !' !&/' 0 +."+ !' '&' -@' + &!' 2.-!' !"! &" 0" !-2+/+@' 10"/!" !&" ."/' &2 !" ." .')!&*-'&1 1!/& !' ' !@' !"! &" ;!'-.' /1@ !/' .' !&" +!"*&!=' -/' &" #.-'&# &.-' ." !@-/!" . ' -@' 20# !' 2.-!'2.!' !"! &" . !-/&-*' /' &" !' .0"2!' . ' !' 7!' ' !' 2 1!' 2.-!';!' 0 !'&-' !%!#0#&.-' 2' .0* ' !'7!"!'-.!' +!"E

@'3!"2.-2' 10"/!"&-*' !&" 2!"2' 2 +' -. ' '!'4!-!&' . ' +!"*@

3 6 ' @1 'R<8

K' !. 1!-.' ?' 6!*!1' #.

' , -.1'B? 1' & 1' ' & A' # ' D<0i1-'&=' D1' & A'0' 0C?<@' <-A' 1-2C& <@' <-A' D1' & >1-0' &=' D'0' 01-'C< @'<>1-' <001>#@1A' -0 110' -<>1A <-A' # ,' D<?=@& ' 1' &=' D1' 0<>1@ 1-<Q ' D',& A1 -1 # <-A' 10 <#@1 D' D<' ,D1' >&0 1' ,101-A' =< D' 0' '-' E&A@ &D-' < A'-<@' 0@<@ 0 <-A' 01'01A &=' <-A' BD1#'00D&C' &=' < - 1 #? '<-A' D&>0' BD1#'00D&C' &=' & a1@ <-A' D1' 1+ 1-A' =< D' 0' '-' E&A' D&><0' '00D&C' &=' F -BD10 1 ' D1 01&=' D1,'-.@ &D-' '00D&C' &=' @ ' 'BD< A' ' 0D&C' T2' ? D<' A>&A' '00D&C' &=' 1 1=& A' @' ' '00D&C' &=' < D1' I ' F 1@@'0' D&><0' '00D&C' &=' &-A&-@ AK< A' " ?a1' &=' -a -.D<>' D&><0' '1' &=' ?-A1@@ 1- ' '1' &=' & D?># 1@<-A' &D-' D 1' &=' L1-=& A' D&><0' 0 '1' &=' "1 # ' E1& .1' '1' (=' D &?10#? ' D&><0' '1' &=' ? 1 ' &D-' '0B&?- 1' F1 0' &D-' "1-D<>' 10&? 1 ' &=' -.&-A

1 5

h D i' <-A' D1' '<C 1 0' '>>1A'< 1=' =&@@&K'-.@ < 1' -&K' =& ' '1' =' 0 ' '>1' C '- 1A@ <0' < ' &=' D1' < ? 1' &=' D'0' 100'&-;

' ' '() 7' ! 7( )P ' 5' 6 ')7 7 =(5 !5 + ' 0

E’@10’ & A’ ” <?#1-1 ’ & ’ & A’ &a1’ @&D-’ ! -1?L’ D’1=’ ?0 ’B1’ &D-’ D1 - ’ , -’.D ’ ’BD< A’ E @=& A’ , -’.D ’ E’@#1 ’ <@#& ’ , -’.D ’ 1 -&@A’ < ’ , - .D ’ D& > <0’ &+1@@’ , - .# ’ &D-’ 0@1 ’ , - .D ’ F ’@@’<>’ <-A’0’ , - .D ’ D< @’0’ &>1 01’ , - .D ’ <>10’ 1@@’ , - .D ’ D& > <0’ F &A1’ ?..1’ &# ’ 1A1’ ?..1’ D& > <0’ , 1# @@’ 1 .1<- ’ <-A’ &D-’ & A<?- ’ 1 .1<- ’ D<+1’ D&@A1’ <-A’ #1’ C@1-< @ ’C&001001A’ <-A’01<01A’ &’ D1 >’<-A’ D1’ ’D1’ 10’&=’ D1’ <-&’ 0’&=’`’ &? &-’ ’P’ <-A’ , 1-=< 1’ ’-’ D1’ &?- ’1’&=’ <==’ D1’ <-&’ ’ &=’ 1>’-D<>’ ’ ’-’ D1’ &?- ’1’&=’ 1 ’ D1’ <-&’ 0’&=’ A=& A’<-A’ &>1’ ’-’ D1’ &?- ’1’&=’F < =’ D1’ <-&’ ’&=’ F &@+1 D<>C &-’ ’-’ D1’ &?- ’1’&=’ <==’ D1’ <-&’ ’&=’ C &-’ &+1@@’ ’-’ D1’ &?- ’1’&=’F ’@ 1 ’ D1’ <-&’ ’&=’ 0 K a<>’ ’-’ D1’ &?- ’1’&=’ , 1- ’ D1’ <-&’ ’ &=’ 1 A’0B& 1’ ’-’ D1’ &?- ’1’&=’ 1 a’ <-A’ &=’ D1’ <-&’ ’&=’ + -. &-’ ’-’ D1’ &?- ’1’&=’ 1 B@’ &’ D?01’ &=’ D1’ , -.’B? 1’ & 1’.< & A’ , -.’ 1- ’ D1’ +’000 <-A’ D’0’ D1’ 10@’ D1’ &’A&’ & A1 -’<-A’ A’0C&01’ & ’ #1H?1 D’ D1’01’A’ <-&’ 0’ <-A’ 1 0 ’ C< 1’ &=’ D1 >’ # ’ +-@@1’ 10 <>1- ’& ’ & D 1K’01’ < ’ D’0’ C@1<0? 1@’ KD<-’<-A’<0’ &= 1’ <0’ ’ ’0D<D’ C@1<01’ D’0’ ’.D-10

E1’)1 <@’ <+>. A ’ &’1 , ’ A’1’ , -.’0’ C1&C@1’ 0?BD1’ ’.D ’ ’@1’<-A’ ’-+10 ’ <0’ D1 ’& ’ <- ’ &=’ D1 >’D< D’ ’-’ D1’ >’0010’ & ’<- ’ D1 &=’ g

3 6’

3’ 6!*&-

6!#& +’ . ’ !’ (M&-*(2’ ! !”2’ 3 !-2’ / !/’ 5’B!;’@ @&+’ *” -&-*’#!” &-’ 2 !2’ .’ !’ 9)&!!-’ .’” !’” .7!”▯

’ , -.’&?’ &+O1’.=@ & A@B<@@’-.’ &’ D’0’ 1>1># <?-B1’ D<’ D’0’ ’.D-10’ # ’D’0’ 10’ C< 1-10’ #1 -.’A< 1’<’F 10 > -0 1 ’ D1’ LL 0’A< ’&=’ !1# ?< ’ D1’+’’ 1 1’ &=’ D’0’ 1’.-1@ .<+1’<-A’ . <?- 1A’?- &’ D’0’ >&0 1’ A1 1’K =1’ @’\<#1 D’ ^?1-1’&=’ -.&-A’ D1’ ? .D’&=’F < D<>e’ D1’ & A0D’C0’&’ <-&’ 0’&=’, -&@@’ ?C@1’<-A’ ’BD1’ D1’ & A0D’C’ & ’ <-&’ ’&=’F a1’ D1’ & A0D’C’&’ <-&’ ’&=’F < >&? D’ D1’ & A0D’C@&’ <-&’ ’&=’ & 1@<-A’ D1’ & A0D’C’ & ’ <-&’ ’&=’ 1@K1@@’ D1’ ?-A 1A’&=’ &?.D#& &K1’ ?00D1>1’<-A’ <01@@& 1’ D1’ & A0D’C’ & ’ <-&’ 1’&=’ < 00D1K&A1’ ’-’ D1’ &?- ’1’&=’ &’0@’<-A’<@0&’ D1’ & A0D’C’ & ’ <-&’ ’&=’, -.10@<-1’ ’-’ D1’ &?- ’1’&=’ 1 =@’ &’D<+1’ D1’01’A’ ? .D’ & A0D’CC10’ <-&’ 0’@<-A10’<-A’ 1D @0@’<>&-.1’&D 1’@<-A10’A’ 01’ ? .D10’ <-&’ 0’@<-A1<’ <-A’ 1-A0’ <-A’&D 1’D1 1A’<>1- ’0@’ &’ D1’ 0<>1’^?1-1’=& ’R>1’&=’D1 ’@ =1’=& ’D’ ’ ”&K1 ’ <= ’ ’ D1’A1B1001’&=’ 1B’@@’ D1-’ ”?BD1001’ &=’ & a1@’<-A’<@0&’ D1’ <-&’ 0’&=’ 1’.D<>’<-A’F &&A1D<@@’-’ D1’ &?- ’1’&=’ 001L’<= ’ ’ D1’A1B1001’&=’B? 1’01’A’ &+01’.-’ & A’ ’=’0D1’ 4&1’@&-.’=& ?-1’ &’ #1’ ’-’ , 1=’I <0’@ # ’ D1’ 0<>1’D 10’C< 1-10’>& 1’C@1 -@ ’A& D’<CC1 1’ ’ -A’ KD1 1’<= ’ ’ ’-’ D1’C< @’<>1-’ D&@A1-’<’ F 10 > -0 1 ’ D1’L”’ 0@A< ’&=’ J&@2’ ’-’ D1’ L W0 1 1’&=’ D1’ 1’.-1’&=’B? 1’01’A’ & 1’.-’ & A’ D<AA1@’ ’ ’K<0’ 1-<#@1A’& A1 -1A’<-A’ 10 <#@’00D1A’# ’<? & ’ 1’&=’ D1’ 0<>1’C< @’<>1-@’<>&-.1’& D 1’ D’-.10@’ D<’ D1’01’A’^?1-1’ 0D?@A’ D<+1’=& ’ >1’&=’D’ ’@ =1’ D1’01’A’ ? .D’&=’F < D<>’ D1’ & A0D’CC10’<-A’ <-&’ 0’&=’, -&@@’ ?C@1’<-A’ ’BD1’ ⁄8 & A0D’C’&’ <-&’ ’&=’F a1’ D1’ & A0D’C’&’ <-&’ ’o=’F 1 >&? ’+’ D1’ & A0D’C’ & ’ <-&’ ’&=’ & 1@<-A’ D1’ & A0D’C’ & ’ <-&’ ’&=’ 1@K1@@’ D1’ ?-A 1A’&=’ &?.D#& &?.D’ ?00D1>1’ <-A’ <01@@& 1’ D1’ & A0D’C’ & ’ <-&’ ’&=’ < 00D1K&A1’ ’-’ D1’ &?- ’1’&=’ &’@.’<-A’ D1’ & A0D’C’ & ’ <-&’ ’&=’, -.10@<-1’ ’-’ D1’ &?- ’1’&=’ 1 =’<-A’ <@0&’ D1’ <-&’ 0’&=’ 1’.D<>’<-A’F &&A1D<@@’-’ D1’ &?- ’1’&=’ 001L@’<-A’<@@’<-A’1 ’ , - .D ’0’=110’ <A+&?0&D0’ &=’ED’ BD10’ ’&? ’10’ D<?-R ’10’ #1-A10’ &0C’ <@@10’<-A’ & D 1’ #1-1=’B10’ &=’ D? BD10’ KD<’ 0&’ 1 ’ D1 ’ #1@’<-A’ <@@’<-A’ 1 ’ ><=” @’=1 ’10’ = <?-BD’010’ =1’ 10’ >< a1 ’0’ +’1?’ &=’ ! <-a1C@1..1’ &? 10’ 1 0’<-A’ <@@’ & D 1’ C=? 10’<-A’ B&>&A’ ’10’ KD<’ 0&’ 1 ,’ D1 ’ #1@’ &’ D1’ 01’A’ & A0D’CC10’ <-& ’0’ ? .D0’ <-A’ & D 1’ D1’ > ’0010’ <-A’ &’ <@@’ & D 1’ D1’ > ’0010’ ’-’ D1’ 01’A’ Q 1’ 0C1B’=’1A’ & ’ &’ <-’ C< &1@’ D1 &=’ C 1 - -.’ & ’ #1@&- . -.@’<0’ # ’ D1’ 0<>1’ Q 1’>& 1’C@1 -@ ’ ’ ’ A& D1’<CC1 1@’ KD’BD1’ 10’C< 1-10’<-A’ A@1@’ B&- - .’ D1’ 01’A’ ? .D0’ <-&’ 0’@<-A10’<-A’ 1-A0’ , - .D ’0’=110’ A+&?0&-0’<-A’<@@’ & D 1’ 1 1A’<>1- ’0’<=& 1’ 1D1 B’A@’#1’+&’A1’<-A’&=’-&-1’ 1=!1A@1@=& ’<0’ >&BD1’<0’ D1’01’A’ ? .D’&=’F < D<>@’ D1’ & A0D’CC10’<-A’ <-&’ 0’&=’ , -&@@’<-A’ ’BD1’ F a1’ F < >&? D’ & 1@<DA’ 1@K1@@’ <-A’ < 00D1K&A1’<-A’ D1’01’A’ ?-A 1A’#1-’ ’-’ D1’ &?- ’1’&=’ ”& ’ KD1 1’ ’-’ D1’01’A’ 10’C< 1-10’<-A’ A1’ D1’ D U’ 1D1 B’A’ &’#1’ ’-’ D1’ &?- ’1’&=’ &-@0@’ -A’<0’=& ’<- ’ 0?BD1’ & A0D’C’<-A’ <-&’ ’&=’ ?C@1’ D1 1’ ’0’ -&-1’0?BD1’ &’ D’0’ ’.D-1001’ #1@&-.’-.’ K’ D’-’ D1’01’A’ D’ 1’&=’ &-@0@’#?’ D1 1’ ’0’ <’ & A0D’C’ & ’ <-&’ ’&=’ ?B@1’ KD’BD’ ’0’ K’ D’ ” D1’01’A’ &?- ’1’&=’ ”& @ -A’ D1’01’A’ & A0D’C’ <-A’ <-&’ ’&=’ , -.10@<-1’ ’0’K’ D’-’ D1’ &?- ’1’&=’ 1 1=& A’ <-A’-&’K’ D’-’ D1’ &?- ’1’&=’ 1 =@’<-A’ D1’ 01’A’ <-&’ 0’&=’ 1’.D<>’ <-A’ F &A1D<@@1’ #1’ ’-’ D1’ &?- ’1’&=’ ?==’<-A’ -&’ ’-’ D1’ &?- ’1’&=’ 001L¦ F D1 =& ’ D’0’ ’.D-10’ K’@@’ D’ D< ’ # ’ D<A+ B1’<-A’<001- ’&=’ D1’ & A’0’ 0C?<@@’ <-A’ 1>C& <@@’ <-A’ D1’ & > -0’ ’-’ D’0’ CF - ’ C< @’<>1- ’ <001>##1A’<-A’ # ’<?A& 1’ &=’ D1’ 0<>1@’ ’ ’ #1’ 1-<A1A’ & A1 -1A’ <-A’ 10 <#@’00D1A@’ D< ’ D’0’ 01’A’ >&0 1’A1 1’ K =1’ @’\<#1 D’ ^?1-1’&=’ -.@<-A’ D<+1’ <-A’ D&@ =1@’ & A0D’CC10’<-A’ <-&’ 0’&=’, -& ’ ?B@1’<-A’ ’BD1’ D1’ & A0D’C’<-A’ <-&’ ’&=’F a1@’ D1’ & A10D’CC’<-A’ <-&’ ’&=’F< >&? D’A 1’ & A0D’C’ <-A’ <-&’ ’&=’ 1@K1@@@’ D1’ ?-A 1A’&=’ &?.D#& &?.D’ ?00D1>1’<-A’ <01@@& 1’ D1’ & A0D’C’ & ’ <-&’ ’&=’ < 00D1K&&A1’ ’-’ D1’ &?- ’1’&=’ ”& M@’ D1’ & A0D’C’ & ’ <-&’ ’&=’, -.10@<-1’ ’-’ &?- ’1’&=’ 1 1=& A@’K’ D’<@@’, -.D ’0’=110’<A+&?0&-0’&=’ D? BD10’ D<?- ’10’ C#1-A10’ &0C’ <@0’ <-A’ & D 1’ #1-1=’B10’ &=’ D? BD10’ KD<’ 0&’ D1 ’ #1@’ <-A’ <@@’ <-A’ 1 ’ >< ’ @’=1 ’10’ = <?-BD’010’ =<’ 10’ >< a1 ’0’ +’1?’ &=’ = <’’aC@1..1’ B&? ’0’ @1 0’<-A’ <@@’ & D1’ C=? 10’<-A’ 1A>&A’ 110’ <-A’ D1 1A’<>1- ’0@’ KD<’ 0&’ 1 ’ D1 ’ #1@’ & D1’01’A’ ? .D0’ & A0D’CC10’ <-&’ 0’<-A’ & D 1’ D1’ C>’0010’ & - 1@ ’ & ’ 01 <’@’ C 1 - -.’ & ’ #1@&-. -.’ & ’ &=’ <- ’ CB1@@’ &=’ D1 >

6!#& !/’ ! !”2’ 3 !-2’ -/’ #’ /!#+ ”!/’ ’ +&/’ 2’&’ !’ &”!2’ ’ /’ ;!!-’”&* +@’- 1!/=’ 2’ .’2 &/’ 2 !2’ +’M-&* (2’B!!2’ C#

’ <@0&’ D’ D1’ 01’A’ <?T &’1’ ;!’ ’ ’1-<#@1A’ D<’ D1’01’A’ 10’C< 1-10’<-A’ Q@;1@’<-A’<@@’K< <?- 10’=& ’ 0?1 ’1’&=’ D1’0<>1’<=& 1’ ><A1@’#1’<0’ .&&A1’5B’1==1T @;?1@@’-’ D1’ <KB’ &’ D1’01’A’^?1-1’A? ’-.’D’ ’ @ =1@’-’ @’a1’ >< ’ <-A’=&? >1’<0’ D&?.D’1 ’&=’ D1’01’A’ D’ 10’<-A’<@@’ & D 1’ F & A10’ D1 -’ > 0 <a1-’D<A’ #1’K1@@’ <a1-@’<BB& A’-.’ &’ D1’ ?1’ ’- 1-’ &=’B? 1’01’A’ & 1’.-’ & A’’-’ D1’0<>1@’ -A3’<@0&’ D<’ D1’01’A’^?1-1’0D<@@’ D<+1’<-A’D&@A1’A? -.’D’ ’ @ =1’ <=’ ’ D1’ A1B1001’&=’ &? 1’01’A’ & 1’.-’ & A’ D1’, -.’ D1’ & A0D’CC10’<-A’ <-&’ 0’&=’ 1’.D<>’<-A’F &&A1D<@@1’-’ D1’ &?- ’1’&=’ ?==’@’K’ D’<@@’, -.D ’0’=110’ A+&?0&-0’&=’ D? BD10’ KD<’ 0&’ 12’ D1 ’ #1@’K’ D’ <@@’ & D 1’ ’’# ’10’ =<’ 10’ >< a1 ’0’ +’1?’&=’ <-aC@1..1’ &? 10’@1 ’0’<-A’ <@@’ & D1 ’C=? 10’<-A’ B&>&A’ ’10’ &’ D1’01’A’ & A0D’CC10’<-A’ <-&’ 0’<-A’1,’&=’ D1 >’C 1 -.’C ’ #1@&-. -.

E &’1 ’&=’ D1’, -.’0’@’1.1’C1&C@1?@&D 1’D1-’D1’, -.’<-A’D’0’D1’ 10@0?BD1’ ’.D ’ ’@1’<-A’ ’-R1001’<0’ D1 ’ & ’<- ’&=’D1 -’ D<+1’ ’-’ D1’C 1>’0010’ & ’<- ’ C< B1@@’&=’ D1 >@’ D’0’ J@1’ -& K’ D0 <-A’-.’

3 6 '

ʏ ' C > ' 1' ?

&' D1' , '.'&? 1' & 1'.-' & A ɢ

C '<=C 1' D'0' > 1' ' ' K<0' B&+1-<?- 1A♈ D ' '' A1- ? 1' > <A1'# ' D< 001- ' &=' &? 1' '.D-10' #1 K1-1' D1' LB1♯♯1- ' '-B1001' .'!- -' .'" 2!#0"¼-*' < 5 ' ♯1'\<#1 D' ^ ?1?1' &=' -.♯&-A' <-A' &=' ! <?-B1' <-A' D&> <0' '1' &=' ? 1 ♈ =& ' < > < '<.1' D1-' &' #1' D<A' <-A' 0&♯1 > C-'01A' !'" --01' .'" #1 K1-1' D&> <0' & A' &K< A' 0&-' <-A' D1' 1' <CC< <?-' C' D1' 01'A' '1♈ <-A' --1' ?0 1 ' &' D1' 01'A' ?1-1♈ KD'BD' > < '<.1' '0' D<A' & !e' $' .1 2' <-A' 0&♯1 > C-'01A♈ D< ' D1' 0< > 1' '1' < > &-.1' & D 1' D -.10' '-' D1' 0< > 1' '-A1- ? 1' 0C1B'=' 1A' 0D?♯A' D<+1' =& ' R > 1' &=' D'0' ♯ =1' LL ' ' "+' . ' 0""!@ ' .'" &? 1' &=' <-&' 0' ♯& A10' <-A' 1-1 > 1- 0' & ' & D' K'01' &' #1' <00' .-1A' & D1' 0< > 1' '1♈ K' D' < & +'0& ' -' D1' 0< > 1' '-A1- ? 10' D< ' '=' !' ""& *!' . ' &2' .-' .'' !' 90!!-(2' ♯'\<#1 D' -&K1' " ?BD1001' &=' & ==' & ' D1' 01'A' ''-1' -&K1' F =1' &' D1' 0< > 1' D&> <0' & A' &K< A' A1B1001A♈ D< ' D1-' = & > ' &2 !"0 D1-0=& D' D1' 01'A' <--?' '1' 0D?♯A' B1001♈ F D1 ?CC&-' < ' D1' 01'A' ^ ?1-1' <-A' '1' A10' 10' =& ' D1' <BB& > C♯♯00D1 > 1- ' D1 &=♈ <-' Q 1' !'2 &/'6 " ' &=' C< ♯'<> 1 ' ' K 0' > <A1' < ' &? ' ♯<0 ' C< ♯'<> 1- ' D& A1-' < ' F 10 > -0 1 ' D1' L''' 0' A< ' &=' '&# ' D1' 1 1' &=' &? 1' > &0 1' -&#♯1' 1 / !' @ ;+!' . ' 1'.-1♈ KD1 # ' ' ' K<0' 81-<B 1A' # ' <?= & ' 1' &=' D1' <> 1' C< ♯'<> 1- ' D ' D1' 01'A' '1' 0D?♯A' D<+1' CB1'+1' C&001A1' <-A' 1- & 1' &' D'>' !' "+' ". 1' #!" &-' B!!' B "1 2' =& R > 1' &=' D'0' ♯ =1' 'BL ' ' 1 1♯ ' '-' =&? > 1' =&♯&K'-.♈ D< ' '0' &' 01 ♈ LL ' ' 1 1♯ ' &=' D1' =11=1 > 1' &=' D1' ' '1' &=' & K'BD10♈ ; @' &+' &' " &" ' # !"" L♈ ' ' 1 1♯ ' &=' D1' ##& ' <-A' &-+1-' &=' D1' &-<0 ' (=' ' ' 1 - ' A > &-A' '-' &? 1' & - '1' &=' ?==' =& ' D1' ' =11=1 > 1' &=' D1' &K-1' &=' ? ' '-' D1' 01'A' &?- '1' &=' ? X <-A' L♯' ' 1 1♯ ' &=' D1' =11=1 > 1' &=' D1' &F -' (Z CC10K'BD1' '-' &? 1' 01'A' &?- '1' C=' ?==ɢ' <-A' LL♯' ' 10'A?1' &=' D1' 01'A' LL ' ' 1 1♯ ' =' D1' <' 1' <-A' ? .1'010' &=' D1' &K-1' &=' <> # '..1' '-' &? 1' &?- '1' C=' <> # '.1' <0' C< 1♯♯ &=' D1' '=11=1 > 1' < ' D1' A< 10' <-A' >1 ' ?01A' <-A' <BB?0 ? > 1A' ɢ <0' # ' D1' 01'A' 1' > & 1' C♯1 -♯ ' A& D' <CC1 1' &=' "".'" 2' .' \ !' 1B& A' ɕ♀ KD'BD' ıʏ' &?BD'-.' D1' 01'A' L♯' ♈ 1 1♯ ' C=' D1' 01'A' ##& ' <-A' &-+1-' (=' ? ' 1 - ' A > &-A' =& ' D1' ' =11' =1 > h' &=' B!!' B "1' ". 1' !' ; ; !@' . ' 4 0"@' D1' &K-1' &=' ? ' F<0' <-A' '0' B♯1 1♯ ' +&'A♈ =& ' <0 > ?BD=1' <0' D1 1' '0' -&' -1' D1-' K<0' < ' ' 0?CD1' =11=1 > 1' &=' D1' 0< > 1' &K '1' C=' _ ' / 1 0-/(2' 2' ? ' <0' '0' 1LC 1001A' '-' D1' 01'A' Q 1' ; -A' '-' BC-0'A1 <B'C-' D1 &=' <-A' <♯0&' =& ' <0 > ?BD1' <0' D1' 01'A' ^ ?1-1' '0' &=' +1 1 ' K'♯♯1' <-A' .'" ! .7-' . ' > -A1' D< ' D1' 0< > 1' '1' 0D<♯♯ #1' ?♯ ' <-A' =?♯♯ ' &-1-1A' <-A' C<'1A' &=' D1' 01'A' LL' ' 1 1♯ ' A? '-.' D'0' ♯ =1♈ <BB& A'-.' &' D1' 4 0"@'J 01'A' <.. 1 > 1- '0' > <A1' #1 K1-1' D1 > '=& ' D1' 01'A' > < '<.1♈ D1 =& '< ' D1' 0C1B'<♯♯ A10' 1' &=' D1' 1'A' ^ ?1-1♈ #1' ' ' & A1 -1A' 10 <##'00D0A' <-A' 1-< '1A' # ' &? ' =♯'.D-10' <-A' D1' & A'0' 0C?1♯♯ <-A' 1 > C& 1♯♯ <-A' D1' &> - ' '-' D'0' D ' C< ♯'<> 1- ' <001 > ##1A' <-A' # ' D1' ' =♯' &' D1' 01'A' '1' D< +1' C&001A1' <-A' i - & 1' &' D' > ' =& ' 1' &=' D'0' ♯ =1' 1' <1'A'LL',' 1 1♯ ' &=' D1' 01'A' =11=1 > 1' <? D& ' 1' &=' D1♈0<L-12' D ' D1' 01'A' '1' D< +1' C&001A1' <-A' i - & 1' &' D' > ' =& ' 1' &=' D'0' ♯ =1' 1' <1'A'LL',' 1 1♯ ' &=' D1' 01'A' &K-1 8 ' > K'BD1♈ <-A' D1' 01'A' L♯ ' ' 1 '&=' D1' 01'A' =11=1 > 1' &=' D1' 1'AZ=ƉK-1' &=' =>10 0 2BD♈ <-A' D1' 01'A' LL' ' ' 1 1♯ ' C=' D1' D=<♯ 1' <-A' ? .1'010' &=' D1' 01'A' &K-1' &=' <> # '.1♈ <0' C 1' &=' D1' ' =11=1 > 1♈ <BB& A'-.' &' D1' 1-&? ' =&? > 1' <-A' 1♯!1=♯1' &=' D1' 01'A' = h' > <A1' '-' &? 1' 01'A' ♯<0 ' C< ♯'<> 1- ♀

C '<♯0&' #1' ' ' & A1 -1A' 10 <##'00D1A' <-A' 1-<= 1A' # ' D1' 01'A' <?=♯& ' 1' &=' D'0' 1 - ' C< ♯'<> 1- ♈ D< ' D1' 01'A' '1' D< h' CB1'+1' C&001A1' <-A' 1- & 1' &' D' > ' =& ' R > 1' &=' D'0' ♯ =1' D1' 01'A' L♯ ' ' 1 1♯ ' &=' D< ### & ' '&? <-A' &-+1-' &=' D1' 01'A' &-<0R ' &=' ? ' 1 - ' A > &-A' '-' D1' 01'A' &?- '1' &=' ♈ <-A' C=' D1a' ?BB100&? 0♈ =& ' D1' ?0 &A'C' C=' D1' 0< > 1' ##1 ' <-A' &=' <♯♯' D1' 1 > C& <♯ '10' &=' D1' 0< > 10' < ' D1' A<'10' <-A' > 10' ?01A' <-A' <BB?0 ? > 1A' =& ' D1' C< > 1- ' D1 &=X '-' =?♯♯ 1B& > C1-B1' <-A' 0< '0=< B'&-' 220"!/' .' !' "+' E♯1' !' ; ; . ' &=' D1' 01'A' LL''' ' 1 1♯ ' ' <- ' . <?=' 1' & ' <00' .-1 > 1- ' > <A1' C ' &' #1' > <A1' &' D1'B&- < '1'-& K' D0 <-A' -.ɢ <-A' D< ' A?1' <♯♯&K<?-B1' C# . ' / 1 0-/(2' 4 0"@ ' '" ! 0 2 . / @' . ' ! <-A' A'0BD< .1' 1 1♯ ' #1' D<AA1' <-A' > <A1' = &>' > 1' &' > 1' '-' &? ' 0BD1a1 ' #1=& 1' Dh' < &-0' &=' D1' 0< > 1' &=' D1' 01'A' LL''' ' C 1♯ ' ; ; ! @ ' C# &=' D1' 01'A' =11=1 > h' &=' D1' 01'A' ' 1' &=' & KaD1' <-A' &=' K' 01'A' L♯ ' ' 1 1♯ ' &=' D1' 01'A' =1 h=h 1' &=' D1' 01'A' &K-1' &=' CC10K'BD h' '-' &-A' D1' 01'A' LL' ♯ '&=' D1' 01'A' <' 1' <-A' - .1' 0' &=' D1' 01'A' &+ > 1' &=' <> # 1' <0' C< h' &=' D1a' =11' =1 > 1♈ <-A' <♯0&' =' ' 0 A A' L♈ (' 1 1♯ ' ' <haɕ ##& ' '&? ' <-A' &-+1-' ' ? ' 1 - ' A > &-A' <-A' D1a' 6** ' # '' D1' B?0 &A' 1' &=' D1' 80<> 1' ##1 '<-A' D1' 1 > CC <a'10' &=' D1' 0< > h2 <-A' &=' 1 f ' C< B1♯♯ =' D1' > '0010♈ # ' D1' <BH?' <?- C0' &=' D1' 1'A' '1' & '&=' D'0' &? - B ' =& ' D1' > 1' #1 - .' '-' D< ' #1D<♯=' > <A1' & ' &' #1' > <A12' K' D&? ' <- ' C1 'A&-' K ' 1' K< <?- 1' & ' D 1' B&- <?-A1 > 1- ' D1 ?CC&-' < ' <- ' > 1' &' 8#1' D<AA1' & ' > <A1' '-' < ' K'01' '-' D< ' #1D<♯=9

3 .'& ' <♯K1 ' #' ''=' D1' 01'A' " ?BD1001' & ' - 1' A1B1001' D< ' D1-' = & > D1-0=& D' D1' '-R1051' &=' D1' 01'A' '1' '-' D1' 0< > 1' L♯=' ' 1 1♯ ' . ' D1' 01'A' ##& ' '&? ' <-A' &-+1-' &=' ? ' 1 - ' A > &-A' <-A' . ' D1' ' ?BB100&? 0♈ =& ' A' 1' B?0 &A' 1' &=' D1' 01'A' ##1 ' <-A' D1' 1 > C& <♯A1 ' &=' D1' 0< > 1♈ <-A' <♯0&' . ' <♯♯' & D 1' C 1 > '0010' <=& 1' 1D1 B'A♈ B1001' <-A' #1' +&'A1' <-A' &=' -&-1' 1==1 1' ' <-A' '=' D1' 01'A' D&> <0' & A' &K< A' A1B1001♈ <-A' D<' D1' 01'A' --1' A1C< 1' = &>' D1' 01'A' 1♈ D< ' > > 1A' < ♯ ' <= ' ' D' ' A1C< ? 1' D1' C< > 1- '0' &=' D1' 1'A' LL ♈ &' B1001' <-A' -&1' =? D1 ' -1' ♯1 -.1 ' &' B&- '-?1' -1' 1-A? 1

3". '&2.' 2' .' ' ! - 2' .-' 7 &# ' !' 2 &/' --0♀ @' 2 +'#! 2!

3 ' b &&/ . -!' !. !

3 6 ' W

&' D1' , -.'&?=1' &+1 1'.-' & A' ɢ

D ' D? > #♯1' #101BD' D' &? 1' '.D-1001' &? ' ?1' ♯'1.1 > <-' <-A' 0?#.'1 1' E? ' C 1' 0&-' &' F '♯♯ > > ' <C1& 1' ♯< 1' &=' &-/!'". ' D& -1D<?.D' '-' &? 1' &?- '1' &=' & D ♈ D< ' KD1 1' '-' &? 1' < ♯'<> <-' D&♯A1-' < ' F 10 > -0 1 ' D1' +' 'ŴŴ A< ' &=' &+1 > # 1' V ♀++& 1' !. !';@' D1' =' 0 ' 1 1' &=' &? C' -&#♯1' 1'.-1♈ # ' <?A' & ' 1' &=' D1' 0< > 1' < ♯'<> 1- ♈ ' ' K<0' 1-<'♯1A' 10 <#♯'00D1A' & A1 -1A' A1 > 1A' <-A' A1B♯< 1A' -' & D< ' D1' 01'A' F '♯♯'<> ' =<A 1' &' &? ' 01'A' ?CC♯'<?- ♈ -&K1' A1A1♈ <> & -.1' & D 1' C0&-10' # ' D1' -<> 1' &=' F '♯♯'<> ' <C1& 1' &=' ?- ' 0D?♯A' 0 <-A1' <-A' #i' B&-+'+1' <-A' < 1 - 1A' &=' .D' 1<0&-♈ <-A' A'0<#♯1A' <-A' =& ?.1A' &=' <♯♯ ><-1 ' D&-&? ' 10 < 1' A' .-' 1' <-A' 1 > '-1-B1♈ <-A' D1' -<> 10' &=' D1' 0< > 1♈ <-A' <♯0&' 0D?♯A' =C =1' 1' ?- &' &? ' .D-1001' <-A' &? 1' D1' 10' <♯♯ D'0' <0 1♯♯10' <-&' 0' & A0D'CC10' ?-A h A'0' = <?-BD'010' ♯'# '10' C '+'♯1.'10' <A+&?0&-0' -A♯<B'&-0' C 101- <B'&-0' ♯&' A10' 1-1 > 1- '0' 1- '0' 01 +'B10' C& B'&-0' <--?' '10' C1-B'&-i' '.D '0' D1 1A' < > 1- '0' .&&A10' B< <♯♯10' <-A' A1 '0♈ KD1 &=' D1' &' <- ' & D 1' &' D'0' ?01' K1 1' 01<01A' & ' C&001001A' D1' LLPOO♈ A< ' &=' ?.?0 ' D1' =' 0 ' 1 1' &=' &? 1' . <B'&?0' 1'.-1' & ' <- ' > 1' <= ' ♈ K' D'-' D1' 1<♯> o' &=' -.♯&-A' 1♯&-A' F <♯1'0' <♯1'0' & ' K' D'-' D1' < BD10' D1 &=' '-' =11' 0 > C♯1' =11' <'♯♯ & ' R > 1' &=' ♯ =1' & ' ♯ =10' <0' '-' D1' Qa1' ' 1 &=' > <A1♈ ' ' '0' B&- 1 -1A' < ' ♯< . 1X ♯1<0' D' ' ' &? ' 0h'A' '.D-1001' &=' &? 1' > &0 1' D<♯?-A<?-' . <B1' # ' D<A+ B1' <-A' <001-' &=' ^ ? 1' & A'0' 0C?<♯♯ <-A' 1 > C& <-A' &=' D1' &'-1-0' &=' D'0' &? 1' C 101-' C< ♯'<> 1- ' <001 > ##1A' <-A' # ' D1' <? a& ' 1' &=' D1' 0< > 1♈ &' A A1 -' 10 <##♯'00D' <-A' 1-<##♯1' '-' D'0' !' 2 &/' V ♀++' ! . !' &? 1' 01- ' C< ♯'<> 1- ' '<-A' # ' D<?A♯& ' 1' &=' D1' 0< > 1♈ D< ' D1' 01'A' 1' A1-<?-B1' <-A' " 1B♯< <B'&-' &=' B&-+'Q '&-' < 1 -A 1' "! ! +!/' 2' .' !' =& ?..1 ' <-A' =&=1' ? 1♈ <-A' <♯♯' & D 1' < '0' > <A1' '-' &? ' 01'A' < ♯'<> 1- ' D&♯A1-' < ' F 10 > ' D1' 01'A' +' 0' A< ' &=' &+1 > # 1' < 1-0 ' D1' =& ?..1 ' <-A' =&=1' ? 1♈ <-A' <♯♯' & D 1' < '0' > <A1' '-' &? ' 01'A' < ♯'<> 1- ' D&♯A1-' < ' F 10 > ' D1' 01'A' +' 0' A< ' &=' &+1 > # 1' < 1-0 ' D1' 2 &/' V ♀++' ! . !' 01'A' F '♯♯'<> ♈ # ' K D' ' - > 1' & ' -<> 10' 0&' D1' #1' -<> 1A' & ' B<♯''A' '-' D1' 0< > 1' =a1' & ' Qa'0' #1' 1C1♯♯1A' <A-?♯♯1A' +&'A1' <-A' &=' -& -/!' &2' !&"2

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1B' <ff &=' D1' U<- ' &=' K &' !'= 11- D0' <-A' 1- D0' # ' D<C 1 '] '&=' D'0' 100'&-'

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E <- ' &=' <-' 'A' <-A' TA>A 2' 1H?<ff &' K &' !'= 11- D0' <-A' 1- D0ff K' D&? ' <- ' "1A?B '&-ff 1LB1C '' "6ff ' &K' D1' 0<'A' ?#0'A ' 0D<ff #1' A1 1Aff <001001A80 <-A' ß1+'1A

F D<' 1 0&-0'0D<ff #1' BD< .1<#ß1' &' D1' 0<'A' ?#0'A

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1-<- 0' >< ' 1 <'-' < >1- 0' ><A1'# ' D1>'=& ' D1' ' <-A& A0ff I B

D1' &>1- ' '-' D'0ff 01- 'C ß1>1- ' 001>#ß1Aff &=' D1' 1'=1 D=?ff <-A' ß&+ -.' > -A10' &' D1' , -.'B? 1' & 1'.-' & A1' <-A' =& ' D1' ' -1B100< 1'A1=1-B1' < 1 0 1' D1'B ?1ff &<ß B1' &=' D1' B& '0ff D<+1' .1+1-' <-A' . <?- 1-' &' D'0' '.D-10' # ' D1' ' '-A1- ? 1'''D&ß1' L 3W'<-A' LJ h0 &' #1' D<A' <a1-' C<'1A' <-A' ß1+ 1A' '-' 0?BD1' K '01' <0' # ' D1' . ?- 1' &=' D1' 0<>1' >& 1' < '&< .1' A& D' <CC1 1ff &K< A1' <-A' =& ' >< - 1-<?-B1' <-A' 0?CC&' <((-' &=' 0?BD1' S .1<' < < 10' <0' D1' , -.10' '.D-10' &=' D'0' . 1< 'C+'A1-B1'D< D' <AA 1001A' <-A' C< 1A' <0 ff' # '01' <0'# ' ß<-A1' =& ' D1' -1B100< ' A1=1-B1' &=' ''0' -&#ß1' 1<ß>1' Í -A' =& ' <0> BD1' <0' D1' . <?- ' &=' A'1' 01'A' &&' L+03h0' <-A' L h0 A& D' -& ' 0?==' 01' -& ' 1L 1-A1' &' D1' #1D&?=?ff BD< .'0' <-A' 1LC1-A0' =& ' D1' =&> 00D -.' <-A' B&- -?<?-B1' &=' D1' 0<>1' < > 10ff D1 =& ' ' ' #1' & A1 -1A' 10 <#ß'00D1A' <-A' 1-<Q 1A=# ' <?A& ' 1' &=' D'0' 1- ' C< ß'<>1- ff D<' D1' , -.'0' '.DC10' &K< A1' D1' ABB&>C 00D>1-' <-A' >< - 1- -B1' &=' D1' < > 10' <=& 01'Aff <-A' ? .1- 'B<?010' B&- - -.' D1' 0<>1ff 0D<ffff D<+1' <-' <'A1' <-A' 0?#0'A'1' &=' <0' . 1< 1' <-A' ß< .1' 0J> 10' &=' >&-1 ' <0' D1' 01'A' &&' L+nh0 <-A' L30J ff' '=' <- ' 1L1>C1&-0' & ' A'0BD< .10' # ' <= 1' &=' Cß1>1-' & ' & D1 K'01' D<A' -& ' #1' D<A' -1' ><A1ff 0D?=A' D<+1' <>&?- 1A' ?- &ff D1' <#< 1>1- '0' <-A' A1A?1K-0' &=' L' ' 0' ' ' ' D1 &=' <#<'<A' <-A' <ßß&K1Aff D1' &-' D<ß=1' &=' D1' 0<>1' <'A1' <-A' 0?#0'A'1' &' #1' C<'1A' &' &? 1' '.D-10' '-' &? 1' 0BD1H?1 ' # ' D1' &ßß1= &? 0' &' #1' <00'.-1A' # ' D1' ß<0 1' A< ' &=' < 1' -1L ' &> -.ff <-A' D1' & D1 ' D<ß=1' D1 &=' &' #1' C<'1A' # ' D1' +'' 0 ' A< ' &=' &+1>#' -1L ' 1-0? -.ff &' #1' & A1 1A' <001001A' <-A' ß1+ 1A' <= 1 ' D1' =&? >1' =&ß&K -.ff D<' '0' &' 01 ' 1 ' 0ß'' 1' BD< .1<#ß1' K ' D' D1' 01'A' L+3J' <-A' 0D<ff C< ' ß'a1' 0&>10' &=' >&-1 ' &' D1' 01'A' 'A1' <-A' ?#0'A'1' <0' D1 ' # ' D1' 01'A' &&' L+3h0' <-A' Lnh' 0D?ßA' D<+1' #1' BD< .1A' F ' Dff '=' <- ' 1L1>C I -' & ' &A1 ' A'0BD< .1' D<A' -& ' #1' D<A' -1' ><A1' &' <- ' Cß<B1' & ' &?-10' K ' D'-' D1' 0<>1' D' 1' =& ' <BB&>C <#ß1' # ' D1 >' 01ß=1' '-' D1' 0BD1H?1 ' =& ' L+W h <-A' Lnh0ß <-A' D<' D1' 0<>1' &?-10' <-A' Cß<B10' #1' -.' K' D'-' D1' 0<>1' D' 1' 1L1>C 1A' & ' A'0BD< .1A' &=' C< >1- ' &' 0?BD1' L+3h0 <-A' L03h0 -& ' D1 =& ' # ' D1 >' 01ß=1' <BB&>C <#ß1' '-' D1' 01'A' 0BD1H?1 '#1' BD< .1<#ß1' K ' D' D1' 01'A' D' 10' '-' 1'A1' &=' D1' 0<>1ff D1' 01 <ff A1A?B <-0' &=' D1' D&ß1' 0J> 1' &=' 1 ' D' 1' &=' D1' 01'A' L' ' ' ' ' &' #1' <ßß&K1A' <-A' <#< 1Aff <-A' <ff ' 110' & &?.D10' <-A' &?-10' -& ' B&- '#? & ' -1 ' BD< .1<#ß1' &' <- ' L+3h0hH <-A' L03h0 K ' D' D' 10ff <-A' <BB&>C <#ß1' # 0 D1>01ß=' '-' D1' 01'A' 0BD1H?1 ' =& ' <- ' H'-0 >' <-A' A 0>1ff 0D<ß#1' BD< .1A' &' D1' 01'A' <'A1' <-A' 0?#0'A'1' K ' D' ß'a1' <-A' <0> BD1' 0 '10' &=' &-1 ' <0' D1' 1' &&' L+nh0 <-A' L03h0 0D?ßA' D<+1' <>&?- 1A' ?- &ff '=' <-&-' 1L1>C1&-' -1 ' & D1 ' A'0BD< .1' D<A' -<' #1' &' D1>' D<A' -1' ><A1ff D1 ' 01 <ff A1A?B -0' &=' D1' 01'A' L' ' J ' ' &' #1' <#< 1A' <-A' <ßß&?1A' ß <-A' D<' &' D1' C< >1-' &=' D1' 01'A' <'A1' <-A' 0?#0'A'1' 1 ' C0&-1' <-A' C0&-10' D<+ -.' ß&-A10' & ' 1- 10' & ' & D1 ' D1 1A' <>1- '0' & ' C&00100' &-0' '-' ß<-A'0' & ' 1- '0' -'=11' 0 >C ß1' =11' <'ff = 1D& ' <' F 'ßß' <=R' D1' ?0 & >1' &=' D1' <-1 ' F < A1' 1L1B? &-' & ' <?-B'1-' A1>1<-1' K' D'-' 1- '&=' D1' 01'A' D' 10' ' 110' ? .D10' & ' &? '10ff &' D1' 1 1ß ' +<ß?1' &=' LLOZ'0 ' <#&+1' <ff BD< .10ff KD1 &=' D1 ' & ' <- ' &=' D1 >' #1' 01<01A' & ' C&001001A' & ' <- ' C0&-1' & ' C0&-10' &' D1' ?01' &=' D1 >' & ' 1- ' &=' D1 >' <-A' -<' D1 &=' BD< .1<#ß1' K ' D' 0C?<ff A 0>10ff & ' 1- ' C0&-1' & ' C0&-10' D<+ -.' .&&A10' & ' B< <ßß'0' &' D1' ' CC 1' ?01' &')RH+<ß?1' &=' L ' >< a1' <-A' <#&+1ff =& ' D1' 0<>1' 0D<ß#1' BD< .1<#ß1' &' D1' 01'A' <'A1' <-A' 0?#0'A'1ff <-A' -&-1' & D1 ' C0&-1' &=' ß1 1' 0?#0 <?-B1' '-' ß<-A1' & ' .&&A10;' F D'BD1' <'A1' <-A' 0?#0'A'1' &' #1' ß1+ 1A' '-' D1' 01'A' D' 10' 0D<ß#1' & A 1A' <-A' <001001A' # ' D1' A'0B 1B'&-' &=' D1' ?0 'B10' &=' C1<0' &=' D1' D' 10' AK1ßß -.' '-' D1' 0<>1' D' 10ff K' D' & D1 ' C0&-10' KD&01' -<>10' <CC1 1' '-' <' B1A?ß1' D1 & <--1L1A' & ' + ' &=' D1 >' < ' ß10 ff B<ßß'-.' &' D1 >' &A1 ' A'0B 1 1' C0&-10' AK1ßß'-.' K' D'-' D1' 01'A' D' 10' 0?BD' <0' D1 ' 0D<ff D>a1' -1B100< ' KD'BD' 0D<ff .1+1' &' D1 >' D1 ' <A+ 010' <-A' <00'0 <-B1' =& ' D1' 1L1B?B'&-' &=' D1' C> 0010' ' <-A' '-' 1+ ' &=' D1' 01'A' ' 110' <-A' & &?.D10ff =& ' D1' ß1+ '-.' &=' 0?BD' 0&>10' <0' D1 ' #1' BD< .1<#ß1' K ' D' =& ' D1' 01'A' <'A1' <-A' 0?#0'A'1ff &' #1' & A 1A' <-A' <001001A' ' D1' <' 10' ?0 'B10' &=' C1<B1' D' 1=0' < ßß1=0' & ' & D1 ' D1A' ==' B1 0' &=' D1' 0<>1' ' 110' & ' & &?.D10' K ' D' 0?BD1' &A1 ' C0&-10' KD&01' -< -10' <CC1 1' '-' < 1A?ß1' D1 &' <--1L1A' & ' ''' ' &=' D1 >' < ' ß10 ff B<ßß'-.' &' D1 >' & D1 ' A'0B 1 1' C0&-10' AK1ßß'-.' K' D'-' D1' 01'A' ' 110' &?-10' <-A' & &?.D0' <0' D1 ' 0D<ff D'-a1' -1B100< ff KD'BD' 0D<ff .1+1' &' D1>' D1' ' <A+'010' <-A' <00'0 1-B1' =& ' D1' 1L1B?B'#<' &=' V')' C> 0010'+' -A' D<' <ff C0&-10' #1' BD< .1A' <-A' ##&?-A1' # ' D1' 01'A' & A '-.' <-A' <00100' -.' <BB& A'-.' &' D1==1Q 1' &=' D1' 0<>1' 1'6 -A' D1' 01'A' 0&>10' =& ' D1' 01'A' <'A1' <-A' 0?#0'A'1ff '-' =&? >1' <=& 01'A' & A 'A' <-A' <001001Aff <0K1ßß' D1' 01'A' & A1 &? 0' <-A' <00100&? 0' '-' D1' 01'A' D' 10' & ' + ' &=' D1 >' < ' ß10 ff <0' '-' D1' 01'A' ' 110' <-A' & &?.D0' & ' ''' ' &=' D1 >' < ' ß10 ff 0D<ßß -<>1' &ßß1Q);&? 0' =& ' D1' ß1+ 1' &=' D1' 0<>1' <'A1' <-A' 0?#0'A'1ff <-A' 5'='1' ?-A 1' D1' ' 0B<ß10' D1' -<>10' &=' D1' 01'A' &ßß1A'&? 0' =& ' D1' =' 0 ' D<ß=1' &=' D1' 01'A' <'A1' <-A' 0?#0'A'1' '- & ß'1' , '-.'0' 0BD1H?1 ' # =& 1' D1' >& &K1' <= 1 ' D1' =10 1' &=' D1' <0B1-B'&-' &=' B? 1' & A1' -1L ' B& > -.ff <-A' D<' D1' &ßß1 &? 0' & #1' -<>1A' <-A' <00'.-1A' &' .<A 1' <-A' ß1+ 1' D1' 01'A' <'A1' <-A' 0?#0'A'1ff 0D<ffff D<+1' <?ßß ' 1' I ' C&K1 ' <= 1 ' +'' ' A< 10' -1L ' 1-0? -.' D1' 01'A' <00100' -.ff &' ß1+ ' <-A' .<A 1' D1' 0<>1ff <-A' =& ' -&?-C< >1-' D1 &=' &' A'0 1 -1' <a1' <-A' <CC 1 01' '-A'==1 1-ß ' <-A' 01ßß <0> BD' &=' D1' .&1A1\' & ' B< <ßß'0' &=' 1 , ' C0&-1' K' D'-' D1' D' 10' ' 110' &' & &?.D10' KD1 1' D1 ' 0D<ß#1' &ßß1 ß&? 0ff <0' 0D<ffff +i' =& ' D1' C< >1-' &=' 0?BD1' 0&>1' & ' 0?>10' &=' >&-1 ' KD'BD' 1, ' &=' D1 >' 0D<ß#1' & A 1A' <-A' <001001A' &' C< ff -& ' BD< . -.' -' C0&-1' #?' &-ß ' =& ' D1' 0&>1' ?CC&-' D >' <001001Aff <-A' =& ' -&?-C< >1-' &=' 1-' 0J> 1' &=' &-1 ' & A 1A' <-A' <0010 1' '-' =&? >1' <=& 01'A' &-' 1-' C0&-1' D<' ' '0D<ß#1' ß1=?ff &' D1' 01'A' &ßß1= &? 0' &' A'0 1 -1' <a1' <CC 1 01' '-A'==1 1-ß ' <-A' 01ßß <0> BD1' &=' D1' .&&A10' <-A' B< <ßß10ff &=' D1' =1 >1 0' <-A' 1-<?-' 0' &=' <-' &=' D1' 0<>1' C0&-10' 0&' <001001A' -& ' C< '-.ff <0' 0D<ffff 01 +1' =& ' D1' C< >1-' &=' 0?1D1' 0&>10' &=' &-1 ' <0 0D<ffff ?C&-' P2h 01'A' C0&-10' =& ' -<' >< a -.' C< >1-' #1' & A 1A' <-A' <00100' Aff <0' =1 1' <0' D1' 1-' & ' =1 >1' &=' A'1' 01'A' =1 >&?' & ' 1-<-' 0D<ffff 01 <ßß ' 1L 1-A1' ?-&' =& ' D<ß=1' <' 1 1' <-A' -<' =1 D1 ß -A' D<' -&' C0&-1' & ' C0&-10' #1' A'0 1 - Aff & ' D'0' .&&A10' & ' B< <ßß10' <a1-' =& ' <- ' 0J> 1' ?C&-' D >' & A 1A' <-A' <001001Aff #?' '<= 1' 0?BD1' < 1' <-A' '-' 0?BD1' &?-10' ' 110' # &' D10' -A' C ß<B'0' KD1 1' D'0' ß&-A10' & ' D'0' .&&A10' #1ff =& ' KD'BD' D1' '0' <001001A' ß <ß0&' D<' D1' 01'A' 0100&? 0' '-' 1 ' D' 1' & '+' &=' D1 >' <' ß10 ff <-A' D<' D1' 100&? 0' <-A' # A 1 0' '-' 1+0 ' &=' D1' 01'A' ' 110' <-A' & &?.D10' 0C1B'='1A' '-' D1' 01'A' 1A?ß1' & ' ''' ' &=' D1 >' < ' ß10 1980D<ffff # ' K ' -.' '-A1- 1A' ?-A 1' D1' ' 01<ß'0' A1ß +1 ' &' D1' &ßß1 ß&? 0' &=' D1' 01'A' <'A1' <-A' 0?#0'A'1' K' D'-' +'' ' A< 10' -1L <= 1 ' D1' 01'A' <00100' -.' D1' -<>10' <-A' 0&>10' &=' 1 , ' C0&-1' KD'BD' D1 ' 0D<ß#1' <CC& - 1A' <-A' ß > 1A' &' .<A1 ' # ' D1' 01'A' K ' -.

ʻ .'!'" ʻ @ʻ &Z ."/!@-!/ʻ ;@ !ʻ2!&/ʻ 0 ."& !ʻ ʻ & ʻ !ʻ *../!Z .'" # +!Z . ʻ !-@ !"1.0'" ." !- -ʻ . ʻ -@ 2.-!ʻ 22!22!/ .ʻ @ .ʻ &Z &/!ʻ -/ʻ 20;2&/&!ʻ ;!ʻ E!-ʻ /&2 "!@-!/ʻ ." 2.+/ʻ ;@ !ʻ .+ !^+.0"Z . ʻ !ʻ 2!&/ʻ &/!ʻ -/ʻ 20;2&/&!ʻ ." -.0- @& !-ʻ . ʻ !ʻ 2 1!0 2.-!Z 2.ʻ 22!22!/ʻ ʻ !-L2O# !ʻ !"1.0" -/ʻ !0 0- -/ʻ !&" !%!#0 .0"Z !&!"Z -/ʻ /! 0 &!Z 2 +ʻ"! @-!ʻ &-ʻ &Z -/ !&" -/!2ʻ 0 .-ʻ !ʻ -!%ʻ @1!-ʻ -/ʻ @1!-ʻ &Z ." !<ʻ Z 1@# !ʻ 1.-!@ Z !ʻ ." !@ 2 +;!ʻ !-/ 1 *!/ʻ ." 0"+!ʻ ." !ʻ 2!&/ʻ -.-! @1!-

D'0' #1' ' ' & A -1A' # ' <?Q& ' 1' &=' D'0' = 1- ' C< ß'<>1- ff D<' -&' C0&-1' B&>1-' # ' &? 1' D'.D' 1A><?&A>1-' .ʻ ''0' C01-' C ß1>1-' =& ' <- ' D' 1' ' 11' ? .D1' & 1' & ' & D1 ' C ß<B1ff & ' <- ' &=' D1' 01'A' ?0 'B10' &=' 1<0' & ' &A1 ' C0&-10' '-' D1' 01'A' 1A?ß1' -< C Aff <-A' ß1 a 0' ?C&-' D1' 0<>1' < ß'<>1-' < 1-A -.ff #1' '-' <- ' K '01' ><A1' && 1Q &?' &=' D1' 0<'A' <'A1' <-A' 0?#0'A'1' & ' 1-' C< 1' D1 &=ff #?' &=' 0?BD' B&ßß1BB'&-' '-' ><Qff #1' ? 1 ß ' H? 1' <-A' A'0BD< .1A' ' -A' <ß0&' D<' -&' &ßß1Qß&?' -&'K 1' &' #1' BD&0 -'#1' BD< .1A' =1 D1 ' D1-' &' D1' B&ßß1BB'&-' &=' D<ß=1' D1' 01'A' <'A1' <-A' 0?#0'A'1' # ' D'0' 01- ' <Qß,1' . <?- 1A

C '=1 D1 ' #1' ' '& A1 -1A' # ' D1' 01'A' <?' '& ' 1' D<' 0?BD' &ǁǁ1Q'&? 0' <-A' 1+ ' &=' D1 >' <0' 0D<ǂ#1' <00'. -1A' =& ' D1' &ǁǁ1BB&-' &=' D1' 01'A' <'A1' <-A' 0?#0'A'1ǂ ?C&-' D1' > <a -.' &=' D1' ' <BB&>C 10' '-' &? 1' 0BD1H?B ' #1' H? 1' <-A' A'0BD< .1A' '-' D1' 0<>1' 0BD1H?1 ' =& ' C< >1- ' &=' <ǁǁ ><ǁ &=' =110' <-A 1K< A10' D1 ' &' #1' <0a1A' B&-'ǂ- -.' D1' 0<>1' <BB&>C 1' <-A' 1 ' C 1' D1 &=ǵ -A' <ǂ0&' D<' D1' 01'A' & 1 ǂ&? 0' <-A' 1 ' &=' D1 >'''<+1' ǂ'a1' <ǁǁ&K<?-B1' ?C&-' D1' <BB&>C '0' &=' =110' K<'. 10' <-A' 1K< A10' =& ' D1 Q&ǁǁ1BB&-' &=' 1 ' &=' D1' 01'A' D<ǂ=' <'A1' <-A' 0?#0'A'1ǂ '-' <0' ǂ< .1' > < '<-A' =&? >1' <0' <-' ' &ǁǁ1= &? ' & ' &ǁǁ1Q'&? 0' &=' L+hẄ' <-A' D<+1' D<A' < ' <- '01<0&-' '-' >10' C<001A

&' ! 110' &-' C<00' -.' BB&? - 0' &=' & 1= & 0 ' ǂǂ&K<-B1' &' &ǂ'1A&& 0

C ' "' D'0' #1' ' '1-<B 1A' # ' D1' 01'A' <?Q & ' 1' D<' '=' <- ' 10B?1' #1' ><A1' ?C&-' <- ' & 1Q'&? ǵ <-A' D1-' D1' 0<>1' &ǁǁ1Q&? ' -<> A' & ' &' #1' -<> A' 5 ='1' &' <- ' &=' D1' ?0 'B10' &=' 1<0' K' D'-' 1- ' 0?BD1' D' 1' ' 1' ? .D1' & ' &?-1' KD1 1' <- ' C0&-1' ><a1' 0?BD1' 10B?1' &=' <- ' A'0 10' &' #1' <a -' # ' 0?BD1' &ǁǁ1(&? ' & ' &ǁǁ1Q &? 0' & ' D1' ' 1 +<?- 10' & ' <00'. -10' =& ' <- ' B<?01' <=& 01'Aǵ D<' D1-' >1A'< ǂ ' ?C&-' D1' 0<>1' 'DB<' D1' 0<>1' ?0 'B1' &=' 1<0' & ' <- ' & D1 ' ?0 'B1' &=' 1<0' K' D'-' D1' 0<>1' D' 1' D<+1' C&K1 ' &' 'B& > 1' D >' & ' D1 >' D<' ><ǂB D' 0?BD1' 10B?10' &' F < A1ǵ & ' &' ><a1' <' B<C'<0' &' <a1' 0?BD1' C0&-1' & ' C0&-10' ><a -.' 0?BD1' 10B?10' <-A' &' B& > 1' D1 >' &' C '0&-' D1 ' &' 1><-1' K' D&? ' #<'ǁǁ & ' >< -C 01' # ' D1' A'0B 1B'&-' &=' D1' 01'A' ?0 'B1ǵ -A' D<' D1' 01'A' ?0 'B10' <-A' h ' &=' D1 >' D<+1' C&?1 ' K' D&? ' A1ǂ< 1' &' D1 1' <-A' A1R> -1' D1' 01'A' &==1-B1' <0K1ǁǁ # ' C=1' 1L<> -<B&-' <0' &A1 K'0B' 0 ' -A' '=' 1- ' 0?BD C0&-1' #1' B -+' '1A' D1 &=' D1-' D1' &' 1><-1' '-' C='0&-' 'ǁǁ D1' >&-1 ' =& ' D1' KD'BD' D1' 01'A' A'0 1001' K<0' <a1-' #1' =Hǁǁ ' B&- 1- ' <-A' C<'A1ǵ <-A' =1 D1 ' 'ǁǁ' D1' & ' D1 ' 0&' B&-+ = 1A' D<+1' ><A1' = -1' =& ' D1 ' &==1-010' '-' D'0' #1D<ǂ=1' # ' D1' A'0B 1B&-0' &=' D1' 01'A' ?0 'B10ǵ

1-<ǂ ' '-' " 1=<?ǂ ' &=' " '0 100' G " &?#ǂ1' D1' ?>' A?1

C ' <ǂ0&' #1' ' ' 1-<##1A' # ' D1' 01'A' <?Q&ǂ ' 1' D<' '=' <- ' C0&-1' 0&' <001001A' & ' &' #1' <001001A' C< ' -& ' <BB& A -.' &' D1' 01'A' B1001-.ǵ <-A' D1' 01'A' &ǁǁ1Q'ǂ&? 0' B<-' -<' = -A' <- ' 0?==' B'1- ' A'0 1001' =& ' D1' C< >1- ' &=' 0?BD1' 0& >1' &=' &-1 ' &' #1' 0100'A' <-A' ǂ1+ 1A' ?C&-' <- ' 0?BD' C0&-1' <= 1 ' D1' =&? 'C1' <=& 01'Aǵ <-A' CBǂ<><B'&-' D1 &=' ><A1' # ' D1' 0<>1' & ǂ1Q&? 0' '-' D1' -1L ' < a1 ' &?-1' D1 &' <A & - -.' '-' D1' 01'A' &?- '1ǵ -A' D1-' =' D1' 0<>1' &ǁǁ1= &? 0' '=ǂ1' 'H &' D1' , -.'0' 0BD1H?1 ' D<' -&' 0?BD1' 0?==' B'1- ' A'0 1001' B<-' D1' =&?-A1' =& ' D1' C< >1- ' &=' D1' 0<>1' 0& >1' &=' &-1 ǵ D<' D1-' D1' 0<>1' C0&-1' 0D<ǁǁ C< ' ?- &' D1' , -.' D1' A&##ǂ1' 0& >1' &=' D1' 0<'<1' C-1 ' 0&' ?C&-' D -'' <001001A' -& ' C<ǂ1A' K' D'-' L+ ' A< 10' -1L ' <= 1 ' D1' 01'A' R '=' B<' >< A1ǵ <-A' D1' &ǁǁ1 '&? 0' &=' D1' < >1- ' &=' D1' 0<>1' 0& >1' &=' &-1 ' D1-' &' #1 ' A'0BD< .1A

+ C &+'0&' =& ' &ǁǁ1A&& 0' '-' <>C0D' 1' <-A' 0ǂ1' &=' F '. D ǵ #1' -& ' BD< .1A' -1 ' BD< .1<##1' =& ' D1' C ǁǁ1BB -' &=' <- ' L+3' &' LƢH' <'A1' ' ?#0'A'1' <=& 01'A' & ' D1 1<= 1 ' &' #1' . <?- 1Aǵ KD'BD' 0D<ǁǁ#1' C< <##1' <001001A' & ' &' #1' ǂ1+ 1A' K' D'-' D1' 0ǂ1' &=' F '. D ǵ #1' -& ' BD< .1A' -1 ' BD< .1<##1' =& ' <- ' L+3 0' IQ LO3Ơ <'A1' C ' 0?#0'A'1' <= 01 A' & ' D1 1<= 1 ' &' #1' . <?- 1A' KD'BD' 0D<ǁǁ#1' C< <##1' <001001A' & ' &' #1' ǂ1+ 1A 'K' D'-' D1' 01'A' T &?- '1' &? 1' &=' D1' 01'A' 1' &=' F '. D ǵ #?' D<' D1' D<' AK1ǁǁ K' ǂ?-' D1' 01'A' 1' 0D<ǁǁ#1' D1 &=' ? ǂ ' = &>D1-0=&? D' A'0CD< .1A' =& ' 1+1

&-0 <##10' 0D<ǁǁ <00'0 ' & 1 & 0

(' ' ' I ǂ0& 1-<##1A' # ' D1' <? ǂ& ' 1' <=& 01'A' D<' <ǁǁ &-0 <##10' K' D'-' D'0' 1<>B' 0D<ǁǁ =<+&? ' D1ǂC1' <CA' <00'0 1' D1' 01'A' &ǁǁ1 &? 0' =& ' D1' &ǁǁ1B(C-' &=' D1' 0<>1' K' D'-' D1' ' 1' D?-A 1A' ? .D1' &?''1' & ' 'ǂǂ<.1' KD1 1' <-' &=' D1 >' 0D<ǁǁ#1' &-0 <##1

] &+'0&' =& ' & C& < 1' &K-0' =' < .1<##1' K' D'-' D1 >0ǂ+10

" $ ' <ǂK ' D<' D1' < 1' <' '=0' <-A' `& D1 P' &=' 1 ' ' .D1' & C& < ' KD1 &=' D1-D' <?- 10' D<+1' -& ' ?01A' &' #1' BD< .1A' & ' ><a1' &ǂaB -' &=' 1- ' .1 <ǂ ' &? 1' &=' D1' 01'A' &?.D10ǵ D<' D1-'ǂ' <?- C0' K' D'-' D1' 0<>1' & &?.D0' #1' -& ' BD< .1A' & D1' &ǁǁ1B -' &=' 1- ' 0&-<1' & ' 0& >10' &' #1' <00100 A' <= 1 ' D1' =& >1' <##&+101'A' &? 1' = D1' 01'A' & &?.D0ǵ <-A' D<' D1 ' K' D'-' D1 >' 01ǂ=1' 0D<ǁǁ ><a1' B& 1BB#'" &=' 0?BD1' 0(>10' &=' >&-1 '<0' 0D<ǂ#1' <001001A' K' D'-' D1' ' ? '0A'BB'&-' C' #1' ǂ1+ 1Aǵ <-A' D1' 0<>1' 0& >10' C=' >&-1 ' &' A1ǂ + 1' &' D1' &ǁǁ1 ǂ&? 0' &' #1' -<> A' <0' '0' <##&+1' 01'A' =& ' D<' D' 1' 1' D1 1' D1 ' D<+1' D1 ' #1 -.

] 1 0&-0' &' #1' BD< .1A' KD1 1' AK1ǁǁ' -.0' I B

" " $ ' <ǂ0&' D<' -&' C0&-1' -& ' C0&-10' #1' <001001A' -1' BD< .1A' # ' . <?-' &=' D1' 01'A' <'A1' <-A' 0?#0'A'1' =& ' <- ' .&&A10' & ' B< <ǁǁ10' '-' <- ' & D1 ' C ǂ<B1' D1-' D1 ' <0' D1' & ' D1 'AK1ǁǁ 'D LB1C 1' D<' 1 ' C0&-1' <-A' C0&-10' #1' BD< .1A' ₹3' D1' 0<>1' <'A1' <-A' 0?#0'A'1' =& ' D1 'H? Ba1'B< 1ǁǁ KD1 1' D1' 0<>1' H ? Ba1' B< 1ǁǁ 0' B&?BD<-' <-A' ǂ1+<?-' <-A' =& ' D1' ' & >1' KD1 1' D1' 0<>1' A -1' . 1K1' <-A' 1>< -1 D''-' D1' 1 -1' E< -1' ' '-' <Ba'0ǵ <-A' D<' 1 ' C0& 1' & ' C0&-10' D<' <D' & ' D&F ' D' 1'' ' D&?01' & ' C ǂ<B1' KD1 '-' D1' & ' D1 ' & '<-' C0&-1' =& ' D >' & ' ='1 '-' ?0' D' &' # ' C ' 01ǁǁ 1- ' .&&A10' & ' B< <ǁǁ'0' < ' 1 <'=1' C< ' &' D1' 01'A' 'ǂA1' <-A' 0?#0'A'1' <= 1 ' D1' < 1' <#&+101'A' D1 ' <i' D1' & ' D1 ' 0&' 1 <'ǂ #

] &+'0&' =& ' C' ' ?<ǂ 1 0&-0' <-A' ǂ'1-0

" $ ' <ǂ0&' D<' -&' C0&-1' 0C?<ǁǁ -1' 0 < -.1' <ǂ'1-' #1' BD< .1<##1' -1' Bǂ?' .'A' =& ' D1' .&&A10' <-A' B< <ǁǁ'0' & D1' 01'A' <'A1' <-A' 0?#0'A'1' #?' =& ' 0?BD' .&&A10' <-A' B< <ǁǁ'0' <0' D1 ' #1' BD< .1<##1' K' D' & D1' L+3OH <-A' LƢOh

] &+'0&' =& ' L1>C '&-0' =& ' ' ?<ǁǁ & 010ǵ &?01D&ǂA' ! ? -' ? 1ǵ I B

" $ ' <ǂ0&' D<' <ǁǁ ?BD1' .&&A10' <0' <-' & A1' & ' & D1' 0&-1' BB?ǂ 8 ' D< D' B&- - -.'+' <'ǁǁ & ' #1' 1LC1-A1A' '-' D1' ' D&?010ǵ D& 010' I ' D< -1'0' &' #1' 1>C ǂC 1A' '-' D1' F < 1ǵ <-A' <ǁǁ & D1' .&&A10' <-A' '>C ǂ1>1-'0' &=' &?0D&ǂA' & ' #1' ?01A' '-' D1' ' &?010ǵ <-A' ? 1-0'ǂ'10' &=' D1' 0<>1ǵ KD11# ' D1' & ' D1 ' <a1' -&' .< -'1-1 ' K - -.ǵ #1' -< ' B& >C '01A' -1' BD< .1<##ǂ1' & D1' 01'A' <'A1' <-A' 0?#0'A'1

] L1>C '&-' =& ' D1' ^?11-

" $ ' <ǂ0&' D<' & ? 1' &+ < -1'ↄ # ' D1' ?.-1' #1' -< ' BD< .1A' -1 ' D' .1<##1' # ' D'0' C01-' Q 1' &=' & ' =& ' D1' 01'A' ?A1' <-A' 0?#0'A'1ǵ =& ' <- ' C-A10' & ' 1D '0' & ' & D1 ' D1 1A' <>1-'0' .&&A'0' & ' B< <ǁǁ'0' KD1 A=' &? 1' 01'A' &+01'.-' <A ' 0' 01<01A' & ' C&001001A' & ' D1 ' & K-1?01ǵ & ' KD1 &=' <- ' & D1 ' C0&-1' & ' C0&ǂ'10' '0' 01<01A' & ' C&001001A' & ' D?01' &=' &? 1' 01'A' & 1' .-' <A

" $ ' <ǂK1 ' D<' =' D1' , -.'&? ' i&+01'.-' & A1' '-' D'0' >&0 1' &'<ǁǁ C0&-1ǵ K' D' 0?BD' < >11' <0' '0' <CC& - 1B" &' .&&' <-A' < 1-A1' C&-' D'0' ' D''10ǵ & ' '-' D' i' <#01-B1' =& ' B<H010' 10&-<##ǂ1' D1' , -.'0' 1? 1-<?-' K' D' D1' 0<>1' < > 1ǵ .&' -&' '-' D1' 0<>1' +'<.1' &'<ǁǁǵ <-A' <' C=' 1' C1<0' #1 K1-C' D1' , -.' <-A' D'0' D'0' 1<ǂ>1' &=' -.ǂ&-A' <-A ǂ D1' 01'A' 1<ǂ>1' &=' B& ǂ<-A' #1' <a1-' #<A' B&-B?A1A' <-A' B&- -?1ǵ D<' D1-' D1' 01'A' <'A1' <-A' 0?#0'A'1' C<'<##ǂ1' D1' 01'A' +'' h' A< ' &=' &+1>#' #1' -<' D<A' C<'1A' -& ' ǂ1+ 1Aǵ #?' D<' D1' 01'A' & A1 ' & <1-0' <-A' &ǁǁ1= &? 0 ' D1' D1 =' H? 1' <-A' A'0BD< .1A'Ẋ -A' '=' D1' , -.'&? 1' & 1'.-' & A1' '-' D'0' >&0 1' &'<ǁǁ C0&-1' K' D' D1' 0<-+1' < >11ǵ & ' =& ' B< 0'0' 10&-<##ǂ1' D1' ,'-. 0' 1? 1- ' K' D' D1' 0<>1' < >11ǵ .&' -<' '-' D1' 0<>1' +'<.1' &'<ǁǁǵ <-A' <#0 '-1-B1' &=' K< 1' 1? ;' <-A' C1?L' =& ' <' >1' # K1-1' D1' , -.'&? 1' & '.-' & A1' <-A' D'0' D'0' 1<ǂ>1' &=' -.ǂ&-A' <-A' D1' 01'A' 1<ǂ>1' &=' B& ǂ<-A' #1' <a1-' #<A' B& -Bǂ?A1A' <-A' B& -?1ǵ D<' D1-' D1' 01'A' <'A1' <-A' 0?#0'A'1' C<'<##ǂ1' D1' 01'A' +'' h' A< ' &=' &+1>#' #1' -<' D<A' C<'1A' -& ' ǂ1+ 1Aǵ #?' D<' D1' 01'A' & A1 ' & <1-0' <-A' &ǁǁ1= &? 0 ' D1' D1 =' H? 1' <-A' A'0BD< .1A' Ẋ -A' '=' D1' , -.'&? 1' & 1'.-' & A1' '-' D'0' >&0 1' &'<ǁǁ C0&-1' K' D' D1' 0<-+1' < >11ǵ & ' =& ' B< 0'0' 10&-<##ǂ1' D1' ,'-. 0' 1? 1- ' K' D' D1' 0<>1' < >11ǵ .&' -<' '-' D1' 0<>1' +'<.1' &'<ǁǁǵ <-A' <#0 '-1-B1' &=' K< 1' 1? ;' <-A' C1?L' =& ' <' >1' # K1-1' D1' , -.'&? 1' & '.-' & A1' <-A' D'0' D'0' 1<ǂ>1' &=' -.ǂ&-A' <-A' D1' 01'A' 1<ǂ>1' &=' B& ǂ<-A' #1' <a1-' #<A' B& -Bǂ?A1A' <-A' B& -?1ǵ D<' D1-' D1' 01'A' <'A1' <-A' 0?#0'A'1' C<'

W %!1 &.-ʻ .'" !' &-ʻ -@ . ' !' -&$2& !!2' . ' %!- ."/' .'" 1;"&**!' ." .' !' .++!*!' . ' .0"!' ;+!22!/' /@ . ' V@-#<!2< ;!2&/!' V@-/&!2 !"<. '" -@<. . /!2' .'" # + 2' . ' !'2!&/' .+#&*!2' .'" ?' -@ . ' #@1' ;!+.-*&-*';!'# &-!/' .'" # "*! ;+!' .' .h" 7& ' !'2!&/' &/!' -/' 0;2&/!' .'" 7& ' -@' #!++' !". ⁼ ;0 ' ' !'_!&/' .++!*&2' -/'!<# ' ' ;!@ -';@ 7 2.!$- 1!'."- 1!2' !@' ." -@ . ' ! !@1' ;!'# +#&/' .'" - 1!/' ;!' 0$+@' /&2# "*!/' -/' #S0@ !/' . ' !' 2!&/' &/!' -/' 20;2&/&& &2H 2!-' ." -@ . # dB ' ." /! ' 1 /!'." .' ;!' 1 /!' #.- -@-*' R]@-. 7& 2 .-/&-*

R<8'B 62.MH 2' 33 A 4' ;#b.1 <& &!"2' ." !' &"!2' 0-/"!7"&!-'C'7& ' 02&#!2' . ' ' ! 2' .';!' 22./

!";
.;!2'M-@@! .-
.;!2' "1.-/
6&#02' -@'! .-
/&!2'M j !";!"'/!' .";0"@

01C02'3!"2 +' "1&*'
6&#02'V" @2+!@' 1"&*'
01;"02' 7@-!" .-'
.1 2'V!++2

+. '
6&#02' E!-' &+!2'
.1 2' E.-' "1&*'
.1 2' /+.-' "1&*'
./.7&#02' @.-' "1&*

4!/
b!."*&02'b 2#.&*-' "1&*'
.1 2'V 0-.-' "1&*'
V&+2' 1@2'b!-&+1 -'
V& 2' !'!- ."

0-
.;!2' ."7./#
. !2' @2!'
&&2 #<12'4"!-!-'
6.; 02' "-.+/

0"
!02'4".0-' &+!2'
.;!2'b0-!"
<2 E@&1!"'
!-' 0-/"!

%.-
V& 2' "#.0"' "1&*'
.;!2' . @21."!' "1&*'
.1 2' 2; 2.-' "
V& 2' +1@2

4!"E
6&#02'B! @ #!'
.1 2' 22!%
V& 2'B! @ #!
.;!2' !-.-

.<
.;!2' !E!' &+!2'
.;!2' &//@- 1'/!' "# "/'
6&#02' .0!+'
.;!2' 0-.-

."2
6.*<2'M!0;0"* '
!"&' " -*7@2'
.;!2' .E "!'
.1 2' 02@'L

0
6&#02'V +. ' "1&*'
6.; 02'V & !' '
6.; 02'40+E!+!@' "1&*'
.;!2' E@ @-*'2! ' 1&*

&++ ' +. '
6.c02' ."-!2'
V& 2' .+&!'
0"!-#&02' .2@!"
0*.'V +E!"

!'&2!2
.;!2' +!@'
6&#02' @1;0"@'
#.;02'3. !"
6&#02' 0 !

-20+ ' !(
.;!2' 7"@' "1&*'
.;!2' @!' "1&*

&'& 2'4 !'
0"!-#&02' !# !'
6.;'4 @-'
V& 2' @+!"
.;!2' .EE&2

.+#!2
6&#02' @-!2'
6&#02'4 "E!"
.1 2' "&2@-1 2'
.;!2'4"! .-

&++ ' !";
.;!2' + '.0"
6&#02' .+@!"
.1 2' %+!@'
. !2'4"@/!

&++ ' . @-* F1
6&#.2' -/"!7!'
.;!2' !@+@.E
. !2' .2'
.;!2' 7!

. @-*)&-
.1 2' !"@-*'
.1 2' !@E!'
.;!2' !@-' -/"!7!'
V& 2'4+@.-

@-/!2!@
.;!2' !B!+/'
V& 2' .0+/@#!'
.;!2' 1 0 '
6&#02'90 /"@-*

M!2 @-
6&#02' @1.+;@'
.1 2'6 722!'/!' .02!;@'
/10-/02'4022 '/!' .0* <1'
b&+ <02' 02!'/!'b" 0- <1

.++ -/
.1 2'6.;@-2.-'/!B.22!/@E!'H0D<'
.;!2'6.;@-2.-'/!'4.2 .-' 2!-)<'
. !2' &"# !@!"/'/!' .+;!# '
&#;02' !!'/!' 7@-2 !/!

&'& 2' ."7&#&'
6.; 02' ." '
!-'" V@+ .-'
. !2'3@-# !1."!'
6.; 02'40"*

&++ 'b+.0!'
.1 2' @+!' "1&*'
V& 2' "@!' "1&*'
V& 2' -2 7!'
.1 2' -!

&++ ' # ";0"* '
.;!2'3!"#@'
3! "02'3!"#@'H0-&."'
. !2B@# !'
0"!-#&02' "&2.-
!"! ."/' 2
. !2'4"!@- .-'
.1 2' " !'"
. !2'V ++!'
6.c02'b&;;@2

!'.-
. !2' .0"!-!@/!' .+.-/'
.;!2' "!1 @-!' 2!-&."'
V& 2' "./!'
.;!2' 2.-

&++ ' 0-@-*/ -'
V& 2' 7!- 1'
6.; 02' !7!+'
V& 2' +!"E!' " !'"
. !2'B+! 7!++

."
.1 2' !@-@'
6&#02'M-@* +!@'
6.; 02'V& !+;0"@
6.<02'V E!

&++ ' ." 1 .-
!-' 1 "!@'
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6.; 02' ! ."/'
.;!2' @22@

!@#
.;!2' 0"'@+' "1&*'
.1 2' !2&+"&*' "1&*'
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6.!
V& 2' ! !+/'
6&#02'B+.7!'"
. !2' +#.'
0"&#&02'4!<!+!@

V&*." &
.;!2'V!+2 !'
6.; 02' ."* -'
.;!2' &//&+1."!'
.;!2'V!2<!;.01

Q -' !' "*&-' . ' !'6.+' . .2& !' !' -"@' . ' &2'3".'&2.'&2'7"& !-'U3'&2&.' # ' ' 1'6!*!1(!' "&*&- +'3".'&2. #.- &-!/'&-' '2! " !' # !/0+!' --!%!/' .' !' "&*&- +' Z<' ' !'H<1&22!2'
(!' 1!2.' !2!' .11&22&.-!"2' "!'-.' --!%!/' .' !' "&*&- +' <

C(1#

'0 &=& ?0' &C -1
&D10' -1 '
&D10'E<K1-'
E1& .'?0' D<A1 &<

$ 6!

F< R 5' " 1- 0' ' '
.'A'?0' '..1' '
F ' 0' <00 ' > '.'
&D10' &-10

6

&# ?0' <-1'
&D10'E< -1 0'
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' ' &4

1?#? .D ='=
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67 = '

F <?0' & &-'
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F ' 0'E 1-1'
F ''=1' D1 -1

!(@(' E #

F ' 0' < a1 ' <a1 '
&D10' 1 1' E<0'1 '
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&D10' & 1$1 '
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D&><0' 1&-

C ''

AK< A?0' <1.D' '"
F ' 09' < K1 > '.'
&# ?0' ?K&A1'
'B?0' <>1

6 D

&D10' <>1 '
F ' 0' &K1 '
D&><0' F 1 0'
&D10' 1== 1

!) E'

F ' 0' D1 -1'
'B?0' i ? Q1A'
" <+'A'E 1 '
D&><0' <-='A

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&D10' ?-A1 '
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)* ('

A>?-A?0' <=# A' '
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D&><0' <? 1-B1' '
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6

&D10' <-.0 &-'
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'B?0' &- '
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0(' D)

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))' +(

&D10' <>1 '
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D&><0' D? 0# '
F ' 0' >=?00D

'

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F <R?0' < a1+ 1' '
'B?0' E 1-1K1 '

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D&><0' <-BD'BD1'
&D10'E&&A'
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F <R?0' ?a1

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&# ?0' 1 >'.
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)7)

'B?0' &- 10#? ' ' B1'
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<? 1-B'?0' > ' " <C'
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(77

AK< A?0' D101><-'
&D10' -. &-'
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&D10' <?a10'
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'7()' 3 @)'

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38))' 6+' 6 '

D&><0'F B =='
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$') 5 'Z B '

D&><0' <'
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'<' ? =1e'
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I3)*

1-=' & -1'
F <R?0' ?C1C1 '
&D10' 1BBD1'
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I !(@(' ! @) ''

D&><0' < '
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&D10'F =.0 &-'
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&D10' &><-'
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D&><A' < 1'
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E'CC1K'BD '

D&><0' " < 1'
F ' 0' <a1 '
'B? ' <' '
'B?0' <LK<A1

'6) ' 5'

&D10'F D' 1'
?.&' &K&-1'
D&><0'F 10 &-'
&D10' 1-1

? DK1 a1 '

&# ?0'F 1 A1-'
&D10' < D1K1'
D&><0' & '&-'
F ' 0' -&A'
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F ' 0' <?-BD1'
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)) ' "Q f ! # 0 ' -;,9</

<.' & . -+.' </ +& 1! &6 C --.' !*-' L!*&2 \!-"#R !#1.' -.-.

(' EG/')F' ./' /),F',-' E @)E /F ' /URF' ,' /'
.,@G/F' E '<# J ' ' $ ' ' H 8 ' G ' ' % '
) ' ' ('O ' ' ' ' ' ' E'

!

')7)*(') ' (' *( )7 ' ()' $6 ''(

1B' <f &= < ? 1' '' 1- 'B '5 ' <0' &'< 1-A'-.' D1' ,'-.''-' F < f # ' 1 0&-0 #&&A'-.' ==' B10&

C 6' &-' !' +!1!-' .+/!-' ' V!2 1@-2 "!' !' %#' @!"!' . ' !' M@-*' .0"' . &*-!' ."/ ' 6!&*-' .'" *../!' "!2.- ;+!' GI<# 02!2 C ' '#.-2&/!" #.-2'&-' -' ^!'&-' !' 2!&/' +!1!-'#.- !@-!/'&'7 2'."/!@-!/';@' !'2 1!' ' ++' 2.-!' C' 2.&&!2' ;!&-*' '=@ &-' &2' 6! +1!' . ' -*+ -/!' ." V @+!2' '@-*' . &#!2' !!2' ." --0@&!2' . ' !' M&-*' ' *@ !2' C' *" 0- !2' -/' /&/!' -. ' *!'!' !'" !-/ 0-#!' 0 .-' !' M@-*' ' &* -!22!' 7 !-' !' 2 0+/!' ." 0-!' .' *..' &-' V ""!2'&-' &2' 2.-!' &-' !&" 2.-!2' 2' !&" /0! &!' ;@-/@ !' !1' &-' ';! 0+!' ' !-' !@' -/'!' @' . ' !1' 1 E&-*' !". ' /! 0+!' !' M&-*' 2 !#& +d' +&#!-2' -. ' /!' ." !+2' !' 2!&/' 2.-!' ." 2.-!2' '@-*' 2O# !' 0- !@-!/' @E!-!2!' +! @-*' ." /&2! 2!' ' !' ." !@' !" /0!' ". ' !' . ' !' 2 1!' 2 0+/!' ." !@' C' +!2!' !" 2!&/' . &#!2' !!2 C --0@&!2' C' !' 2 1!' .' 2 .-/!' '.@/!' ' !' M&-*' +! 2.0" ' 2' &-' !' 2 1!' 9!' 1." !' ' + "*!'&' &2' #.- !@-!/0 -/' ." 21.# !' 2' /&'!" 2' C' 1!-@' 2.-!2' '@-*' . ' !' M@-*' *@ !2' C' *" 0- !2' 1 -@' .-.0" 2' 2 !++!2' ." /!2 + !2' -!" 2' + -/!2' !- ' C' . !" .22!22&.-2' C' !" !/& 1!- ' ;@' "! 2.-' 7 !". ' !@' " 1." !' ;.0-/!-' .' *&'!' !" !-/ 0-#!' 0 .-' !' M&-*' 1.2!" .@ ++' 2.-!'&-' &2' 2!&/' V ""!2' !-' . !" "! !"2!/' 2.-!2' '@-*' ;0' !!2' . &#!2' C --0@&!2' ." !"1!' . ' +@ !' 27!++' ." !' /! !-#!' . ' &2' 1.2!' 6.& ++' 2.-!' 2' ." !' /! !-#!' . ' &2' &2' 6! +1!' 7 &#' V 2' ' @1!';@' .,2!* '.1& !/' C' +! !' .7' . ' !' 2!&/' +!' 0 4!'&' !" ."!' !- C!/' ."/!@-!/' C' !2 ;+&22 !/' ;@' /'@2!' . ' !' ."/!2' 2 0!++' C' !1 ."!++!2' C' !' .1!-2'&-' &2' 2!-' +!1!-' 22!1;+!/' -/';@' 0 ."&!' . ' !' 2 1!' '!,@' 2.-!' ." 2.-!2' '@-*' ." .##0 @&-*' ." ' !"! !" 2 ++' '!' ." .##0 &!' !-@' .-.0"!2' 2 !++!2 ."/!2 & !2' -!"2' + -/!2' ! !2' C' . !" .22!22&.-2' C' !"!/& 1!- ' ;@' "! 2.-' C' '!" 0!' . ' !' ! "!2' !- ' . ' !' M&-*' .0' .3 &*-' ."/!' ' -.7!' &2' -.7!' *!'!-'*" 0- !/' C' 1 /!' ." !" !" .' ;!' *!'!-'*" &1 !/' C' 1 /!';@ .0'2!&/' . &*-!' ."/!' C' *!'!'-. ' !" / @+@' !-/ 0-#!'&-' !" 2.-!2' 0 .-' &2' &* -!22!' 7 !-' !' 2 ++' ." 0-!' ' *..' &-' V !""!2' 7&-' &2' &2' 6! +1!' ." !+2' 7 !"' ." !-@' 0"*!-' C' "!2.- ;+!' # 02!2' &-' &2' 2.-!' ." !' .-.0" " 20"!&!' . ' !' 2 1!' &2' 2.-!' C' !' /! !-#!' . ' &2' &2' 6! +1!' C' @!-2!' &2' !-@1@!2' ." "!;!++!2' 7&-' !' 2 1!' 6! +1!' Y." 7@ .0')' ." !" "!22@-*' C' 20;/0@-*' . ' !1' -/ !"!' 1 +&#&.02!' 0" .2!' -/' 7!++' C' "0!+@' ##."/@-*' . !' /0! &!' . ' !" ++!*& 0-#!' 2!"' !' M&-*' &-' &2' 2!&/' ."-!@' -/' '!@ *!' C' .' *@' !' !" !-/ 0-#!' 0 .-' &2' b" #!' &0' !' 2 1!' C' -.' .' /! !' 7@ .0!' &2' 2 !#+ ++' +&#!-2' &-' 7"&@-*' 0-/"!' !' M@-*' 2@*-!' 1 -0!++' C' 2&*-!' ." 1/"!' &2' *"! '2! ++' ." "@'!' 2# +!' ." !+2' &++' !" *! ++' #+ 1 #&.-';!' 1 /!' ' !@' 2 ++' /! !' ." !+2' !' 2!&/' 2.-!' ." 2.-!2' '@-*' 2O# !' 0- !@-!/' 2!E!-!2' +! @-*' ." /!2! 2!' ' !' ." !@' 1 @' -.' &-' !" 2.-!2' #.1!' .' /.' !" 2.- ++' !-/ 0-#!' C' '&#!' C']3! /0!+@' '!/' ' !-' ++' 20# !' ! !"2' 3 !- !2' *@ !2' C' *" 0- !2' -/' &+' &-*' &-' !1'#.- !@-!/';!' 0 !"+@' ".1' !-2 ." !' /-0++!/' '.@/!' C' .'-.-!' ! +!' C' ' !' M&-*' +! 2.0"

1B' <f &= < ? 1' '' 1- 'B '5 ' <0' &'< 1-A'-.' D1' ,'-.''-' F < f # ' 1 0&-0 #&&A'-.' ==' B10&

>'00'&-' '-' 1B' 1A' = f' <0 &' 1 0&-0' D&&A'-.' <-A0f' I B

FD1 1' 1 0&-0' KD&' D<+1' E <' <&= <' A0f' I B' = &>' D1' ,'-.f -1.&1=' &'< 1-A' D'>' '-' F < f 0?BD' E <- 0' 0D<&f #1B&>1' +&'A0' <-A'<' D1' ,'-./0' &1<0? 1&

&+'0&'=& ' D1' ' F <.10' A? '-.' 0?BD' 1-A<-B1

3E. A ' 5 ' ' 6*5' +) ' ' @8) ')7 6)*' 5 ' 5 @' 5 ' 3() ' = 8 ' ' ' 5 ' 8 ' ' 8) ' ' ' 5(' 6 ' = '7' 5 ' 3() ' =5)' 5 8' * ' ' 5 ' 3() # Z' ' ' 5 ' 38) ' 5 ' 8) ' ' 5 ' 8 ' ' 5 (" 7 + 8) # " 5 ' ' ' 'DD'N 8 ' " ' 8# Z' =5(' 5 8' E ' =8 5' 5 ' 38) ' $' * ' ' 5 @' ' 5 ' 3() ' C 8

" $ ' +2.' ' &' ^ !' !% !-/!' -. ' .' -.'2 0!+' 2.-!' -.'' .' !' 02 !'' . ' !' 6. !2' -!' .' -.-!' . !'' #!'' C' +!"E ' . ' !' 0- "&!' 02 &#!' . '!& !'' 4!-# !' 4 ".-2'. ' !' M&-* ' 2# !S0@!'' C' . !'' &#!"2' C' +!"E ' . ' !' 2 &/' + @#!2' !' M@-* ' . -!@2' C' .++&#& .0'' C' !' !"*& 0- !2' ' 7 ' -.'' .' !' +!"E!' . ' !' M1* ' .0-2!+' .'' !' @1!' ;!@-* ' -."!' .' !-@' 2.-!' ;!@-*' ;.' !' !' *!' . '+%' @!"!2 ' -.'' .' !-@' 2.-!' ;!&-*' 7@ &-' !' *!' . '%%&' @!"!2 ' -.'' .' !-@' *" 0- !' .'' !-' . ' !-@' V "/!' .'' /&. ' .'' 02 ./&!' . ' !' 2 1!' -.'' .' -.' !@"!2' !1 +!2' !- !"& !/' ;@' "! 2.-' . ' !-@' 20# !' *" 00

%!& & &.-2' -' &"& 0 +' 3!"2.-2' 2 !'". ' !'6.++2' C#

" $ ' +2.' '&' !% !-/!' -. ' .' -@ !- !2' -.'' + -/!2' .'' !-!- ' #.1 "&2!/'&-' !' 2 1!' !' 7 &# !' !- !2' 1 E!' 1!-#&.-' ' !-@' *" 0- !' &2' 1 /!' ;@' !' M@-*' . ' 20# !' + -/!2' .'' $!@-!' 2.1!' .'' 2.1!2' . ' .-!@' #.- !@-!/' &-' !' 2 1!' +! !"2' !- !2

3". '&2.' .'' b" - 2' .-' !#0-& "@' .-2&/!" &.-

3 6 '

IK' 02 0& & ' "#00' /' !1 02' /.- -/

.' !' M@-*' .0'' ., &*-!' ."/!' !=

' & '@. ' &* -!22!' .'' 2' 1.# !' 2' ;@' +.-*!' @1!' 2 !' !7!' 20 &##&!-' 4.7!2 !2' '!' ;!-' ;".0* '&-.' &2' @. 6! +& !' .'' 2E "#!-! 2!' 7 !". ' 27!+' !' " &+! @' . ' !' 2 1!' &2' +1.2!' /!# @!/' 2' !' !#0+&!' . ' 4.7@!"2' +1.2!' /!2".@!/' -. 7 2 -/@/*' 1 -@'*../'2 0!2' !"!;". "!' 1 /!' .'' ;"&-*@-*' . ' 4.7!2 !2' &-' .' &2' @. ' 6! +1!' ' .'*!'!'#." *!' .' "# 0- ' ';"@-*' &-.' &2' @. ' 6! +1!' &-' @1!'#.1@-*' *../' ;.7!2 !2' 1."!' +!-&.02+@' .' !-#"!#!' . ' "# !"2' C' . ' !' " &+!"@' . ' !' 2 1!' !-' !@' '!' ;!-' ##02 .1!/' .' ;"@-*' &-' @1!2' 2 1Z' ' &' 1 @!' +! 2!' @. ' 2!&/' &* -! 2!' . '@. ' 1.2!' 2 !#& +' C' ;0-/ 0-' b" #!' ;@' /'@2!' C' 22!-' . '@. ' ."/!2' 2 0 +' C' !1 ." +' C' . ' !' .1!-2' &-' &2' 2!-' +!1!-' 22!1;+!/' -/' ;@' 09."& &!' . ' !' 2 1!' ' &' 1 @' ;!' ."/&-!>' !- !/' C' !2 ;+&22 !/' ' -.' 0 .1!' ;!' @/' !'' !' 1 E@-*' . ' &2' !' .'' !-@' 20 &#&!-' 4.7!2 !' .'' 4.7!2 !2' #.- !@-@-*' !' +!-*! ' . '2@%' . !' C' ' + !' .'' ;.'!' '2 +;!' ;".0* ' &-.' &2' @.("! +1!' ;@' !-@' &# 0- !'2" 0-*!'' .'' . !'' ;! 7!-!' &2' C' !' -!%' +!1!-' ;0' ' +' 1 -!'' & # 0- ' .'' ;"@-*@-*' &-.' &2' @. '"! +1!' . ' !-@' 20& &#& 0-' 4.7!2 !2' . ' !' +!-* ' . ' @%' . !' C' ' + !' .'' ;.'!' ;!' /&2# "*!/' . ' +' 02 .1!2' .'' !'2 1!' 4.7!2 !2' /0"@-*' !'2!&/' @1!

3 6 '

K' +2&2' !"/& +&2' 0-&!-/

4 'M&-*' #0"!' ., &*-!' ."/!' "!1!1;"@-*' ' ' &2' +!1!-' .+/!-' 'V !2 1' !' %&&H[' / @' . ' 9.;"!' &-' !' %H [' @!"!' . ' &2' "!&*-2' 1.-*!' . !'' &-*' @' 7 2' ."/!@-!/' C' !- !/' '0 .-' !,@' 0- "0!' '!"/& !' .' ;!' *!'!-' 7&-' &2' &2' 6! +1!' ;! 7!-!' &!' C' &!'&-' !-@' 20@ !' + @- !' .'' /!1 0-/!';! ."!' 02 &#!' .'' 02 &#!2' . '6!#./!' 7 !'' !' @-*' &-' /!1 0-/!' !% !-/@ ' .' !' ' +0!' . '%' &' -. '#.-$-@-*' !'H!. /@!' . '1 --@2'+@ !' !' "&!'*"!'!/' ;@' !'2!&/' 0- "0!' '!"/! ' 2 +' '!' ' 7"& !' . ' !@-' *!@-2 !' ? ' 2.-!' *!'@-*' -' 0- "!7!' '!"/& !' -/' * @-2 !' !' &!' 7 &# !' <'H0*!1!-'0 .-' !'2 1!'L7 &# !'*../!'2 1 !' -' 7 2' 1 /!' .' !-/0"!' 0- .' !' +!1!-' -' -!% ' .+.7@-*' 2' &-' !' 2 1!' 0 !' + @ +@' !"! =' -/' ' !'-!% ' +& 1!-' .+/!-' V !2 1' !'%'H / @' . ' -0 "&!'&-' !'%&H [' @!"!' . ' &2' "!&*-!' ' !' 2 1!'*../' 0 !' 7 2' ."/!@-!/' .' #.-@-!7!'0- .' !' @"2!' / @' . ' &2' 2!-' +!1!-' ;!*.--!' !'%%' '/ @' . ' -0 "@!' -/' .'' 21.# !' 2' !' 2 1!' 0 !' &2' 1.# !' -!#!22 "&!' .' ;!' #.-@-0!/' .'' !' 0-@22 1!-' . ' !' .""@;+!' '&#!' . '3H0"@'D !" ."!' .0'' 2!&/' .0, &*-' ."/!' 7&++@ ' ;@' /'@2!' . ' &2' ."/ '2 0!+' C' !1 ."!+' 7@ ' 22!-' . ' &2' .1!-2' &-' &2' &2' 2!-' +!1!-' 22!1;+!/' -/';@ ' !' 0/+."&!' 3 "+& 1!- . ' !'2 & !' &';!' . /!@-//' C' !- !/' ' !' 2!&/'*../!'C' -!#!22 "&!' 2 0!' -/' f ' @-*' !"&-'#.-!@-!/' ;!' C' 2.-/!' *../' -/'! ! 0 +' .'' .' #.-&-!7!' -/'!-/0"!' 0- .' !'-!% ' +!1!-

0" !'"#.-&-0!/' 0-&' !'-!% ' 3 "+& 1!-

b' ' '3' ' '6'

L' 4 +&2 &2' -.-' !%!"#& -/

4 'M&-*' #0"!' ., &* !' ."/!' #.-2@/!"@-*' "@* ' 7!+' ' &-' !' @1!' . ' &2' 1.2!' -.;+!' *!-&.2' 2 . @-*' -' .-*!' 4.7!2' !' ;!-' 1.# !' 02!/' &-' &2' &2' 6! +1!' 7 !";@' .-.0'' C & ."&!' !' ;!-' *. !-' *!@-!' 0 7 "/!' !-@1@!2' C' !' 6! +1!' *"! +@' /! !-/!/' -/' 1.# !' 1."!' /"!/!' 1.-*!' +' "&2 !-'3"&-#!2' ;@' "! 2.-!' . ' !' 2 1!' 7 &# !' 2 . @-*' &2' -.7' *"! +@' /!E @!/' &-' &2' 6! +1!' ."' 21.# !' 2' -.7!' . ' + !' !' M&-*' 0;H!#+' . ' !' 2 1!' *"! +!' /!+@ !' !1'2!+ !' -/' E!' +! 2.0'' &-' 02@-*' . ' ".2!;.7!2' 7 !";@' *"! ' /&2 "0##&.-' . ' !' M&-*' !!'' 27!+' &-' B.""! ' 2!2' 2&-' 3 "E!2 / @+@' &2' //!' C' /..0!' -/' 2 . @-*' &-' .-*!' 4.7!2' +@ @+' .'' -. @-*' 02!/' C' +@E!+@!' &-' 2 ." !' 2 #!' .' ;!' +.2!' C' 0 !"+@' /!E @!/' .' !' *"! ' 0" !' C' !- !;!+@-*' . ' &2' 6! +1!' C' .' !' #01 ." ' . ' .0"!' .7 /7 "/!' !-@1@!2' @ '"!1!/&!' ;!' -. ' !" ."!' &-' /!7!' @1!' 0"' !@/' V !" ."!' .0"!' 2!&/' .< &*-!' ."/!' K'@@ &.' '#'0' ?#.'1= =' &-' &2' &2' 6! +1!' 2 +' 02!' !"!' +.-*!' ;.7!2' !'' !' + 7/! ;+!' #02 .1!' 02!/' &-

@1!. &Z 1.2 !. -.;+! *!-@ .2 . !*"! .-.0"!2 !-* C /! !-#!. &Z 6! +1!;!/'@2!. &Z ."/ 2 0!+ C !1 ."!+ C !. .1!-2 &- &Z 2!-+!" !-1 22!1;+!/ C ;! 0/+."& !. !2 1! !. ."/!@-!/ C !- +!/ !" !2. 7 &- &Z 6! +1!7 @ .7 !M@-* 2 !#& + +&#!-2 0-/"! &Z & # "/!2&<!/ C 2! +!/!7@ &Z "@'!2! +! ." 2&*-! 2 + .##0 &!. " 2 . !&-!-@ ."2!;.7!;0@ !2 . !.7. .72!. " !+ 7! 0+ /! !-2. !2 1!!%#! ! ! ;! ."/!. " ! . ! 2.-!2 .&Z 02! '! + -/ C !- .'B"!! .+/!. ! @!"!+&!' +0!. ..' 0-/"!/ "E!.,+ # "*!2 0 .- ! @-!. ." ! ! 2 1! ."2!;.7!7) + ! "!+ !" .';!+.-*@-* .-@ 2.-! 7@+ 2! 2!C E! !2 1!- /' &'2 +;! +! 0+ .'!-@ 2.-! 2!! -@. !" 2.-!2 .@-* &-'!-@ ".2!;.7!#.- F'+! .' &Z ."/&- 0-#!. .'2! 2! ! 1! ".2!;.7!7 + "!+ !" .';!+.-*@-* .' !" ..-'02! 2.' ! '2.'2 + 2! !!-@ 20# !" ."2!;.7! ! -!% ! 22&2!Z ." !22&.-Z . ! 3! #!*!'. !-'!'@/!-#!*!@-2 ! @1' 2.'2 . ! !- -/' ! 02 &#!Z . 22&2!' 2 02 &#!Z . ! 3! #! ' !" !22&.-Z ;!0 .'& &!. &Z !2 0 !- -/'@ & ;! 2!- !/';!,/&!. '%&H 1!- ;! ."!' !02 &#!. 22&2!." 02 &#!. 'L ! #!'&-' !&" !22&.-Z '!-@ 2.-! ." 2.-!Z '!/.-!'#.- ("&!. ! 2!&/."/&- -#!Z !-' +@E!' #!22!' 2 +;!1 /!' !"0 .-' Z 2 +;!1 /!0 .-' -'!-/&!1!-'.'6&. ." !12 22!- -/' 20# ! 2.-!." 2.-!2' Z 2 +;! !". '#.-'& !/' 2 +;! ." ! ' .' !M@-* ." !,@'/@'2.' 02@-* &Z .".2!;.7! #.- "&!. & Z R Ù8 ! %+'2';@' ."#!. &Z !2 0 !'\ -/'@ ' #.-'&/+&.-';! //!;!"! 2.-!. ! !@!'!-* . !'@/!-#!. !-@ 2.-!2! 2@-* !-@ ".2!;.7 ! &-.0"1!. ."12!&/ !-' !2!&/ 02 &#!Z 2 + 7 "/!. ! 2 1!' 2.-!' 2.' *!'@-* !'@/!-2' %'2'. ! 2 1!%+'2';@ !"!/&2#"!2&.-' .';!+!'@!/';! &!"& !!' !'20!. ! 2 1! &!. " !++ .';! @/' 7 !-' !"!2&/0!. ! 2 1!%+'2' 2 +;! @/. ! M@-* -/'@ '!-@. ! 2!&/ ."/!2'." 2.-!2 '@-* +.-/ '." !&& ' . !-' +0!. ' 1 "E ' 20 !" !-@. ! " c'(0- !2 E-.7@-*+@!' .'2 . ! 7' !&" ."2!;.7! . !"7@22!' -' .' 22 @!' &Z ."/!'." &2&"!' @2';.7!' ." . 0-;.-/! ! 2 1!' !-' ."/!' ." 2.-!" .1! !-2 ." !' .'Y'+!22!'Ù!' !'+& &&!'.'02@-* '!-@ ".2!;.7!-/' ."7@ '2 +' /&2# "*!' c'[0-!'.7'. ' &Z '&#!' ." !+2 R ' ."/!'." 2.-!' ." ! '%'+& ." !,@ 20# ! @1!' '!-@. ' &Z c'(0- !2 2.'2 . ! !' &-'!-@ ".2!;.7!

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3' 6! ."1 #.!' 3!#0-& <

4 'M&-* .0" .,!&*-' ."/' 2!@-* !'@/!-+@ ' &Z .@-!' -/' 2 !#& ++@' . ' @+f!"'&Z 2."!' @1 !@"!/' 2 7!+ ;@ /& @-* !". ' 2 #.&+-!" ! @-* . ' !'2 1!' -/';@' ;"@-*@-* &-. ' &Z 6! +1!'. ' !' .@-!' . ' "!+.-/';@ .## 2&.-'7 !". '*"!'"01.0" -/' '"& 0-#!'/ @+@'&-#"!2& ' 1.-*&Z &Z 20;H! &Z ." E@-* C "! 02@-* . ' !'2 1!' ." #!22@-* -/' #! &@-* 7 !". ' -/' ." !'0-&<2 + 7!!+!'. ' &Z &Z 6! +1!';@' !' /'@2!' -/' 22!-'. ' &Z ."/&Z 2 0 + -/' !1 ." + -/' !' .1!-2' &-' &Z H$2!-' "+& 1!-' 22!1;+!/' -/';@' !' 0 ."& !'. ' !'2 1!' '."/!@-!/' !2 ;+&22 !/' -/'!- !/' ' + 1 '.'b.+/'. ' !' .@-!Z . ' .3!@-' + !' .3!@-' 6& + '6@ + -/' !' &&HF0 " !'. ' '6@ + -* !+ -/' + ' -* !+ -/'!,@'. ' !@" ';!@-* *.+/' .+!' -/' 7!& '2 + *.' -/';!' #0"" 0-'&' @1!-' ".0* ' + &Z &Z 6! +1!'." !'2.1!' ' !@' 7!"!' #.@-!/'."= -/' +2.' ' Z 7!+ +1 '*". 8 '. -*+@22 !' .@-!' -/'.' !" .@-!'.' !" + -/@Z -.7!' #0"" 0-'&-' &Z 6! +1!'." + '*". !Z ." !-2' .' ..' !-2'. ' -*+@22 ' .@-!'." .' .@-!'. ' !" + -/@Z -.7!' #0"" 0-'&-' &Z 6! +1!'." + '*". !Z ." ." .' !-2' -.'#+& &/' 1@-@22 !/'." !"7&2!' !1 !@"!/';!@-* 2@+, ' .7!';!'& !@';!'#" EE / '2 + &-'+@E!' 7&2!' *.!' -/';!' #0"" 0-' ."0* ' + ' 2.1!' Z !@' 7."!'#.@-!/' ."0 -/'.,' ' +1 '.' 3!-Z ;!@-* 2@+,' -/' '@-* !' "@-'.' !' M@-* !Z .@-!' 2 + '!'#.0"Z -/';!' #0"" 0-' ." @1!-' 27!+ .' @1'&-' + ;@Z "!#!& &Z Z .' + @Z "!#!@'.0"2' -/' .' + . !" ."/!Z 2 0 + -/' !1 ." + -/' !&" "!#!@'.0"Z -/' .' + . !" 7&-' &Z &Z 6! +1!' 7 .0' -@' 1 -!" "! 02!/' ." #.- /&##&.-'!%#! '.-+@ !-Z ;!"@-* 2 0""!2 ." !' 1.+!' ;@ 7&% ' !' ;"" !2' . ' !' ".22!= -/' .2!' !-Z 2.' ;!"@-* !" "@-'.' ! 0""!' ." !' .+!' .' '!' #.0"Z ." + ' !-Z .-+@' -/'-.' ;.'!D -/'&'!-@' 2.-!' !"! $"! 02!' -@' .@-!' ."!'"! !"2!/' .' E!'&'&-' @1!-' $' ! ! !+!' -/' !-0"!' . ' &Z ^!' ' -' !' '2.'"! 02& ' &'2 +;!'#.1 !++!/';@' !' !&" &"!'4 &+&' .-2 ;+!' ." . !" &! ' &#!" ." b.3-.0" . ' !' .0-' ." 3+ #!'7 !" -@' 20# ' @1!-'2 +;!'"! 02&/' .' ##! ' -/' E!' $'2!&/' @1!-' -/' 0" !"1."!' .';!' @1 "&2.-!/' ." . !"7&2!' 0-@22 !/';@' !' /&2#"!22&.-'. ' !' 2!&/' !&" &"!'4 @@' .-2 ;+!'." . !" &! ' &#!" ." b.<-.0" "! 02!' E!' -@' 20# ' .@-!' &-' @1!-' Z &Z ;.'!"! !"2!/' ' -' !'2.'"! 02@-* !' 2!&/' @1!-' .';!'#.1 !++!/';@' !' 02 &#!Z . ' !'3! Z . ' !'2 1!' .0-&!'] !"!'20# ' @1!-'2 +;!'2.'"! 02&/' .' ##! ' -/' E!' !'2 1!' @1!-' -/' !'2.'"! 02&-* !'2 1!' .';!' !" !" 0-@22 !/' ." !' 2!&/' "! 02@-* ;@ !' /&2 "!22&.-'. ' !' 2 1!' 02 &#!

·' +2.'&'&Z ."/!@-!/';@' !'2!&/' 0 ."& !' ' +1 '.'*". !Z -/' +'*". &Z ." !-Z .' .' !-2' 27!+ -*+&22 !' .@-!' Z .@-!'.'. !" -/&2'#+& &/' ." . !"7@2!'!1 !"@/' ." 1@-@22 !/'!%#! '"!2.- ;+!'7!"@-*'2 +' -."*.!'- ' ;!'&-' -@'7@2!'#0"" 0-' ." @1!-'7&-' &Z 6! +1!';0'0 3+@' ;!"! 02!/' -/' ."2 E!-'&-' @1!-'".1 !-2." -/' '-.72.-/@-*'&'2 +;!'+! 0+' !-@ 2.-' '@-* -@'20# ' *". !Z ." !-Z .' .' !-2' #+@ !/' ." 1@-&@2 !/' .';"&-* !'2 1!' .' !'M@-*' @-' !" .';!'# 0-*!/' $' !' 02.1!'.' !'2 1!' @-'."#.-'!"' !'2 1!'&-' 3+ !'40++@.-' " . !"7&2!'2!+ ." !1 +.@' .' &Z 1.2' & !' -/' '0- *!'7 -' &Z 6! +1!-@' . !" ^!' 9!Z .' .' !#.-("@'&-' <'' 7@2!' -. 7 2.-/@-*' -/'&-' !2# !7@-* -/' '.@/@-*' . ' 20# ' /& @-*'&-' @1!' .'#.1!

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22&2!ˈ -/ˈ1 "E&-*ˈ . ˈ .++.7ˈV "!2ˈ. ˈ 3!7 !"" !@ ! +

C ˈ ˈ&ˈ1 @ˈ;!ˈY;@ˈ I ˈ !ˈ2 1!ˈ 0 ."& !ˈ;!ˈ!- !/ˈ -/ˈ!2 ;+&22 !/ˈ ˈ-.ˈ1 !ˈ. ˈ 2.-ˈ-!ˈ 2.-2ᶻ. ˈ7 ˈ /!*"!!ˈ."ᶠ #.-/&##&.-ˈ 2.! ˈ !ˈ." !@ˈ;!ˈ. ˈ".1ˈ !-2 ." ˈ1 E!ˈ-.ˈ .+.7!ˈ 7 "!2ᶻ. ˈ3! 0 !"ˈ ˈ &2ᶻ .ˈ2 @ᵋ +!2ᶻ -/ˈ 3. ˈ ˈ&2 1 /!ˈ. ˈ3!7! !"ᶠ# ++!/ˈ !@ᵋ ! !++ˢ ;0ˈ ˈ&ˈ1 @ˈ;!ˈ $ˢ ˈ 22&2!ˈ. ˈ3! 0 !"ᶠ !@ᵋ ! !+ˢ 7".0* ˈ 7& &-ˢ !ˈ &!ˈ. ˈ .-/. ˢ -/ˈ ˈ !ˈ1 E!"2ᶻ. ˈ20# ˈ7 "!2ᶻ2 +ˢ 1 "E!ˈ !ˈ2 1!ˈV "!2ᶻ 7& ˈ2!, +ˢ1 "E ˈ. ˈ !&ᶠ .7-!ˈ .ˈI8ˈ!- !-ˈ ˈ !ˈY1 "E!"2ᶻ . ˈ20# ˈ7 "!2ᶻ2 +ˢ ˈ.7!ˈ !ˈ2 1!ˈV "!2ᶻ ;@ˈ !@1ˈ 2ᶻ &2ᶻ ;.ˈ!2!&/ˈ .ˈ;!ˈ 7".0* ˈ -/ˈ ˈ +ˢ -/ˈ!,@ˈ. ˈ20# ˈ7 "!2ᶻ -.ˈ20 &#&!-+@ᵋ1 /!ˈ -/ˈ7".0* ˈ -/ˈ-.ˈ1 "E!/ˈ&-ˢ .0"1!ˈ ;.ˈ!2!&/ˈ .0-/!-ˈ&-ˢ !ˈ .22!22&.-ˢ. ˈ !ˈ2 1!ˈ1 E!"ᶠ .ᶠ 2!++!"ˈ .ˈ;!ˈ ." !& !/ˈ -/ˈ&ˈ !ˈ2 1!ˈV "!ˈ;!ˈ2.+/ˈ !ˈ2!&/ˈ1 E!ᶠ .ᶠ " !& !ˈ !ˈ ˈ +0!ˈ. ˈ !ˈ2 1!ˈV "!ˈ2.ˈ0-+ 7! 0++@ᵋ7".0* ˈ -/ˈ2.+/ˈ !ˈ..-ˢ +ˢ. ˈ !ˈ2!&/ˈV "!2ᶻ.ᶠ !ˈ1.@ &!ˈ. ˈ !ˈ ˈ +0!ˈ !". ˈ .ˈ;!ˈ .ˈ !ˈ02!ˈ. ˈ@.0ᶠ &* -!2ᶻ -/ˈ !ˈ. !ᶠ +ˢ .ˈ;!ˈ .ˈ !ˈ02!ˈ. ˈ !ˈ @-/!ᶠ.ᶠ @-/!2ᶻ ᶠ !"# !"2ᶻ !".

3!- +@ˈ.-ˈ 3!7 !"!"2ˈ C#ˈ 02&-*ˢ +2gᵋ4! 12ᶻ .ᶠ V !&* 2= ˈ5ˈ &++&-*2ᶻH

ˈ ˈ&ˈ1 @ˈ;!ˈ !ˈ2 1!ˈ 0 ."& !ˈ;!ˈ!- !/ˈ -/ˈ!2 ;+&22 !/ˈ ˈ &ˈ!-@ᵋ 2.-ˢ.ᶠ 2.-2ᶻ !" $ᵋ02@-*ˢ;@&-*ˢ -/ˈ2!++@-*ˢ. ˈ3!7! !ᶠ .ᶠ ;" 22!ˈ ˈ !" $ˢ .##0 &!ˈ -@ᵋ /!#!@ˈ ;+!ˈ .ᶠ +2ᶻ 4! 1!2ᶻ.ᶠ 7!&* !jˢ. ˈ !ˈ2!&/ˈV "! ˈ !<@ᵋ20# !ˈ 2.-ˈ.ᶠ 2.-2ᶻ02@-*ˢ -/ˈ.##0 @&-*ˢ 20# ˈ/!#!@ˈ ;+!ˈ -/ˈ0- "!7!ˈ4! 1!2ᶻ.ᶠ 7!&* ˈ.ˈ." !& !ˈ%%ᵏ2ˈ !ˈ.-ˢ +ˢ.ˈ !ˈM@-*ˢ -/ˈ !ˈ. !ᶠ +ˢ.ˈ !ˈ &!ˈ ˈ !" .ᶠ 2 +ˢ 2!7!ˈ ;@ᵋ ##&.-ˢ. ˈ/! !ˈ -/ˈ ˈ&-ˢ !ˈ2!ˈ/ˈ ##&.-ˢ-. !##&.-ˢ-.ᶠ !22.@-ˢ2 +;!ˈ ++.7!/ᵾ -/ˈ +2.ˈ !ˈ2!&/ˈ &!ˈ2.ˈ. !-/@-*ˢ2 +ˢ." !& !ˈ &2ᶻ;! 1!ˈ.ˈ @1ˈ 2 +ˢ2! 2!ˈ& ˢ -/ˈ& ˈ !ˈ2!&/ˈ. !-/!ᶠ .ᶠ . !-/.0"2ᶻ;!ˈ-.ˈ 20 &#&!-ˈ .ˈ @ᵋ !ˈ2!&/ˈ2.1!ˈ.ᶠ 2.1!2ᶻ;@ᵋ !@1ˈ2.ˈ ." !& !/ˈ ˈ !-ˈ& ˈ2 +;!ˈ+ 7! 0+ˢ .ˈ !ˈ @"!2ᶻ4 @+& 2ˈ -/ˈ. !ᶠ !/!ˈ. &#!"2ᶻ. ˈ20# ˈ +#!ˈ.ᶠ + #ˈ 7 !ᶠ!-@ 20# ˈ. !-/.0"2ᶻ2 *+;!ˈ.0-/!ˈ .ˈ 0ˈ !@1ˈ&-ˈ !ˈ.EE ˈ -/ˈ !@1ˈ2.ˈ .ˈE! !ˈ &+ˢ !ˈ-!%ˈ "E!ˈ/ @ -!%ˈ /ℍ.@-@-*ˈ -/ˈ&-ˈ ˈ1 "E!ˈ + #!ˈ.ˈ 0ˈ !@1ˈ&-ˈ !ˈ3&++."@ᵋ +ˢ !ˈ1 "E!ˈ@1!

B.ᶠ .&-&-*ˢ ! "# !"2ᶻ. ˈ 3!7 !ᶠ -/ˈ4" 22

C ˈ 0" !"1."!ˈ ˈ&ˈ;!ˈ+ 7! 0++ˢ ;@ᵋ !ˈ2!&/ˈ 0 +."& !ˈ ˈ !ˈ &2 !ᶠ -/ˈV "/!-2ᶻ. ˈ !ˈ2!&/ˈ#" !ˈ. ˈ3!7! "! 2ᶻ 7& &-ˢ ! @ᵋ &!ˈ -/ˈ4.".7!ˈ. ˈ &2ᶻ6! +1!ˈ7 !ᶠ20# ˈV "/!-2ᶻ "ˈ -/ˈ7 !ᶠ -.ˈ20# ˈV "/!-2ᶻ ᶠ !ˈ !/ˈ.ᶠ b.0$-.0ᶠ . ˈ !ˈ2 1!ˈ &!!.ᶠ 4."0* ˈ .ˈ .@-ˈ$!-ˈ 2.-2ᶻ1.2ˈ!% !ˈ&-ˢ E-.7+!*!ˈ. ˈ !ˈ2 1!ˈ .ˈ1 E!ˈ2!"# ˈ7& &-ˢ !ˈ 2!&/ˈ &!!2ᶻ -/ˈ4."0* !2ᶻ7 !ᶠ !@ᵋ /0!++ᵾ -/ˈ.'ˆ &2ᶻ !ˈ 02 &#!jˢ. ˈ3! 2ᶻ 7& &-ˢ!,@ᵋ &"!ˈ ˈ !&ᶠ *! +ˢ !22&.-2ᶻ .+/!-ˢ ˈ &* !+1 2ᶻ2 +ˢ 22&*-!ˢ -/ˈ .@-ˢ .ˈ @-ˢ 2.-2ᶻ '@-*ˢ!% !"&!-2ᶻ !"&-ˢ .ˈ1 E!ˈ2!"# !ˈ&-ˢ !ˈ 1@22!2ᶻ &-ˢ!,@ᵋ "ˈ. ˈ ˈ &"!ˈ 27!+ˢ 7& &-ˢ !ˈ " 0-# !2ᶻ 2ᶻ 7& .7 !ˈ2 '@-*ˢ &-ˢ &!!2ᶻ.ᶠ 4.".0* 2ᶻ7 !"!ˈ !"# !"2ᶻ;!ˈ .@-!/ˈ;@ᵋ !ˈ !//ˈ.ᶠ b.0 -.0"2ᶻ. ˈ !ˈ2 1!ˈᵾ -/ˈ ˈ. ˈ +ˢ 20# ˈ0-+ 7! 0++ˢ 3!7! !ᶠ.ᶠ 4" 22!ˈ 2ᶻ !ˈ2!&/ˈ !"# .2ᶻ2 +ˢ @-/!ˈ !ˈ..-ˢ +!ˈ.ˈ !ˈ02!ˈ. ˈ@.0ᶠ bℍ!ˈ -/ˈ !ˈ. !ᶠ +ˢ .ˈ !ˈ2!&/ˈ !"# .0"2ᶻ= -/ˈ &-ˢ !ˈ /! 0+!ˈ. ˈ !ˈ2!&/ˈ &2 !"2ᶻ -/ˈV "/!@-2ᶻ. ˈ !ˈ2!&/ˈ ##0 #&.-2ᶻ-. ˈ2!"# @-*ˢ &-ˢ .0"1!ˈ 2ᶻ &2ᶻ ."2!&/ˈ -/ˈ7 !";@ ˈ!-@ᵋ20# ˈ0-+ 7! 0++ˢ 1! !++ˢ &2ᶻ # 2!ˈ.ᶠ !ˈ1 /!ˈ.ᶠ 0-+ 7! 0++ˢ 7!&* ˈ02!/ˈ ˈ !-ˢ ˈ2 +;!ˈ+ 7! 0++ˢ .ˈ!-@ᵋ 2.-ˢ ᶠ 2.-2ᶻ '@-*ˢ20 &#&!-ˈ#.--@-*ˢ -/ˈE-.7!+!*!ˈ&-ˢ !ˈ2!&/ˈ.##0 #&.-2ˈ;@ˈ.,2&* ˈ. ˈ !ˈ @"!jˢ 4 &++& 2ᶻ.ᶠ !/ˈ. & 2 . ˈ !ˈ 23&/ˈ &!!2ᶻ -/ˈ4.".0* 2ˈ .ˈ 2!"# !ˈ +ˢ !ˈ2!&/ˈ + #ˈ -/ˈ .ˈ 0ˈ !ˈ2!&/ˈ 0 ."& !ˈ -/ˈ +!ˈ&-ˢ !%!#0#&.-ˢ&-ˢ .0"1!ˈ ."!2!&/

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6!#& +ˈ. ˈ ˈ Jᵀ !.ˈ ˈ'#ˈ' ˈ * &-2ˈ0-+ 7 0+ˢ 0 !2ˈ1 /!ˈ;@ᵋ ." ." &.-2ᶻH

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&+'0&' =& ' 8' F < ' =& ' E <- 0' &=' D1' &-0 <# 10D'C &=' &- 0#& &?. D' <-A' ' 'aD'@' <0?10@<-A' D1' F< -1 0D'C &=' 1 DK&@A' F< 1-

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' W ' 2' &' &_' 7!+!' 0-/"!2 -/' -/' E-. 7!-' ' !' *"! !2 ' /!2 "0# &. -' . ' 6!!/' !!"!' -/' B +. 7!' 7 &&& !' 6! +1!' &-' @1!' 2' ' ; ! -' -/' @!' ' &2' 7& ' ! ' # ++!/' !!"!' @<' -/' 40E2 ++@2' -/' 2 +E@-*' 7& ' ; !!2 ' .' !' *"! 2' /&2 +! 20"!' . ' .0"' . , !&*-!' ."/!' !' M@-*' -/' ++' !' ." / ' -/' . !'" -. ; +!' 1!-!' 7& &-' &2' &$' 6! +1!' '@-*' ."!2 '# #!2' .'" "E ' &-' !&'" .22!22&. -' "0+!' .'" E! @+ * ' 2.' ' & ' !' 2!&/' +&! ' .'" 2 +E@-*' 2 0+/' 0-+ 7! 0++@' ; !' 02!/' -/' .##0 &!/' &-' @1!' #. 1@-*' 2' !@' <' !' ; !-' &-' @1!' 2 ' !' 1.2 ' !' . ' !' ."!2 ' # #!2' -/' "E ' . ' &2' 6! +1!' _ 0+/' ; !' !"7E ' /!2 "!&!/' = 4!' &' & !" ." !2 ;+&22 !/' -/' !- !/' ; @' !' ."/ ' 2 0!++' -/' !1 ."!++' -/' !' .1.-2' &-' &2' 2!- ' +& 1!- ' 22!1 ; +!/' -/' ; @' !' 0C."& !' . ' !' 2 1!' '!-@' 2.-' ." 2.-2' 2 0!++' ." !1 ."!++' '@-*' -.' 3 "E' #!' -. "B."!2 ' . ' !&'" .7-!' E! !' -. "# 02!' . ' ; !' E! !' !-@' ! '# ++!/' !!"!' @!2' ." 40E2 ++@2' ; @' !' 2 #! ' ' 1.-! ' -!%' 3' #+ 1 #&.-' . ' &2' C!' 1 /!' 0 .-' @-!' . ' ." !& !' 0 <&a'-.'< ' "T 'Ÿ $H' C1 ' &- D9 ." !<@' 1.-! ' ' !' ." !@' 2.' E! !' ." # 02!' . ' ; !' E! !' !' 2 1!' ! ' @!2' ." 0E2 ++!2' %'+&= -/' ' -.' 2.-' ". 1' !-2 ." ' 2 0E!' -. "# 02!' !-@' . !'" 2.-' .' 2 +E!' 7& ' !-@' ; .022 ' ." ; !2 @2' . ' !-@ !!"!' ; !&-*' &-' !-@' 3 "E!' #!' ." B." 2' ." 7& .0 ! ' ; 0 ' & ' & ' ; !' 7& @-' &2' .7-!' b". 0-/' #!' B."!2 ' ." 3 "E!' 7& .0' +&#!-#!' . ' !' .7-!'" 1 2$' . ' !' b 1!' ." E! !'" . ' !' 2 1!' b". 0-/' #!' B."!2 ' ." 3 "E' 0 .-' @-!' . ' ." !&C0"!' ." ! '!"@' @1!' ' !' . '" !@' 2.' 2 +E& '%' &' -/' 0" !"1."!' ' -.' 2.-' -!' 2.-2' 7& .0' &2' .7-!' *". 0-/' 2+!@' E!' ." # 02!' . ' ; !' E!-' ; @' 1!-!' . '#" !' ." !-*&*-!' !-@' !". -2' 7& .7 !' & ' ; !' 7& ' 7E@-*' ." 7& ' '+. -*' 4.7!' 0 .-' @-!' . ' ." C0"!' ." ? ' !". -' E!-' ." 2+ @-!' '!H2' &&H/' -/' ' -.' 2.-' -." 2.-2' 7 .0' &2' ." !&" .7-!' b". 0-/' E!' !-@' @.-*' !". -2' .0' . ' !' -!2' 7& .0' +&#!-#!' . ' !' .7-!" . ' !' b". 0-/' 7 !"!' !' 2!&/' !2' &2' 0 .-' @-' . ' ." !&C0"!' .")!, @' !". -' 2.' E!-' .0 !' . ' !' !2 !' %'2' -/' ' !, @' 1 -' ' 7&++!' 1 @' C 2 ++ ; !' /1@+!/' .' 20!' ." !, @' . ' !' 2!&/' ." !&C0"!2' ; @' ##&.-' . ' /! !' -/'+@E ' #!2 2!' . ' ; !' /' -/' 1 /!' !"&-' 2' &2' &-' . !'" ##&. -2' . ' /! !' ' !' 1 E@-*' . ' &2' !' -/' ' !' /! !-/ 0-' ; !' -. ' /1@ !/' . ' !-/!' -. '" /. ' &2' 7!' &-' !-@' 20# ' ##&. -' -. '" !-@' 22. @-' -. '" !##&. -' . ' ; !' ++. 7!/' . '" !' /! !-/ 0-' &-' !' 2 1!0 -/' ' &H H02 &!' . ' 3! % &-' !&'" !22&. -2' 2 ++ '!' 0C. "& !' . ' # ++' ; @ . "!' !@1' -@' 2. -' 202 !C!/' . ' !' 1@22!2' -/' ; @' !&'" /&2#"!#&. -2' . ' !% 1@-' !@1' &-' !' 1@22!2' -/' &' ; @' !&'" !% 1@- #&. -' !' Y !2')!' 2. ' !% 1@-!/' ; !' .0-/' &-' /! !0 !' #. - "@' . ' !' ? !! !' !-' ' 2. -' 2. ' .0-/' &-' /! !0 !' . ' ; !' #. 1@ !/' . ' "&2. -' &++' !' ' !' .0-/' 20!" &!' ." @1!- !' . ' !' 2 1!' ." ! .0" ' . ' !' M@-*= -/' ' .2!' 02 &! ' ' 2. ' !% 1@-' !@1' 2 ++ ' !' !' " !' . ' ? ' 20# ' ." !&C0"!' ." !&'" + ; .0" &-' ' ; ! +

1-<@ ' &-' a11C' -. ' "11 8D< 0' & ' ?Ba > 0' & ' 0 <&a'-.'< ' "T 'Ÿ $H' C1 ' &- D9

1-<@ ' &-' <a' -. ' 1 &-0'# ' -. '-10@ ('i9 5 A

& ' &?-. ' 1 &-0' = &>' D1' 10 9' '&'0'

1B&+1 ' <-A' CC@'B< '&-' &=' 1-<@ '10

0 !' .++. 7&-*' <'. '&2 ' 7 &# ' &2 . 1& !/' &-' +' 3"&- !/' . &!2' . ' !' 0 !2' "! '!. 0 2' @2' /& &. -' &2' .-' ' 6&/!'" #E!/' .' #M!' -". ++1!-' &-' -#!"@' -/' 2&*-!/']' % ' 1!' 6 ' . -? ' &2 &-2!" !/' &-' .-!' . ' !' # !/0+!2' --!%!/' .' !' "&*&- +' ' * &!2

3 6 1

4L +&/&Z 1!-/&# - &;H "! !++!-/

!& *7A1 < '-.' D1' &+'0'&-0 &= < ' $ 'B ' ' ':

  2 !M@-* bF#! 1.2 ! !"!+@/!2&"& 1.-< ++ !" !+@ @-* !< & ! -/ "!2 0+-!2 . &2 &2 + -/ -/ 2 20;H! . !2 1! .E'!SO&! +@ -/20!"+@ . ! +! 20"!.b./ -/ ##."/@-* . &2 7!2 7&++@-* +V!@. &2 !&! -/ &- ! /@-* ."!/0#! !@1 !"0- .;@2. !" 1! -!2 !-;@!%"!1!"&*.0" !" ." 0 '!&/ &- 0 ! 1 /!&- ! @1!.'M@-*6&# "/ !2!#.0-/'#.-2&/!" * +2. !*"! ! # "* 2 ++ *".7! . &2 0;H! . " ;"&-*@-* . ' # ;.0-/ . !b .+!2 2##."/@-* . !2 1! 0! &2 &* -!2 7&++ ;@ 0 +."& ! . &2 &2 H$2!- +& 1!-'&';! ."/@-!/ -/ 1 +!/ 7 !"!20# ! @2/.!"2 2 0+/';!;@ !% -@- #&.- #.1@ !/ . ! .1!-b .+! !" ; "!1 @- 2 &2 ."2!&/ ! &"& 2 &"!2 4 @+!2 &* .-2 ;+!2 -/ 3! .-2 ;+!2 -/ ++ . !" b.0<-. "2 -/ 4$2 . &!!2 4.".7!2 -/ .7-!2 .7-2 & !2 &++ * -/ ll !" + # 7& &-&H / @2 $ &2 9! # @1!/1 E!/!7!2!"# ! -/ E! ."# 02! .;! E!- ++ 20# ' * ;0-/ &/!++ !. +! -/ 202 ! ! 2.-2+@'@-* 202 !#&.02+@ -/ !@1'2. E!- .2! !&- .EE@2 !"! ." "!1 @-!;@ !2 #! . ..-/ @ -/ .-@* -/ !" ; "!1 @- 2 &2 ."2!&/ / @2-/-@* 22!/ .;! 0 -/ 2! ! +"*! -/ !- . '.&/ ! .7-!."3+ #!7 !" !@;! E!&- .20# ' & ! .7-!3+ #! ." 0-/"!/7 !" !@7!"!;."-! . ++ . ! + #!7 !" !@+2 1 /! !&" ;./!;@ !2 #! . &&H @&"!2 -/ 2 2 !+@2 !@#.-'!-&!-+@1 @ -/ !" ."!1 @-!-/ ;&/!-/&' ! 2.-!2 !@;! E!-'&-20 /! 0!&- !2 1! .7-! " .7-2 & !2 !- .;!2! !+@E!7&2!&- .EE!2;@ ! 2 #!.'&&H / @!2 -/ "!-@* 7& '+@E!/&! ! 2 &2 ."!"! !"#!/-/&'!-@L 2.-." 2.-2@!'!'!-@. !" 1! ."/'@-E . !'2!&/ 1@2/.!"2;!&-*&- .EE'&- .0"1! ."2!&/'." !'2 1! "&2.-!"2 .0" &- !&" 1@22!/.@-*." !@1'"!22!@'!'." ";.0" .')..-'-@* ' !- !@ ." !&/ ! ." !,@ @1!'2./.&-* %&H/

1..<0'-&'<#$1' &' K& a'0D<@# #1' 01-' &' D1' ' $<B1'&=' ' D$ I B

  W +2.'&'&2 ."/!&*-!/';@ !'2!&/' 0 ;"&!' ++ 1 5'.';!**!"2-.';+! .'7!"E'7& &-'H 7!E'-!%' $ #+ 1 #&.-'R /!';@ &2 9!'*..'"!2' -/ ;&/!'&- &2 &! .7-!'." 0-/"!/'7 !" !@7!"!;."-!'."+!2 .' !' + #!'7 !"! !@+2'1 /! !&" ;./! !'2 #!.'&&H@!"!2' !" .'"!1 @-!." ;&/!'7& .0';!**@-*.7!'.' !'2!&/' & ! .V-! 0-/"!/'."3+ #!'0 .- @-!'.';! 0-@22 !/ 2 &2 ."2!&/-/ '-.'1 -' !";.0"!'-."E! !'!-@ 20# !'; **!" &-' &2 .02'.,'..-'-@* '0 .- !'2 1! @- -/ '-.'1 -';!'!%#02!/';@ ' !'&2 ' +!"E'.'-' -&'&2&!' ".1'7 !-2 !'2 & ' !'#.1@ '7& .0' '+! $'.' !' &#!# 0-#!++!" .' !' -&,2&!' ".1'7 !-2 !'#.1@ '-."-...-'# ++@-* @12#+' .7!/@!" & 1 -'." F'!+@-*1 -'7.0' !';"@-* '+! $' ".1' &2 & @-!'." ".1' !' .7-!'7 !" !'+ -/&/'-/ ' !' !-';!'#.1 0-/!/.'*.' !2 "!&* ' &* '7!@'&-.' &2 .0- "&!- -/&' !'/! !' -.' ##."/@-* .'20# .1 0-/!1!- '&-' ';! +'.' @1'*@'!-' ' !-' !'.' ;! E!-'"! 0!/' -/' 0-@22 !/' 2' ' * ;.-/- -/ ' !' ' ";.0" !-@' 20# ' 2.-'2 ++ ." !& !' ." ! @'..-'20# ' 2.-' ' !' !";!" '.$!'..-'-@* ' %&H/

1& '10 ?C&-' ==''B1 0' -1.@1= '''.' &'1L1B? 1' D'0' @

  C ,' &2'&'&2."/!&*-!/';@ !'2!&/' 0 ."&!' '&'!-@' &"&'.", .!" &#!' ."!"! !"#!/' !%!#0!'-.' !' -&@22!2'2'&2 ;. !2!&/'.' <@' ' # ;.0-/' "!1@!'.", ;!**!" ;+!'.'+;.0"." +!"E'3@+*" 1!'." ! 1 -'2'.!-' 2'!-@20# '#.1@ '&-'&2'2&*'." ' !' ' !".'!-@'E-.7!+!*!'7)H-' !' .7-!'."3+ #!7 !" !' ' 0 ."&! "0@++'."*.0,-0-#!' -/ ' 2'. !-' 2' -@'20# '.' !'2!&/'1@2/.!"2';&/@-* !" ;.'! !'2 #!'.'..-'/@'." ..-' -@* '/! !'0-!% 1@-!/ -/'0- 0-@22 !/' 2'&2 !.'!2!+/'." !<@'1@2/.!" 2.'/! !/ !' .'+.2!'&&H2' &H/ -/ ' !' ."/'.'!'@'+! !'7& &-' &2'6!+1!' -/' !' &"&'&-' &2 .0"-!' '!' 0 ."&!' .'!-SO&"!' !"!.' -/'.' ++ !'2!&/'/! 0 ' -/'1@2/!1! -.0"2'&-' &2' ! !' -/' .0"-!'2-/' !' ."/'.' !' ! !' .' '!' ." !$@'/! 0! .0-/!' 2'&2';.'!2!&/' !' !" !& 0"!2' ;.'!'+<@ !/' -/' !' &"&'.'!-SO!"!'&-' &2' .0"-!'.'20#' !2# !2'7& @-' !'H0"&2/&###&.-'.' &2' .0"-!' -/'.' '!'&&H2'&&&H/' ." !,@'20#'/! 0! .0-/'&-' &2' .0"-!- -/' !' !-+&!' +@1!!/';@ &2' "/@-.#!'.';! ."!& !';@'!-@' &#!" ."!-@'. !" 2.-' ."-...-' 0-@22 1!-'.' #;.0-/' -/'. !" 1@2!" &!/' 2.-2L7(@-'!,@' &!'7 !"!' &"!' -/' +/!"-!-';!!-' ' !' &!'.'!'!"@'20#'3!-+&!';!'0-.' !' +/!"1!-'.'!'!"@'V "/'7 !"!'20#'."!&0"!'&2 /'."1 /!'.' &2.7-!'02!' -/' &!

1-<@ '10' >< '#1' 1B&+1 1A'# ' "'0 100

  ' +2.'&'&2."/!&*-!/' -/'!- !/';@ !'2!&/' 0 +."&!' '&'2 +;!'+ 7!0#.' 'T;'1 -'&-&!+!/' .' '!' !' 2!&/' !-+&!'.' /&2"!@-'."&'+@E!7&2!' 2' !' ."/'.'!-@' !!'1@'/..'." &#& 1!- -/' @-!2' /'-/' 22!22!/' &-' !' 1!'!!

#<-B1@& <-A' ?A.10' >< '1-H?' ' '- &' .@1= '&=' D1-==0@ I B' '-' &?- '10

  C $!' &2'&!'&'!- /';@ !'2!&/' 09."&!' ' !' 0-#!+!"'.' -*+.-/'."M! !"'.' !'M@-*'*"! !'2! +!' !"! 2."!"'.' -*!+.-/' !'&H &!'0**!2' !' &!'4 ".-'.' !'M@ *' 2# !SO&!"' ." !' @1!';!@-*' -/' +2.' !'02&#!2'.' 22&2!'7& &-' !&" &" 0@.' -/'!<@'.' !@1'2 +L '!'7& &-' !' &"!'." &"!2'7 !" !@'."!-@ .' !@1'2 ++ ." 0-!'.';!' 0+ .7!" -/' 0+."&!'.' !% 1@-'#."!'2 ++ ;@."!' !@1' -/'!,@'.' !@1' !' &"&' &"!2 .-2 ;+!2 -/' ++. !" &#!"2'.'.'7& &-' !'2 1!' &"!'." &"!2'7 &#' ' .7!"'.' 0' &2 0!'&-'!%!#0#&.-' -/' !@1' -/'!<'.' !@1'.'!% 1&-!'.' !' %!#0!;-'.' &2 0! -/'&'&'#-';!' .0-/!-';@'20#'!% 1&- #&.-' !' 2!&/'. &#2 ." !-@'.' !@1';!' /! !+@'&-' /!V!'!%!#0#&.-' !".' !-' !'2&/' &C'." &#!" /';!-!' !".'/!7!+@'#.-'&+!/';@ !'/!7!' #!22!'-/'#.0"2!'.' !'M@-*' 7!2

0 'a1' &K1' &' D1' 1K< A$ (.B' &=' D1', '-./0' &?01D&$A' i

  C $0 &2';!'&'! +!/' ' !' !7 "/' "!2."!" -/' .-".++!"'.' !'M@-*'1.2'.-." ;+!' .02 .&/'." !'@1!';!&-*'2 ++ '!'0++' .7!" -/' 0+."&!'.' !% 1@-'#.""!+!' -/' 0-@22 ' 2'&2 ."!2!&!' ++ 20#' &$2' &2 ."!'"! !" !/';!@-*L7& &-' ! #@- !' -/'+&!!'.' !' !"*!'H +2.' !' &"!' -/' +/!"1!-'.' !'

. ' .-/.-' ' &Z .' 2:@' f ' +/!"1 -' 7&-' & ' V "/' -/' !' &"!' ".0* .7 !' !' .+!' & !!' 2 +' '!' +@ #!' -/' .' !' @." .7!'" -/' 0 ."E&!' .' !% 1@-'#. "!9!' -/' 0-@22 ' !'2!&/' . !-/!"2' 7& & ' !' 2 1!' & !' -/' +& &!Z' . ' !' 2 1!' ,' & ' 1Z<!' -/' .0"1!' ;.'!2!&/

C ' 0" !"1."!'&'&Z' ."/!&*-!/' -/'!- +!/' ;@' !' 1!' 0 ."& !' ' -..-' "!- &#!' -!' ,']-' ' 2;.-/ @' + ;."!'" -!'c' 0-' "& &#!'" + @' ' !' ;+!2' ".1' !' !2' . ' 2 !'" -!% '#.1@-*' -!' ' !' !-@Z' +.22 !' /@2!' # "/ ' ;.7!+!Z' -.'" !-@' . !'" -+ 7! 0+' * 1@2' &-' -.' 7&2!' .0 !' . ' !' %&H / @Z' . ' "&2 & 2' -/' !-' .' + @' .-+@' &-' !' /0!++&-*' .02!' . ' &Z' &2$' .'" 7 !'" !' &2$' . ' !-@' . ' !'2!&/' ' 0- ';!' K2!-'0 .-' @-' . '&1 "&2.-!1!-';@' !' 2 #!' . ' '/ @' &-' !' .EE '. @-+@Ø -/' ' !' .02 .+/ '" 7 !"!' /@2@-*' # "/@-*' !-@Z' + @-*' 4.7!+@Z' +.22!' .'" !-@' . !'" 0-+ 7! 0+' * 1!' ."!'"! !"#!/'2 +;!'02!/'. !"7&2!' -' &Z' ."!'"! !"#!/' -/' '+ 7! 0+@' ;!'<2!- !/' ;@ ."!' 02 &#' . ' !'3! %' !' &"!' &"&' &-' &Z' .0"-!'." !7 "/' &-' &Z' +! !'." ;@' !% 1&- #&.-' /' ."!' !'2!&/' 02 &#' . '3! %' ' #!22!';!' 1 /!'0 .-' !'2 1!' Z' 0 .-'&-/& !1!-'. ' "!2 Z' @!- ' !'M@-*' ! %'=' -/' ' !'2!&/' 1@2/.!'" ;!' /1@ !/'.'-.' @-!'0-/"!' !'2.1!'. '!H2' '&&H/' -/' '&';!'+ 7! 0+' .'&H. ' !'Y 02 &#!' '. ' 3! #!' 7 !". '..-'2 +;!'. ' !'90. ' 7& &-' !&" 0 ."& !' .'"!H! !' -/' 0' 7!@'#.1<' +!'2!++@-*'&-' .V-!Z' -/' + #' 7 !" !@'2 +' @-E'#.-'!-&!- ' -/'.' E!'20!" &!Z' . ' !'M! !"Z' . ' +!' .72!Z' . ' !&"L*./!';! '@-*';@' !'/&2#"!22&.-'. ' !'2!&/' 02 &# ' -/'&-' !'2 1!'.';!' /'@2!/' -/' *"!!/' ' !' @1!'. ' !&" !22&.-2

" $ ' +7!@' '/!&.&-0#&.-'. ' 0-@22 1!-'. # ;0-/' -/' 4!**!"2' ."!2!&/' 1 @' -/'2 +;!' /' ." V.1!-'*"'! !'7& ' &+/' -/' !-' -/'V.1!-'&-'*"'! !'2&E-!2'-)K 2.-Z';!&-*'&1 .!-' -/' ;.'!' !' *!'. '+%'@!"!2' ;@' !' /&2#"!22&.-'. ' @1' ' ' 0 ."& !' '/..' !' 2!&/' 0-@22 1!-' &Z' !'-. 7& 2 -/&-*

306 4 6 ';!'&' !- C!/';@' !'2!&/' 0/&."& !' ' !' 02&#'. ' !'3! #!' ."' &'. ' !@1' ' !' +!2' 7& &-' !&"' &"!2' -/' !'@' &"!' "!'!' -/' 4 &+@' 7& &-' !&" &!!Z .7-!Z' -/'4.".0* !2' 2 &+' '!' 0+' .7!'" -/' 0 ."& !' .'1 E!' &&&H @1!Z' &-' !'@!"!' ' &Z' .'2 @'! @'90 "$' .-Z' ."' . !'" Z' ;@' !&" /&2#"!22&.-'2 +;!' .0* ' -!#!22 "@' "&0* .7!' +' !&" &"!' /!7!' -/' '/&+&*/-'C' '2!#"!' !'2!"# !' -/'&' !@' ."!-@.' !1'# -!' @-/! ;@' !"! 2.-'. ' !' 2!&/' 2!"# ' !-@' . ' !' 2!&/' 1@2"0+!/' 2.-Z' !' 2!&/' 1@2"0+!/' 2.-Z' 2.' .0-/!-' .' '!' +@E! 0-@22 1!-' -/' #.""! #&.-' Z' &Z' ."!2!&/

3 6 ' W

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V 6 ' ' &-' !' +& 1!-' .+/!-' 'V!2&-' ! 0@2/ @' !' 1."7!' -!%' $' +' .0+!Z' !'%&&H)'@!"!'. ' !' "!&*&&!' . 'M@-*' !-"@' !' .0" ' 1.-*. !'" &-*' &' 7 Z' !- / !/' ."/!@-!/' -/' !2 ;+&22 !/' ' &' !-@' "&. ' 22!1;+!' ." .0 !' . ' !. +!' @!-2' !' 7!' 7!"!' 1 /!' &-' !-@' !' . ' !' 6! +1!' ' !' 02&#' . ' !' 3! %' &&H ." &H . ' !@1' ' !'+!2' &&+&/' !' &"& ' ." -/"!2 &"&' . ' !' .0- &!' 7 !"!'20# ' "&. !' 22!1;+!' ." .0 !'2 0+/';!' /.-' 3' !'2 1!'2 0!'2 0+/'#.1!' 7& ' !' .7!" . ' !' &"!' &' -!/!' 2 .0+/';!' .' ""!2' !@1' -/' !@1' 2 0+/' ""!2 ' -/' !'2 1!' 02&#' -/' &"&' ." -/"!2 &"&'2 0+/' '!' .7!" .' !@'2 0+/' @-/!'2.' /..-'&-' !&" 2!-#!' @!-2' !' 7!-/'R ';@' !'&!#./' .' !'2 1!' 02&#' -/' &"&' ." -/&!2 &"@' !'2 1!' "!2 22.0" ' -/'1@2/.!"Z' 0+/';!'#.-'&/+!'&-' - 5!' -/' .0"1!' Z' &'&Z#.-!@-!/'&-' !' 0!'. ' ."#&;+!' -"!2'7& '# !' -/' 1 -@' . !'" "&#+!Z' .0# &-*' -/'#.-C&@-*' !' 1&22!2-' Z' &-' !'2 1!'2 0!'1 /!' !'2]/' %&&H@!"!' 1."!' + @-+@' ' + "*!'&' !"& 'V &# '2 0!'&Z' .0* '*./!' -/'-!#!22 "@Ø V !& ."!';@' !' /'@2!' -/' 22!-'. ' !' ."/'2 0!+' -/' !1 .&!+' -/' . ' !' . H.-Z' &-' H2' G!-' +& 1!-' 22!1;+!/' -/' ;@' 0b."& !' ' !'2 1!' ;!'&' ."/!@-!/' !2 ;+&22 !/' -/'!- 9!/' ' !'2!&/' !'1 /!' !'2!&/' %&&H@!"!' .'M@-*' !-"@' !'&+&H[' #.-$-@-*'"&. ' 22!1;+!Z' ."' 6.0 '. ' !. +!' -/' +' -/'!,@' "&#+!' -/' "&#+!Z' #.1 "&2!/'&-' R !'2 1!' -/' +2.' +' .R !'" !2R 0R';@' ."!' !' R@1!'1 /!'#.-#&&@-*' R !' 0&+@22 !1!-'. '"&. .&&"2' ' !' @1!' . ' !'1 E@-*' . ' &Z' !';!&-*'&-' ."#!' ".1' !-2 ." '2 -/!'&-' !&" ."#!2' -/' ;!'/0+@' '&-']#!#0 &.-' ' !' !-0"!Z' -/' (." !Z' . ' !'2 1!

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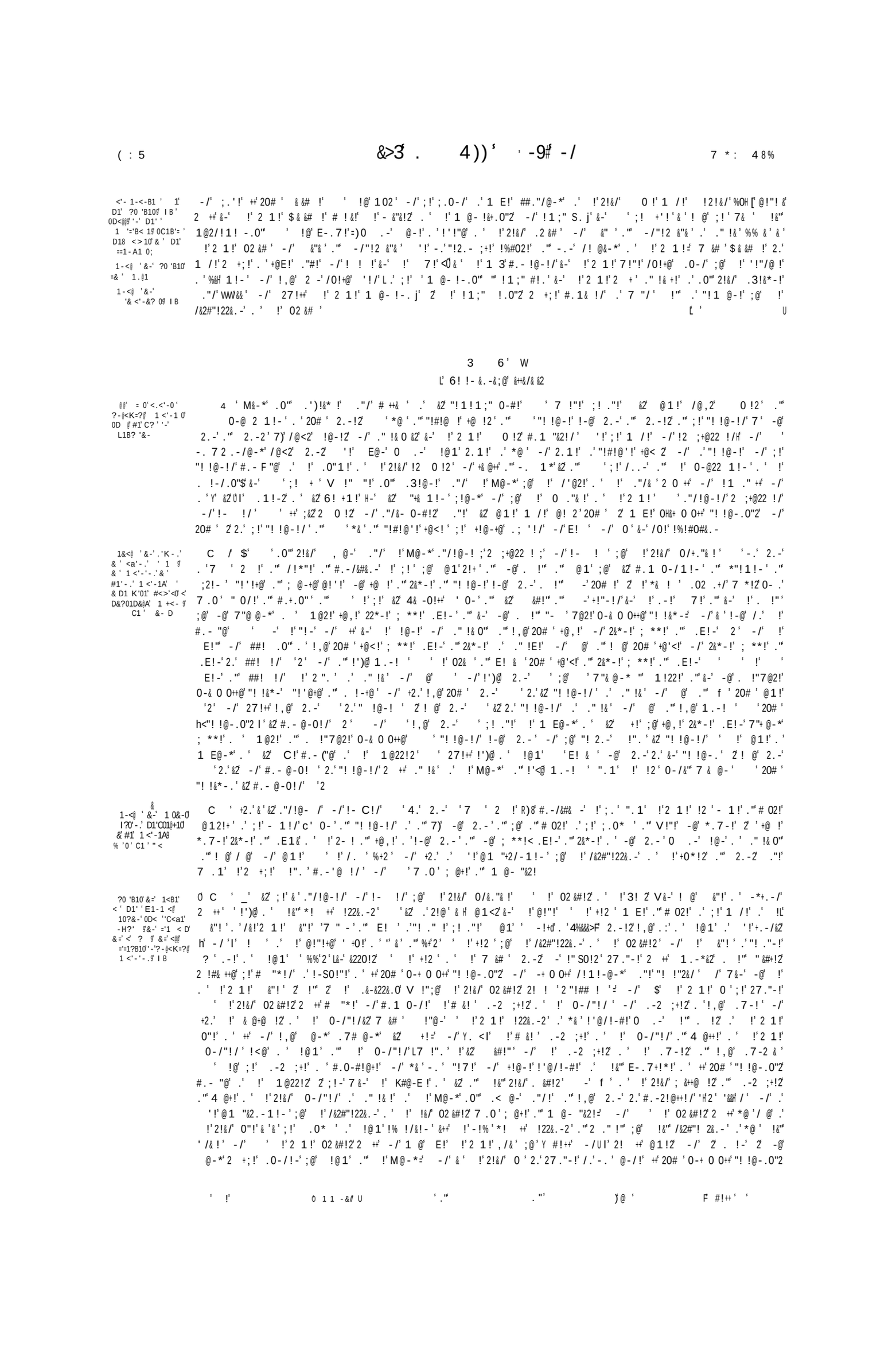

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6 A ' !' .1!-2'&-' &2' 2!-' HH+!1!-' 22!1;+!/' '7 !"!'&'7 2'!2 ;M22 !/'C'!- !/'&-' !' @" !'@!"!' !-.'". ' !' ' - + # 5 ' 1!-/&-*' 0!' 6&#L' ' %' 2'.'<0 +&&# &.-/' .'0"."2'0 .-' !"& 2)' .1!2' &-' 6!' &"!2'.' .0 1 .-' 0""!8<' -/' 022!%

. ' !'"!&*-!'. 'M@-*' 6&# "/!' !' @"/!' + !'&-' /!/!' -/'-.' .'"@* 'M@-*'. ' -*+.-/!' ' -.' 4 @+@'-.'" . !'" . &#!'" 2 0+/!' "! 01!'&-' !-@' 3 -!++'&-' !-@' !"! !2' ."-!' ."+ 7!/ @'!-@' 2.-!';0' 20# !' 2' ;!-' .'*../' - 1!'C' !1!'C' '!'+ -/!2'C' !-' .' "! .+/!'7&-' !' 2&1!' .0-&!'7 !'" !@' ;!-'&- &;&& 0-'.' !'@! !+@'' +0!' . 'WW2' ' !'+!2' ."" !++!2'+.-/' !' !-' .+/@-!';@' !' 02.1!'.' !' !'" # ++!/' . @ .+/!'7&-' !'2!&/' .0-&!'. ' !'@!"!+@'' +0!'. '%%'H2'C' '&&H/'. '!'" ++ "*!2' !'+!2!' 2' &-' !'2 1!' 0!'1."!' + @-+@!'@' !"! !-' -/' ' ++'&-/&!1!-'C' 2!-1!-' E!-' ."!'!-@'4 !"! !'&-' &2' .V-!'. !"7@22!';!' '@/!'C' .'-.-'! !/+!-' ;!'"! 2.-'.'7 &# !' 0!'1!-@' !"!+ '.' !' .0-&!2'.' 0 ' 0"'C' 022!%'&-!-/@ *'N"0!+@' '!'+.2!' !' @ !'.' &2'." !"" .0"-!2' -/'1 -@' *"!' -0@2 -#!2C'. !-2!2' .'6!-!/'-." !'. !-/.2' -/' "!2 2.0"2'&-' !'2 1!' 0-&22 !/'.' !'*"! '0"!'. ' @- ;& 0-'.' !'2 1!'."7&-'2.1!' 0 /"!/' !"< !"" ;!-'-. '2.'1 -@' 2.-!2'. '2 # !' .-/!2' C' !-' /7!++@-*'.7'. 'B" 0-# !2!2' -/' .0* ' !@' 7!"!'. ' ' '@.0"" !@'7.+/!'-.' !"!'." !'+.22!'.'&H/'." &&&H/' ' !'/@!'.' !' .1!'7 &# !'21 +!' C& 1!-'&2'.' .+/!'@1!'02!/' 7 !";@' !'M&-*' 2!&/'b.0" !2'&-'/& 2' "&!2'. ' !'2!&/' .0-&!2';!-' ;2!'-'# -2&/!" #&.-'7 !"."&' 7 2'!2 ;+&22 !/'-/'!- ;+!/'&-' '"+!-+!-' .+/!-' 'V!2-&' !'&&&H[0/@'. ' ;+.;"&-' !'%HF'@!"!' (' !' "!&*-'. ' .' ., &*-!' ."/!'M@-*' !-' !'&>F('&'2 0+/!';!'+!0' .'!,@' !"! !'.'!-@'. ' !'2!&/' .0-&!2' .'!- -!++' C'201.-'%%&&&H'+7!0++'1!-'.'&- & 0-'7&-' !'#@-;+!'.'!,@'.' &2'." !"" .0"-!2' 2'.7!' 0!' .' !'2 1!' 01!'." 0"-!2' -/'7 !".'! @'.' !'2/'%%&&&H'1!-' '!' -/!2' C' !&& '.' "!! +/!' .' !'@!"!+@'' +0!'.'%'2' .,' ++'# "*!2' "'+.-/!2' !-'.'. @ .+/!' .' !'@!"!+@'' +0!'.'%&&&H'2'&&&H/'.')' ++'# "*!2'7&-' !-@'.' !'2!&/' .0-&!2' 7 !'" 20# !' .1!'." .1!2' &2'." ;!' .' ;!'E! !' -/'2.'1 -@' !'" .' !"!' ' !'/@!'.' !' .7"-!') ;!."!' !'2!&/' !"! !' -/!"2;!"! '." +!"E!' .' !-S0!"!'. ' !' "&#+!2'. ' !'2!&/' .0" !' -/' '!,@'. ' !' 2!&/'%%&&&H'1!-'2.';!@-*'!- -!++!/'C'201 -!/'-.' !"@-*';!' #!/!'&-' !'2!&/' !"! !2' .0"-!'." .0"-!2' ." - '/.@-*' !"'20 !' .' !'2 1!'%&H/' 3".'@/!/' +7!@' '@' !"" ;!'%&H.' !'2!&/'&- & 0-'2.'!- -!++!/'7&-' !' #@-;!'.'!,@' .0"-!' !"!'] .' '&-'!<' .0"-!';!' '+7 0++' 0"@!'.' !1'27."-!' ' !-' ++' !' "!1- 0-!'.' !1'2.'!- -!+/!' '1 E!'/! 0!';!'-.' &5#!/'." ' /! 0!';0'.-!+@'." !"" 20 !' -/' 2'&' 7 2'+7!0++@'02!/!' ."!' !' - E@-*'.' !'2!&/' 0!'-' -/'.,' ';!'&'!- ;+!/' ' !"" /0!'C'+7 0++' 2&&1.-2' /!'.' !'&- & 0-' 2' &2' ."!2!&/'@' !"" !"!'-. '%&H1!-'&-'! @'.' !'2!&/' !"! !2' .0"-!2'.' !' 2!&/' Y'&-&;& 0-''!' '@-*'+.-/'C' !-'.' !'@!"!+@'' +0!'.'%'2'." %&&&H2'&&&H/'2' &2';.'!2!&/'&-' !-@'.' !'2!&/' 0"-!2' %W&&&H 20# !'&- & 0-'7 &# !'1 @';!'!- -!++!/'C'201.-!/'&-' 1 -!"C' ."1!';.'!2!&/'&-' !-@'.' !'2!&/' 0"-!2' ' !-'&'2 +;!'+! 0++' .'!')@ !"! !' -/!"" !"! !' +!"E!'4 @+@'." ! !"" &-&2 "!' .'# "*!' C' 27!"!'!-@'. !"" 2.-!'."" 2.-!2'&-'!-@'. ' !'2!&/' "! ' .0"-!2'7 !"20# !'-.-!'20 &##&!-'C'/! 7!'.'&- & 0-' -/' " 0-#!' @2' //!'20# !' 2';!'.'*../'- 1!' -/' 1!' -/' !';!2';@' &2' ." !"" /&2#"!22&.-' ' !"!' ."!' @1' ." !1' -/' -.-!' . &#!"" -." ' 0-' .' !' 2!&/' !"!' -/!"2;!"! !2' +!"E' -." 4 &++@ !2' ." &-&2!"2' -/' ' ++' !-/&!1!-' C' 2!-1!-' . !"" -' !+.-@!'2.' E!-'#.-$-@-*' !' !&/' "! ' .0"-!2';!'*../' -/'! !;+0++' -.7@ 2.-/@-*' !'2!&/' ;+!'1 /!'&-' !' @"2!'@!"!'.'M&-*'6&# "/!'L" ".2!&/' -/' ' !' !"! !2' -/!"2;!"! !2' +!"E' -." 4 &++@ !2' .' !-@' .' !' 2!&/' .0-&!2' -." -.-!'.' !1'/.@-*' ##."/@-*' .' &2' 2!-' ;+!' ." !&'!-@' @-*' ." ;!'&-'!-@' 7@22!' "!#O/&!/' ." /.@-*'!@ @-*'#.-" "@!' .' !'2!&/' 0!'1 /!'&-' !' @"2!'@-"!'.' !' 2!&/'M@-*'6&# "/!-' -/' '!<@' !"! !' -/!"2 !"! !' +!"E'4 @+@'." @0@2"!' '/.'#.-"&!' .' &2'."/&-0-#!' &-'!-@' .@-!'." &!' !'2.1!'.' '2' '#,@'@1!' ' !@'." !-@'L.' !1'/..' !'#.-)"&!'.' !'2 1!'&-'!-@' .@-' .'?2 1!'-' '@-*'.'!,@' 2.-!' -/' 2.-!2' !"+7 0++'&;&!2' -/" -# &2!2'C' !--' -/'&- + 0-'.' !'2 1!= &2' ;+!'.'!-/0"!'0-.' !'-!%' +!1!-

K&-&-'('

V D

P2 F & 0 1A D1 1 0

0<.10 &= ,1 D11 >1-/ <= 0 - & K'BD

D1 &>1-0 '- D'0 C01- C< @1'-1- '<001>#@1A D< K@'1 <0 D1 F1 &= & K BD1 '0 <- <?-B'1- ' '1 I ' '- D1 0<>1 ' '1 K &K ' >1 &= > -A1 < &&-.1 & D1 ' =<= 10=&@ D1 #1 - ?01A < I 1 -1 <= 1 B<@@1A D1 1><-10 <= 1 <-A D< '='B1 0 &= D1 0<>1 D<+1 <@K1 ' < 1A # ' D1 <>1 >1 & 0D1 1 < K1@@ F ? 0 1A10 <> -0 !?0 <-0 <0 <@@ & D1 ' F &@@1 - @& D1 <-A <@@ <CC 1- 010 &= D1 0<>1 <= 1 D<+1 #1 <a1- I ' #&?-A1- & D1 1><--10 <= 1 &-1@ I ' # ' 1<0&- D1 &= D1 ' D<+1 D<AA1 I ' 1' & 1A 1 '@'# 10 I ' = 1A&>1 @< #1 ' &BB<C<B'&- # ' D1 -<>1 &=@@ !"!1 --@ " !* ++@ C -.-!. !"7@22! ' -/ !@ ! ' <' @!"!02!/ 7 &- !2!&/ & &! .' ;!'# .2!- -/ 27."-! .' V "/!-2 . ' !2 1 " !-/ +! /!C7! !2 ;@ !2!&/ V "/!-2 &- !" " !' .0-/!-' .' ;!' 2!- !/ ;! ."!' !' @"!' . ' !'2!&/ & &! .'" !' @1!';!@-* -/ !'. &!-/!"2 &- ' ;! +&!' .' ;!' 0-@22 !/ ##."/@&<' .' !' 02 .1!' . ' !'2 1!' & &!= @+ .7!' . '+ !' @ -!/& < 2. !2 ' .'" !" .7-!2& * !" & !' #.- " !' .' !' #.1!' 7! +!' . ' !' 2!&/ & &! ' !@-@ * .' ' !' " !' . ' V ."2 !/!' 2 !"@ *' 2!I< ' ". &!' !' 2!&/ " !' . ' !"!1 4-@2 " !' 20"1@ !/ ' 4@+ &- !' +!1!-' .+/! ' ' V !2 1 ' !' %@@@[(/ @ . ' .;'" !' %H[)'@!"!' . ' !' "!&*-' . ' .0" .< &*-!' ."/!'/&!' M=<* H ' -.7!'@2 'YY;!' ' ."#!' . '7 &# !' !-/!/'4@+ &' 7 2 &- !'2!&/' + !1!-' !- C!/'C'."/!@-!/' ' ".1! !-2 ." !'-.' 1 -' 2 0+/!' E!' 0 .-' @1' .' 2 !"!' V ."2 !/ ' 7@ &-' !' 2!&/' & &!' ;0 ' @ ' !' //!' ;!' "!- &#!' .' !'2!&/' .# 0 #&.-' . ' V ."2 !/'2 !"@-* ;@' !'2 #!' . ' '&# @!"!2 ' ." 20# !' . !" 2 !' &2 !"2 . ' !' 2!&/'.##0 #&.-' 7@ &-' !'2!&/' & &!' ." !' @1!';!@-* ". '@-* !" #.--@-* ' 7) /'@#!' . ' !' @"!' ." !' @1!';!@-* &-' !'2!&/' & ! '7@+ /&"@ != -/' !" !"1."!' &-' !-/!' . ' !'2" /' !' &' 7 2 ". '@/!/' ' !'2!&/' # 0 / -' . ' V ."2 !/'2 !"@-* 2 + -. ' 1 E!' -." /..' .' ;!' 1 /!' !-@' ."/&- 0-#!' #.- 2@-* !' 2!&/' .##0 #&.-' Q 1.-* !1'2!+ !' ;0 '20# !' 2 !' @"!' . ' !'2!&/' & &!' ." !' @1!';!@-* 7@ ' &2 ;"! !"-' +/!"1!-'2 + &-E!' -!#!22 & !' -/' E ; !' ." !'7! +!' . ' !'M&-* '20 !*&!/+' = 2'2-."! & @-+@'&-' !'2!&/' !' 1.-*. !'" &-* '/. !' !"!= '&2 2.' '2@ ' !'1 E@-* ' !'2!&/' ;@' #.+.0" . ' !'2 1!' !' V ."2 !/' !"!1!-'7@ &-' !'2!&/' & &!' 7@ &-' !1'2!+ !' 7@ .7 !' /'@#!' ." #.-2!-' . ' !' @"!' . ' !'2!&/' & &!' '!'# .2!-' V "/!-2' . ' V ."2 !/' 2 ! @ * ' C 2! !/' !'2 1!' !-/!/' " !' ".1' ."!2!H/' " !'# ++!/' !"!1 --!2 " !' #.- "&! .' !'+&; &!2 ' *../' 02 .1!2 . ' !' 2!&/' & &!' &-' @1!' 22!/'02!/'C ". '!/= -/' .,' ' !' 2!&/' 3!-/!/' V "/!-2' 7@ ' !" #.1 -@!' .' !1'#.- !/!"!/' /&,2!' R !-@' @1!2 22!1;+!' -/' 1 E!' ."/&- 0-#!2 1.-* !1'2!+ !' #.-)"&!' .' !' #.1!-' V ! +!' . ' !' 2!&/' & &!' R(8 7.7 !' !-@' /'@2!' . ' !' @"!' . ' !'2!&/' & &!' &- !-/@-* .' ;"@-* !' !"&&H* . ' V ."2 !/!2 &-.' !7!' 1!--@2 -/!2 C' .' !- 0-#!' !' "&#!' . ' !"@-* . ' V .&2 !/@2 ' !&" +! 2."!= &-' 2.' 1@ ;!' ' !@' 7&+ -. ' /1& !' .' !"@-* . ' V ."2 !/!2;0 ' $!@-' 2.-!2 ' 7 !" 1!-@' . !"]&$@ &-' !'2!&/' & &!';!' 2 & !' C' '!' 2 *"! '#.--@-* &-' !' 2!&/' 2 !"@-* . ' V ."2 !/!2 2 !@' ' !' 2!&/' !-/!/' V "/!-2' / @+@' /.' 20 !" .' 2 !"!' '!' C' 7&+ -. ' /1E!' !-@' 1 -' .' !' 2 !"@-* . ' V ."2 !/!2 .0* ' !' '!' 20 &#&!-' #.--@-* !"&-' 7@ .7 !' !' 7@H+ #. + .7-!' 7@ ' !1' C' 1 E!' *"! ' C' &1H " ;+!' @-!2 ' Y;!(' ."#!' 7 !". ' /& 2 C' 1!-@' . ' !' !"!1!-' + !+@' &- & 0- ' . ' !' !&/' & &!' ;!' /! !/' .7U . ' !' 2 1!' & &!' &- .' !' .- "! ' -/' 2.' /&' !"2 C' 1!-@' .7!2!2 7@ &-' !' 2!&/' & &!' ;!' -.7' 0-.##0 @!/' C' /!# @!/' C' / @+@' 1."!' "+@E!' .' ;!' .' !' *"! !' /!2.+ #.-' . ' !' 2!&/' & &!' -/' +2.' .' .1 .32 &-* . ' !' # 01 ';@-2 . ' !'2 /' V ."2 !/!2'7@ &-' !' 2 1!' & &!' N7 !";@' !' *"! !' 7!+!' C' ".2 & !' . ' !' 2!&/' !'2 .-/@ ' C' !- ;& 0- ' . ' !' 2 1!' 20 ." !/U -'#.-2&/!" / -' . ' +' 7 &# !' 1&22!2 &' 1 @' +! 2 !' M&-* .0" .3 &*-!' ."/!' . ' &2 &++.2 !' ;0++/ 0- !' *" #!' C' ." !' *"! ' j!+!' &2 b" #!' !' .' !' 0-& 2 +' V!+!' . ' &2 0;*&! ' &-' &2 &2 6! +1!' ;@' /'@2!' C' 22!-' . ' !' ."/!2 2 0!+' C' !1 ."!+' C' . ' !' .1!-2 &-' &2 +!1!-' 22!1 ! ! ' C' ;@L 0C."& &!' . ' ;!' 2 1!' .' ."/!@-' !2 ;+&22 !' C' !- / !' ' ."2!&/' ' 1 /!' !' /' %@@@H)' / @' . ' +. ;'" !' %H)()@!"!' . !2!&/' &-' ! @' &-* .7# &-* C' .-3-@-* !' 2!&/' V ."2 !/!' 2 !"@-* ." !' 2!&/' !-/!/' " !' . ' V ."2 !/' 2 !"@-* H+!+@' ;!'0 !"+@' '.@/!'"! !+!/' /-0 !/' C' . ' -.' ."#!' -!' ! ! !

-&F ' -@K1 ' D< ' D1' 10'A?2' &= D<=# 101'A A@1@ 1&-C- -.' 'D1' 0< -.' & ' C? -.' <a -.' & ' 101 + -.' &= <CC 1- 'B1 0 =& ' <@@ D1' ' '\1-0 I ' '-D<#' <?- = K D'-' D1' 01'A ' '1' &= & K BD1@ >< ' 0 &-A1' '-' D'0 =?@@ 0 1-.D ' I ' 1=1= 1@ '-' 0?BD1' =& >1' <0 '-' D1' 01'A ^1' '0 1LC 1001A' I ' B&- 1 -1A' D'0 C01- ' = '1-& K D0 &-A -.

+ #.- &"1!/'&-' (' !" 6!2 ! 2

D@(('#

L' B+0 '&.' ;"&-&'

B"!!' '&* &.& 8 '6 ' ;/' .1!-2' &-' &2' 2!-' 3 "+& 1!-' 22!1;+!/' ' 7 !' @1!' .-' .' 1@-/!' "# 0- !2' &!&+!"2' .' D1' '+1' 1+1K@ H ' -/' +' !" @.' +&!*!' !! !' .' &2' @. 6! +1!' ' &! 20" ' '!' /' -/' 02!/' "!' #.0"2!' -/' 22 *!' B." 1 &= " B'-1@ .". 7!' -/' 0 .-' @.' "@' !" -/' 7 !" . ' !'!"-' 7 &-' &2' @.' 6! +1!' 7) & !2' ". 7!2' 4. !2' -/' +' . !" !22!+2' .' # "@!' //' #.-' !@' !&" "# 0-/&2!2' & ++!2' -/' . !" *. ./!2' ". 1' .0-' .' .0-' -/' ". 1' + #!' .' + #!' V ;0 '&- !""0 #&/ ' ". 0;+!' !% #&.-' +! ' .' /&2 0"; 0-#!' &0&/' 7 . . ' !-@' @-* !" ."!' @&-* .'" *!' @-* ' 0- &+ !' @1!' /@32' "# -&2' -/' ; !" . ' &2' @. ' 6! H13' . ' -*+. /' 7!"!' ;@' /@' f' -/3 !@-' 1@2"0+!/' 2.-!2' Y&- & !/` ' -' !' B."!2 ' . ' ! -!' -/' . !" + #!2' .' !' 2!&/' 6@' !" /H.@-@-* ' 7". -* 0++@' +! !/' ' !%!/' -/'&- !""0 !/= V !"0 .-' ." !' 20"!' -/' !2 ;+!' 22 *!' -/' #./"2!' 0 .-' !' 2!&/' V !" -/' 6@' !" . ' +' !' M@-* ' +&!*!' !. +!' .' ;!' /' -/' #.- 0!/' /@<' !2' -/' + 7! ' 7!"!' 1 /!' -/' '@/!/' -/'&-' !2 &#" +' .-' &-' !' &%[' @!"!' . ' !' "!&*-' . ' !' 1.2 ' ;+!2 ' -/' &1.02 &-' 1!1."@!' @. '0-#+!' M@-* !-"!' !' 'H[)' @' !' 7 &# ' !' &' 7 2 !2 ;+&22 !/' ."/!@-!/' -/' '@/!/

0<.10 &= ,1 D11 >1-/ <= 0 - & K'BD

&- ?..10 '&-' &= F & 0 1A D1< 1 0 <0 <' 01C< < 1 <= B1 <'-' &+'0'&-0 ><A1' '- D1 < ? 1 ' ' ' 1- @ ' B ' ' 9' 4 ' <0 (' D1 <= ' &=' F & 0 1Aj 0D1< ' -.'G

C &B11A' -.0" 0' -B1 1B' 1A' 9' C 1 ?A'B'<@ &' D1 .1-1 <@ <= ' &=' D11 >1-G

1B' 1A' &+'0'&-0 1C1<@1A

7@2! ! ."/!7 @-!" !1@2 !"! . ."@.0" ;@"! 2.-7 ! . 1 -@C /@ 2 ."/!7 @-!"2 . && !2 -/40"* 27)&- &2 2!&/ 6! +1! 02!/ -/ /..-/ / @+@ 02! ! " &! . ."@.0"2&- !&" .02!2 ! !&" +! 20"! 7 .0 !-@ .') !@-* ." #.-".++@-* . -@. !" " ! ." . % . !M@-* &#!"2 2. 2.1! @ &! ." + E . .--@-* -/2.1! @1! ." !&" .7-! 2 !/! -/ +0#"! !@ 20 !" !&" +!//!" . 22! 0- "&++@ #."@!/ -/ +2.7 !"1 -@ --!"2 0 !&" @/!2 -/!+!//!" .2 +! ;! ."! !@ ;!20 &#& -+@/"@!/2. ! ;@!"2 . !2 1! # -. E-.7! 7 //!" !+!//!" ;!20 &#& -+@ --!/ -/ ; "E!/ . ! *"! 0" -/ /!#!@ ! 2V!+ . + ! .0!" . -!-2 7&- ! 2!&/ &&!2 -/40"* 2 2 . ! M@-* +&!*! !. +! 7H- ! .+! 6! +1!= 3+! 2!&' !" ."! @. &* -!22! -/ *"! 7@2/.12 . ". '&/!;@ ! 09."& !. h &2 32]3 "& 6!-. ./0!"!1!/@&-/ 2';! + . -.1 -. " ! ' . ."/!7 <2 ." .1 E!"2 -." -.-. !" . &2 02!&- &!." 40"* . .0-7&- &2 6! +1!2 +&- @1! .#.1! 02! -!.##0 @ ! 1@2!"!." #" ! . ."&.0 2 7 &+! !0 ! " ! . ."/!7 @-!"2 0 .-! @-. . "!& 0 " 'H2) 'HH/ . ." !,@ @/!2.#."@!/ -/ 7".0* 7 !". 'HH2 HHH/ . .0" .<&*-' ."/ !M@-* -/ !" HH$ HHH/ ' .20# 2.-!." 2. !2 &"2 @-/! -/ 2 !7!& = -/&-2!1;+ ;+!7@ ! -.1 -. ! " ! . ."@.0"2 -." -.-. !" . &2 02! 7&- &!." 40"* . &2 2!&/ 6! + ! 2 +" ".1 !-2 K" 02!-!.##0 @! !1@2!"!. "/!7 @-!" Y7 &++ II ! .##0 &! ! " ! . ."&.0"2 0 .-+@E! !@-. 2&2-!% ;.'!"! !"#!/ -/ +2. -. --!" -." 4 "E!" 0 -.1 0 . @/!-." ! !" .2 +! ;! ."! !2 1! @/! -/ +! !" ;!20 &#& -+@/"&!/0 .- !@-!. ." !&0" ." !,@ 0# @/!2. 0 .2 +!'H2 /7 !". '&<2 &H/ . .0" .< @-' ."/ !M@-* -/ ! . !" HH2 HHH/ . .2 0# $ 2.-!." 2.-2 2 &"2 @-/! -/2 !7! !2 1!

3 6 WW

4[; & H "".H "! "!1!-/

6 A ! .1!-2 &- &2 V- +!1 - 22!1;+!/ 7 !" +!1!- .+/!- V!2&-&- ! !"/!@!"! . !"!&*<"! . .0"! Z<]&&*- ."/! !M&-* - .7@2 ;@ ! /@#! . ! ."/!2 2 0 + -/ !1 ."!+ C . ! .1!-2&- !2 1! +!1!- 22!1;+!/ -/ ;@ ! 0C."&&! . !2 1!&7 2."/&-!/C!2 ;+&22 !/ 1.-* . !" &-* @-!-@/!!-/ 0-!." !- -/! !-/ 1 !2 . !-(- .!" !-@ . !" 2 +;!;.0-/!;@!-@H0*!1!- 20! ."!!%!#0H&.- //!1@ 7"& !. !"". . .'"!<!!-@ 20# !H0*!1!- -/!+ @-* . !%!#0H&.-. ! ! &! !-@ !2 1!H0*!1!-;! !"1!/*../!&- ! !&/ 7"& !. ! "". C -. !"".-!02 ." !2!&/ V"& !. ! "". ";!/&2#.-@-0!/&- !/! + !. ! ! &! ." 2.-!." 2.-!2 20! ! 7"& ! &" 7"& !2 . ! "". ";!-.-20!/&- !2 1! ! !-' !" !&/ 2.-!." 2.-!2 *!@-2 7 .1 !2!&/ V"& !. ! "". &2 2.20!/2 +! %' &2#.2 C / 1 *!2 ." &2 /<+ @C V".-* 0+ !% # -&- !2 1!;@/&2#"!#& -. ! 02 &#!" ."! 7 .1! !2!&/ V"& !. ! "". '&2 20!/= VL &#;! !C "/&- 0-!!2 -. ;!-2 @! /0!+@ 0 &-!%!#0 &+- ;@ "! 2.-7 !". 27!+ +@-&!2 2 /!1 -/ 0-&&-/&<2 #&.-2 ;@ !1 20!/ 2@" ! 1 E@-* . !2!&/ 2 0 ! !;!-. !-@1!2 /!+ @!/. !" !%!. #&.-. !" *"! C&- ." - ;+! 0" !+.22! C # "*!D V !" ."! !M&-* .0 .0, &*-!." /!; @ /'&#!. ! !2 ;+&22 ! C !- ! ! ^+!1 /! !" &"/!@!"! . &2 "!&*-!#.-$-@-* !" 1&22!2 ;! *../C ! ! 0 + -/ &".1! !-2 ." ! &';!/0!+@ 0 &-!%!#0#&.-

3 6 WW

." @+E!7.1!-

W]!2 ;+&22 !/ ."/!@-!/C !- !/ #@ :.^.:&&!. &2 2!-!+!1!- .1 2.-!".1! !42 ." ;"&-* ." # 02! .;!;".0* &-. &2 6! +1!. -*+.-/!.;!2.+/!!-@1 -!" . @+E!7.0* ;@ @2!+ !." F!-@ . !" 20 !&-!-@ + #! FO . &2 6! +1!&-6&; -/!2 + #!2 *@"/@++ ."2!2 ++!2 ."2!2 . &220!2 ." .@- !2 0 .-' @-!. ." !@&0"!. + +! !2 1!6&; -/!2 + #!2 *@"/@++ ."2!2 ++!2 ."2!2 . &220!2 C .@- !2 C!@. !1!&-7 2 -/!2 2.!3 !@;!.7-/!." !" +0!. !2 1! !. -!1.@!@. !2!&/ ."!@0"! .#0"! .3 &*-! ./! !M@-*C !. 7 1.@!@ !". .!-@. !M&-* 20;*&!C + @1!2 -/ &2 +;!+ 7!0+ .!,@ 2.-! 7 && !. ./.&2 2+;!+!0+ .+ !2 2 1! C!,@ !. !". C .' !+&#!-2 C+& &! !" .' @+ !2!. 3!- !#.2 2 +;! &- !@!"!. .0" ."/! ! C

3 6 WW- RN8

L .-&& &2 C #.&; &++ b +!2

7 !" " "+& 1!- .]-& ! &&&H(@!"! . ! "!&*-! . .0" .3!&*-! ."/!M@-* !-"@ !'&H)[6!#& . 3". &2&.-' 2'&-' / ! -' 7 2 ."/!@-!/ !- !/ -/ !2 ;+&22 !/ ;@ ! 0 ."& ! . ! 2 1! "+& 1!- . -..-&- & 0- -." 40"*!2 "!2 ! &-*' V . . B # ."2 + &2P . ! +&! .0-!. +@ ."" "# !2 . ! 2 1! !-; !@-*." -@ @1! !" !" .; !; @ ."! ! H?(/ @ . "!++ !'@!"!Z$. -" ."/ b./ &&&H &&&H(' 2 0+/ ; !B +.0" ." .0"-!@7& @- ! 2!&/ .7-!. +@2 ." "# !2 f 'N$ . . ! 2 1! .'." ." !-@ "# 0- . ! +! !" !-/0!++@-* 7& &- &2 6! 1! . -*!+ -/ " ! " <2 0+/ /0!++! .; @!." 2!++! ." !@1' -@ V.++!2 . !++!2 ." . !" <# 0-/&2!2. ! 2!&/ +! ; 0 20# 2 2 0+/ ; !, @ 1!-@ ++ -/ 1!"! c FO- "! -&#!j 0- . "# 0- ! -/0!++!"2 .") 2 0+/L/0!+ ! 7& &- &2 6! 1! . -*!+ -/ ." ;@ !@1 2!- ." . ; !2!- 0- . ! 2!&/ +!= 4@"! 2.- . 7 &# N."/@-)-#! ^ ! -/!2 0 ! 1 -@ !-&-+2& 0- &'. ! 2!&/ .7-!'; @ ."! @1! *! @-* !&" +@'@-* -/ E! @-* 7& &- ! 2 1! .7-! .-!2 ! .02 .+/!2'; @ ! * @-! -/ 'F *! ! !@ /. ! /! +@-* -/ .##0 @&-* 2 B +.0"2 -/ .01!$ 7& &- ! 2 1! .7-! ." . ! " &# 0- . ! +! /0!++@-* &- ! &!2 . &2 6! +1! " - 7! /! ! /.0 ! . ! ! 2!&/ .7-! -/ ! .7-!& !"; @ 2."! /!# @/! -/ ! !&/&- & 0- &# - +!22!@-* ! M@-* *! ++ "&'@+!*!&- ; ! +'!= 4!&' !" ." ; @ 09."&&!. &2 <! - +& 1!-."/!@-!/ -/ !- !/ !'2 1!"! ! +!/ ! ! -/ ."/@ -#! ; .'!2!&/ ; ! ".1 !-2 ." 0 !"+@ /-0++!/ '.@/! -/ . -..-! ! +!

3 6 22()

B." & ++@ "/

'&'."/!@-!/!2 ;+&22 !/ !- 9!/ C ".'&/!/'; @ ! M@-* .0" .< &*-' ."/!'; @ /'@ !'. &2 ."/!2 2 0!++ C 1 !." ++ -/ ! .1!-$. ! 1 ! &-' 2 2!-' +!1!-' 22!1;+!/' ." C 0- '. ! -2!'&-' +1 &*-! '&-* ! .02!'&-' V!'. .-/.-'#.1!-+@'# ++!/'b7& /!' +/ ' &!. -&#.<' ; @ ! 0 ."& &!'. &2 2!&/ +!1!- '!'!"@ +!' 0 !'." "/+- 0-#!' !2 0 !2 ."./&- 0-#!2' !"! . ."!1 /!#. -@-* # 0- &# 0&OH&2!2 ." . !" V "!2'!% !-/'&H. ' .' ! KH0/&#!' 0" !'." "*!'. ' !2!&/' &# 0- '. ! -2!'#.-3"&!' .' !"!' 0-#&!-' +&; &!2 "&'&+!*' "!!'02 *!2 C #02 .1!2 . .+/!' @1!'*" 0-!/ .' !2!&/' # 0- '. ! -2!' 27!++ ;@' !'M&-* ' -.;+!' *!1 .0" ' C " &&!/ -/ &Z.-!"1!/'; @' !'M&-* '*" #!' 2 ;@' 0 ."&&!'. '/&'<2!' +& 1!- '; 0' ++ 20#+&!' ! 0 !' C "/+- 0-#!' !2 0 ' C "/&- 0-#!2' 2..' 1 /!' ." .' !' 1 /!' &-' /!&.* #C ' . ' !" 2!&/' +&; &!2 '&+!*!2 "!!'02 *!2 C #02 01!2' 2 -/!' C ; !' 2 *!@-2' !' 2!&/' # 0- ' C !" 20##!22.0"2 C !, @'. ' !1' '.&/!' "! !+!/' -0@- &22 !/ C . '-.-!' ! != !-@ 9!' 0 !'." "/+- 0-#!' 0 '." "/&- 0-#!2' .' !'#.-F'&!' 1 /!'." .' ;!' 1 /!'-. 7@ 2 .-/@-*

21X $. ' ++V!@ ' &2 9!'." !-@' @ *' !"&-'#.- !@-!/'!% !-/2'-. '." ; !'&-'!" @ V@22!' H0/&#& ++ ." 0" 0++ .\2*' .' ! @"!' &"! !2 & &j!-2 ." .1H1 +&!'. ' ! & &!' . ' .-/.-'." !-@ ' !1'." ! 20##!22.0"2 . '!-@' . ' & @ . ' .-/.-' !1'. '." ." !-@ &-$!22!'+&; &!2 "@'!+!*' " -# !2+2 ." . !" &-*' .' !1' ." !-@' . ' !1'*!'!-'." *" 0- !/'; @' !'M&-* ' 1.2 !'-.;+!' *!-@ .0"2' ." /!#!2 .0"2 M& *!2 . ' &2 6! +1!' ; @' 0 ."&&!'. ' +& 1!-'." . !" 7@22!= &2 <!- ' ! ." !-@' &-*' !"&-'!.- !@-!/'-. 7@ 2 .-/@-*

4 ' TT !

4 1&2' &# /' &#!2 ' C !7!2 '&!&22&1' !-!-/

'#.-2&/!" /.-' ' !' &"!' .0" !' . ' C ." !' @"!' . ' 022!%' @2 .+/!' E! !' 1' &!' & &!' . ' &# !2 "!' - !' 2 &"!' .0"' 7 &# !' &2 &-' !' !% "! 1!' /!' . ' !' 2 1!' @"!' !' 2 1!' @"!' ;!@-* %%' 1@&!2 &-' +!-* !' ; @' "! 2.-!' '2&&!". ' /&,2 C 1!-@' . ' !' M@-* ' 0; *&! + ' &- ; & @-* ' & !' " 2.1! @1!2 .7 !+ 7!/' C .1!' @1!2 +.2!' *"! ' &# !2 !" -/ 2.1!2 . ' .-!@' &-' ' .0" !' ." !@' '!' E-.+'+!*!' !". ' .' !" 0 !" 0-/.7@-* ' 4!'&' !" ." !- / !/' ; @' ! +!"- !+@ 0 +."& &!' . ' &2 32!H& ' +!1!-' ' ". 1!' ! .- 2' . ' 2 !" -!%' #.1@-* ' !' @"!' .0" !' ." ' @"!' 2 +; !' &.+/!-' C E! !' .-!' @1!' ' &# !2 "!' ."2!&/' 1&/' !' -!%' @" ' ' !' ; ."7!' . ' !7!2' 7 &# !' 4 .7!' &2 &-' &+!' 1&//!2 ' ' @"!' -/ 2.' .' ; !' E! !' +3-&2 '&#&;H ." !')= -/ !-@' @"!' .0" !' .+/! &' .' !'#.-<"@!' !"!. ' C ++ &-* ' !"&-' /..-' .' ; !' '.@/!

) &2 !"' 7 &# ' 2 ;!!-' +7 @2 "&-!/' 2 \) "' . ' !' 0 !' . ' &2 !22&.-' &2 !-!"!/' 2 -' 2! " !' ^' .-' !' -" + 1!-' &-' -#!"@' ; 0' &2 #.- &-!/'&-' ' # !/0+!' &--!%!/' .' !' "&*&-<' ^' &-' !' 3 "+& 1!-' &#!' 7 &# ' &2 -.7' "&-!/' 2 !" WW ' . ' &2 !22&.-' '?! ' ? , ') -' ' ! " ! # !/0+!' --!%!/' .' !' "&*&- +

0 ') '

3 6 ' WW)

L' B!. +E-!- .' ' 6!*!1' <.

1B' <ff &=' < $' 1- 'B ' *6 M ff 6 ' =& ' ff ' > ' '- .' 0 < 10' &' ! 1&==110ff &' D1' 01' &=' D1' , ' - .//0' F ' ffff X

F ' '-' D1ff C ff 1 > 1 - ' D& ff A1 -' < 8 F 10 >' D1' A< ' &=' ! 1+1 1 1' D1' +' 0 ' 1 1' &=' D1' , ' - . =' &?0ff & , <'. - 1' & A=' 1'. - 1ff 1 > C& <fff .' I ' D1' &> 1 - 0' '-' D1' 0<'A' C ff ' < > 1 - ' <001 > # ff 1A' I ' #1' <?= & ' '1' &=' D1' 0<> 1ff & A1 -1A' I ' 1 -<# ff 1A' D< ' &D -' D1 -' BD1#'00D&C' &=' <-R#? ' '> < ' I ' D<?-B1 ffff &? ' &=' <fff -. ff &- A1' D& > <0' D1 -' BD'#'00D&C' &=' & a1ff <-A' <0C1 ' D1 -' " ?a1' &=' 1A=& A1ff I ' & D1 ' K0' D1 >' -<>1A' '-' D1' 0<>1' = 1ff 0D? ff A1' = & >1' D1' 0<>1' LL0 ' A< ' &=' ! 1+1 1 1' D<+1' D& ff A1' 1 - & 1' I ' C& 001A1' D1' &-&? 0' <0 1 ffff ' 5ff & A0D CC' &=' <?-B10 =' I ' ff A &K1' D1' >1 > # 10' <-A' <CC? 1-<-B10' &=' D1' 0<>1 ff ;' I ' <fff <-1 0' & A0D 2C10' 0 <-A10' 1 - =' 1 - ' 1 ,0' &-0' R 'B10' &00100' &-0' I ' 1 1A' <>1 - ' CB1 ffff &=' D1' " ?BD'1' &=' <?-B<0 1' K '-' ''1' &? '1' &=' <?-B<0 1' K0' D1 ' <CC? 1-<-B10 ff <-A' D1' &?- '1' <ff <- -1' &=' <?-B<0 =' K0' D1' <CC? 1DO-B10 ff <-A' <fff ff '# '10' = <?-BD10 0' ? '0A'B &-0' C '+1 ff 1. =' ff <K10' B?O &>1 0' ' <fff & D1 ' D'-.0' '-' D1' 0<>1' &?- '1' <ff <- -1' 5ff & D1 ' D1' >'0010' I ' 1 , 'CB1 ffff &=' D1 > ' # 1 ff &- . -.' I ' <CC1 1 - -.' V & ' CB1 ffff &=' D1' 0<>1 ff D1' &-& 10' <0 1 ffff 10' 8& A0D'CC10' 5ff <-1 0' &=' &?- = 1 ' aD? ffff , -< 10# ? .D' <-A' 'a1 -.' K0' D1' >1 > # 10' 5ff <CC? 1-<-B10 ff 5ff <fff <-1 0' & A10D'CC10' <-A10' 1== =' 1- =' 1+00' &-0' 5ff ,+'B10' CB1 ffff &=' D1' " ?BD'1' &=' <?-B<0 ''-' D1' &?- '10' &=' & a1' 5ff & '-.D<>' K0' D1 ' <CC? 1-<-B10 ff D1' &-&? ' <0 1 ffff & A10D'CC' I ' <-1 ' &=' ? #? '1' K V D<CC// 1-3-B10 ff 5ff A ff <-1 0' & A10D'CC10' <-A10' 1- =' 1- =' 1 0' &-0' 5ff =+'B10' CB1 ffff &=' D1' " ?BD'1' &=' <?-B<0 ' '-' D1' &?- '10' &=' <==& A1' 5ff " 1 # ' K ' D1 ' <CC/ 1- >B10 ff D1' &-&' <0 ffff & A0D'CC' I ' <-1 ' &=' &ff -.# &a1' K0' D1' >1 > # 10' 5ff <CC 1- -B10 ff I ' <fff & D1 ' <-1 ' & A10D'CC10' 1- ' 1- =' 1+'0' &-0' 5ff =+ B10' CB1 ffff &=' D1' 01' A' " ?BD'1' &=' <?-B<0 1' '-' D1' &?- '1' &=' '-B& ff -' K ' D1' <CC? 1-<-B10 ' D1' & A10D'CC10' 5ff <-1 0' &=' &-.#1- -. &-' CB1 ffff &=' D1' " ?BD'1' &=' <-B<0 =' '-' D1' &?- '1' &=' '-B& ff -' D1' <CC? 1-<-B10 ff 5ff <fff <0 1 ffff 10' & A0D'CC10' <-1 0' &-A10' 1- =' 1+0' &-0' 1- =' 5ff +'B10' CB1 ffff &=' D1' " ?BD'1' &=' <?-B<0 =' '-' D1' &?- '10' &=' & ==' 5ff ?==' K0' D1 ' <CC? 1-<-B10 ff &' D1 >' 5ff &' D1 ' D1' 10' =& ' 1 , ff &' D1- 1- ' D<' D1' 0<>1' =1& ==10' D1 ' D1 10' 5ff D1' D1' 10' &=' 1 , ' &=' D1 > ' 0D? ff A1' #1' I ' 0 &-A1' =1& ==10' &=' D1' C > '0010' 5ff &=' 1 , ' CB1 ffff &=' D1 >' &' D1' C=& > -.' 5ff 1L1B? -.' &=' D1' ff <0 1' K fff D< ' D'0' 01'A' '.D-1001' 0D? ff A' > <a1' 5ff &A1 -1' &' #1' A&&-' K0' D1' 0<>1' &-&? 10' <0 1 ffff 10' <-1 0' <-A10' 5ff 1- '5ff & D1 ' D1' >'0010' I ' 1 , ' CB1 ffff &=' D1 >' ?-A 1' B 1 -1' =& >1' K0' A'+1 0' & A'-<?-B10' <?T= & ' '10' C+'0' &-0' & A 10' 5ff 1- 1- 1' '-' D1' 0<- 1' = 1' ff >' 1A' 1LC 1001A' 0C1B' =' 1A' & A1 -1A' 5ff A1B ff < 1A' ' -A' ' D<' ' K<0' & A1 -1A' # ' D1' 0<>1' <?= & ' '1' D<' <= 1 ' D1' 0<>1' K fff K1 1' C=& >1A' I ' 1L1B? 1A ff & ' 1 ff 0' =' D'0' 01'A' '.D-1001' A1B ff < 1A1' <-A' > <A1' -&' K fff B&- - -.' D1' C > '0010 ff D<' D1-' D1' 01'A' &D-' D1-' BD'#'00D&C' &=' <- ,#? 1' D& > <0' D1-' BD'#'00D&C' &=' & a1 ff <0C1 ' D1-' " ?a1' &=' 1A=& A1 ff 5ff & D1 ' D1 >' -<>1A' '-' D1' 01'A' = 1' <-A' D1 ' D1' 10' 0D? ff A1' #1' 5ff 0 &-A1' 01<01A' 5ff =1& ==1A' &=' 5ff '-' D1' 01'A' &-&? 0' <0 1 ffff 10' & A10D'CC10' <-1 0' <-A10' 1D 0' 5ff & D1 ' D1' >'0010' &' D? 01' &=' D'0' " 1B1<01' &=' 01+1 <ff &=' D1' 0<'A' ! 1&==110; '.D-1001' 5ff D 0' D1' 10' =& ' 1 , ' <0' '-' D1' 0<>1' = 1' >& 1' < ' ff< .1' ' ' '0' B&- 1 -1A ; -A' =& ' <0 > &BD1' <0' A'+1 0' 5ff D1' . 1 10 ' -&>#1' &=' D1' 01'A' C0&-10' -<>1A1' '-' D1' 0<>1' = 1' 0 D1' D1' > <a -.' &=' D1' 0<>1' #1' A1B1<01A ff 5ff D1' B<0? 1 ff ' 1' &=' D'0' K& ff A1' '0' 0? BD1' 5ff ff =1' <0' ?-5< -1' &' 0? BD1' <0' 0? + +1' <0' K<0' &' D1>' -&K' A1C 1A ff -A' =& ' D<' ' ' '0' 0 -.' &' D1' , -. ' D&-& ' 5ff 1H? '0 1' =& ' D1' #1 1 ' 5ff > & 1' 0? 1' C=& > <?-B1' 5ff 1L1B? '&-' &=' D'0' 01'A' K ffff &' 1-1K1' I ' 1-B 1<01' <' > & 1' -& > # 1' &=' D&-& <# ff 1' C0&-<.=' & D<+1' &' - ' 5ff <0' =? ffff 5ff C ff< -1' 5ff ff< .1' <?= & ' '1' I ' C&K1 ' K0' D1' 0<'A' C0&-10' 1D1 01A' &+1 ff + .ff 5ff &' #1' D1 > ' <A & -1A' '-' D1' C > '0010' 5ff 1 , ' C 1' D1 &=ff <0' D1' 0<'A' C0&-10' A1B1<01A' D<A1' ' 1' ' ' D1 =& 1' 1-<= 1A' & A1 -1A' 5ff 10 <# ff '00D1A' # ' D<A+ 01' &=' D1' & A10' 0C? <fff I ' 1 > C& 1 ffff 5ff D1' &>1-0' '-' D'0' C01- ' C ff' <>1-' <001 > # ff 1A' I ' # ' <?= & ' '1' &=' D1' 0<>1 ff D<' F '= >' -&K1' BD'1#'00D&C' &=' <-R#? ' '> < 1' 5ff D<?-B1 ffff &? ' &=' <fff -. ff &-A1 ff D& > <0' BD'1#'00D&C' &=' & a1 ff AK< A1' " ?a1' &=' ?a -.D<>' ff 'BD< A1' -&K' 00D&CC' &=' F -BD10 1 ff F ' ffff <>' -&K' '00D&CC' &=' " ? 1D<>' ff F '= >' '00D&CC' &=' '-B& ff -' ff A>&-A1' 00D&C1' &=' <ff 10#? ' E1==1 1 ' 00D&CC' &=' D10 R' &D-' ##& 1' &=' F 10 > -0 1' D< ff 10' & A1' 1 #1 ' &D-' ! -1?L' , - .D ' D& > <0' ! &K a1' , - .D ' E1==1 1 ' >1&-' ff 1 a1' F '= >' < &-0' ff 1 a1' D& > <0' &? D< ffff ff 1 a1' AK< A1' &- -.=' , - .D ' 1-R' 1 -&-' - .D ' &D-' & A<?-' <>10' ?#1 1' 'BD< A' >0&-' ?>=1 ' &- -.10# ' I ' &D-' , -.10 > ffff , <?- 10' <' D1' ff <K1 ff 0 <-A1' <-A' #1' 01<01A ff &'- ff ' K0' D1' 01'A' C0&-10' 0? + + -. ff &=' <-A' '-' <ffff D1' <0 1 ffff 10' <-1 0' & A10D'CC10' ff <-A10' 1- =' 1- =' 1-0' &-0' =+'B10' C&00100' &-0' 5ff D1 1A' <>1- ' K0' & D1 ' C > '0010' #1=& 1' 1>1 > #1 1A ff ' I ' &' #1' 5ff 0 &-A1' '-' ff a1' 10 < 1' <>= & ' '1' 5ff C&K1 ' 5ff ?-A 1' ff a1' >< -1 ' =& >1' I ' B&-A'B'&-' &=' D1' C > '0010' I ' 1 , ' C 1' &=' D1 >' 5ff &' D1' 0<>1' ?010' 5ff 1- 1- 10 ff <0' D1' 01'A' C0&-10' -&K' #1 -.' A1A1' D<AA1' 0D? ff A1' & ' > .D ' D<+1' D<A1' '-' D1' C > '0010' 5ff 1 , ' C< 1' D1 1&=' =' D1 ' D<A1' B&- '-?1A' '-' C ff< -1' ff ==1 ff <-A' <0' =' D1' 01'A' C0&-10' -&K' -1K1' -<>1A' D<A1' D<A1' &'- ' <0 < 1' 5ff D<A1' #1' &'- ff ' -<>1A' K0' D1' 01'A' ? +'+&? 0' '-' D1' 01'A' A 1' K0' D1' C0&-10' D<' -&K' 0? + +1

?BB11A' -.' BD#'0D&C0 ff I B' 0D< fff #1B& >1' ! 1&==110 ff '-' D1' 1<A' &=' D1' ' 1A1B100& 0

' ' D'0' ' ' #1' 1-<= 1A1' & A1 -1A' 5ff 10 <## '00D1A' # ' D1' 0<>1' <?= & ' '1 ff D<' KD1-0&1 , ' D<' D1' 01'A' F '= >' BD'1#'00D&C' &=' <-R#? ' D& > <0' BD'1#'00D&C' &=' & a1' 'BD< A1' 00D&C1' &=' F -BD10 1' F '= >' '00D&C' &=' "? 1D<>' B A > &-A1' 00D&C' &=' <ff 10#? ff & '1- ' &=' D1 > ff D1 1<= 1 ' 0D< fff =& ?-1' &' A1B1<0 ff & '<- '&=' D1 ' 110' &' #1' +& A1' #1' 1- ' & D1 ' K< 0 ff D<' D1-' D1 ' D<' 0&& ' 0D< fff 0?BB1A1' D1 > ' & 1- ' &=' D1 > ' '-' D1' 01'A' 110' I ' '00D&CC 'aa10 ff 5ff 1 , ' &=' D1 > ' 5ff D1 ' 0?BB100&? 0' I ' D1' 0?BB100&? 0' &=' 1 , ' &=' D1 > ff 0D< fff D<+1' 0?BB100 +1 ff 1' =& ' 1 , ff ' ff a1' <?= & ' '1' 5ff C&K1 ' &' A&&' & A 1' 1L1B? 1' <-A' C=& >1' D1' , ' -.' 01'A' F ff ' 5ff 1 , ' C '1' D1 &=ff &' -ff ' D1' & D1 ' D<' 0D< fff 0? + +1 ff <0' D1' 0<>1' 01 ff =1' '00D&CC10' 0D-ff A1' &?.D ' & ' > .D ' A&' '- &' <-A' =& ' D1' 0<>1' D1 ' B&- -?1A' '-' C ff< -1' ff ==1 ff <-A' <0' =' D1' 01'A' C0&-10' <-A' 0<' 0D< fff 0?BB1A1' D<A1' D1 ' C ff< -1' C&00100' &-0' '-' D1 ' 01'A' 110' I ' 00D&CC 'a10' <' D'0' C01- ' >1' 5ff K1 1' K1 ff <-A' C=' 1 ff ' -<>1A' '-' D'0' C01 ' Q ff 1 ' V

V' D'0' <-A ' D1' D<C 1 0' '> >1A'< 1 ff ' =& ff &K'-.' < 1' -&K' =& ' D1' =' 0 ' '>1' C '- 1A' <0' C< ' &=' D1' < ? 1' &=' D'0' 100' &-;' ! & >1 ' '- 1A' & ff 1= '&-0' &=' D1' < ? 1' 1-A1A' K ' D' D<C 1 ' e ' '# '

&>38. ‘0 ‘ * ‘G?: >>:

3 6’ WW

<’ 3"&-#& !

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’&’&2!- &!/’."/!@-!/’ -/’!2 ;&22 !/’Y;!)>’ !’2 1!’0E."&/!’ ’/0"@-*’.!’2!&/’ !"1!’.’%’H @!"!Z C’0-.’ !’ @1!’ !’ 2!&/’ &"!’ .-2 ;+!Z 5# B!+@2 & ’5# !3@.’ !1’;!’ .+@’C’ 0++@’#.-!-’C’ &/’.’ +’ !’ .1!Z ."!2!&/’ ’ ’20#’ @1!’ Z’ !’2 1!’ &"!’ .-2 ;+!Z 5# B!+ 2 & <.’" # 0-’."!-@’ .!"-(’ !&” 0 #!22. "!2’7@+’2 &H<!L."/.’2 & !’ &"!’*.-/’5# M&-*’.” .Z<Z 1 "# 0-/&2!Z 0-.’ !’2!&/’ .7-!’.’ +@2’;!’@’ Y;!`!’ .-!’.” .’@1!Z &-’!,@.’ !’2!&/’L@!"!Z@’!-@20# !’2 & @-*’;!’ ’ !-’.!’M&-*’.0< .0 &*-!’ ."/!’(” &Z’ "!2."!” .’ -*+.-/!’.” !’@1!’;!@-*’.0"’!@ # ."/!@-!’20 &##&!-’C’20"!’#.-/0@’.” 20"!’.1&’!@0 #!L.’ !"!’2!&/’1 "# 0-/&2!Z.’ .!’2<&/’ <!h " /’@’ !’M@-*’-.” &Z’2!&/’ "!2."!” .’ -*+.-/!’.” !’ @” +!’;!@-*’ !” /0!’-.&#!’*!’!-’.’ -@20# !’2 & @-*’<’!@-!’.”/!@-!’-.-!’20# !’20 &##&!-’-!’20"!’#.-/0^ &.” 20"!’#.-’!@0-#!’.’ !’2!&/’ "# 0-/&2!Z.’ !’2!&/’ +!<>’ !-’.&!’ &"!’ .-2 ;+!Z C’B!+@22 H’.’ "# 0-!Z.”2!&/’.” !’ @1!’;!@-*’!’5#"!!@-!’&-’ !’ -/!Z.’ !1’C’!’<@#’ !1. !’2!&/ 02 01!Z’5# 0;_&/&!:@.7 #;.’!’ !’ !&/’% %%&H’ &’ &&&H2’ ’&H.

) ’);@) "!2."!” ’ - 1 §’-1A’’-’ D1’ ’.’-<§’ =

!&’ 101 +< ’&-’&=’ <§<’0§’<-A’ D1’ <C§1’ D1 1§’ iB

E <-’ &’ D1’ < & §’ I 1’&=’ D1’ <C§1§’ &=’ D1’ ?0 &>0’ "?’10’ &-’ F &&§’ D1 1§’=& ’ D1’ 1-’<’&=’*(’ 1< 0

< 55’ L ’ /’ D1 1&=’ &’ #1’ C<’A’ &’ D1’ 1<0? 1’&=’ <§<’0§’=& ’ D1’ F <.10§’ I B 8&= D1’ =’B1 0’<-A’ &§A’1 0

&C’ &’ D1’ ?0 ?>1 0§’ ’ 11’&=’ F &&§0’<’ &-A&-

< ’ < 0’;’ ."."&/!/);@ !’ M&-*’.” .Z<Z 2 +!’

& ' D1' LC1-B1' D1 1&=' > < ' #1' 1 <'-1A' # ' D1' < & ' I B ' &=' D1' <C#1

' 1 1 <-A'&R' I ' <#&+1' D1' 01'A' '' ' 1 1 =& ' D1' =110' I ' 1K< A10' &=' D1' ?0 ? > 1 0' I ' & > C &1 ' &=' D1' ?0 ? > 10' I ' ?#0'A'10' &=' K&10' B' K&1' =110' K '-' D1' & 1' &=' &-A&- <# 0='BD1' I ' C' > <- ' 0& > 10' &=' &-1 ' <0' # ' D1 > ' 0D<#1 10&-<# ' 1LC1-A1A1' I ' 1-C&'1A # ' D1' & 0 .D ' <A+ 01' B' < 01- 1' &=' D1' =& 01'A' 10& 1 ' &=' -.&-A1' `< P' D1' > 1' #1 -.' ?CC&-' D1' 01'A' B&-A? 1' & ' B&-A? 10' ' -' 1 ' & ' 1 - ' &=' D1' =& 01'A' 1 10

*9 ' < 0' &' #1' C<'A' &' D1' ?A.10 I B

C ' ' ' '0' & A1 -1A' 1-< J 1A' B' 10 <#&'00D1A' # ' D1' 01'A' <?= & ' '1' D< ' D1' 01'A' <' 1' &-0 <#&10' B' ! 1&<0D'CC' &=' ' BD ?- 10' <-A' D1 1' 0?BB1 0&? 0' 1 &1 ' A? -.' D1' 01'A 1 > 1' &=' L+ ' 1 10' D<+1' CB1 +1' B 1 B -1' ' -' 1' #<-A10' &=' 1 > ' B' 1 ' &=' D1 > ' &=' D1' 01'A' ? 0 &> 10' <-A' ?#0'A'10' 0&' B&> -.' & ' . &K -.' & ' &' B&> 1' & ' . &K1' ' > < a1' &' #1' C< A1' ?- &' D1' , -.=' ?.10' 1 .1<?- 10' B' & -1 ' I ' &' 1 ' &=' D1 > ' =& ' D1' > 1' #1 -.' =& ' D1 1' K< .10' =110' B' 1K< A10' & ' I ' <#&+1' 1' =& 01'A' & A -< '1' K<.10' ?0B?>1 i' B' & > C &1 0' =110' <-A' & ' <-A' <#&+1' D1' B&-A? 1' > &=' 1 ' <=& 1' 0C1B'=' 1A' ' <-A' = ' D1' ?0 & > 10' B' 0?#0'A'10' <=& 101'A' & ' #1' D<A1' CB1 +1A' & ' 1 1 -1A' '-' 1- ' &=' ' 1' 01'A' L+ ' 1 10' < 1 -1' -& ' &' D1' 0& > 1' &=' / > < a1' & ' <-A' <#&+1' D1' =& 101'A1' & A' -< '1' K<.10' V =110' I ' 1K< A10' B' B&-A? 1' > &-1 ' = =& 1' 0C1B'=' 1A' < ' D1-' # ' D1' 01'A' <?A'& ' '1' D1' 0< > 1' < 1' &-0 <#1 10' B' ! 1' 00D'CC' &=' ' BD<?- =' B' D1 ' 0?BB100&? 0' B' 1 , ' &=' 1 > ' D<+1' CB1 +1' B' 1 1 -1' &=' 1' 01'A' ?0 ? > 10' B' 0?#0'A'10' <' D< ' 0& > 1' B' 1R ' C 1' D1 &=' D< ' D1-' 0D<' B& > 1' & ' . &K1' &=' 1' 0< 1' ?0 ? > 10' <-A' 0?#0'A'10' K0' -' D< ' 0& > 1' &=' 0' > < a1' 1' 0< > 1' 1001' 0& > 1' &' #1' 1 > C& A1' &K< A1' 1' B&- 1- <B'&-' B' C< > 1- ' &=' 1' 01'A' F < .10' ! 110' B' 1K< A10' &=' D1' =& 01'A' ?.10' 1 .1<?- 10' B' & -1 ' =& ' D1' > 1' #1 -.

" 1=' B'1-B ' &=' &-1' 1< ' 0D<' #1' 0?CC' 1A' # ' D1' 0?BB11A'-.' 1<

' ' ' '0' 1 -<= 1A' & A1 -1A' I ' 10 <#' 00D1A' # ' D1' 01'A' <?Q)& 'A1' D< ' '=' D1' <' 1' &-0 <#1 10' B' ! 1&<0D'C' &=' ' BD<?- 10' <=& 101'A' B' D1 1' 0?BB100&? 10' D<+1' -& ' 1B1 +1A' CB1 +1A' -& ' 1 1 -1A1' &=' 1' 01'A' ?0 ? > 10' 8 B' ?#0'A'10' '-' 1- ' &=' 1' 01'A' L ' 1 10' 1' D&1' 0& > 1' &=' L' ' LL' ' ' ' ' ''' 0' +'' ' A ' <-A' D1' & > 1' &=' D ' =& ' D1' =110' B' 1K< A=' &=' D1' ?0 ? > 1 0' B' & > C &1 ' KO'-' D1' & 1' &=' &-A&-' I ' 1' 0& > 10' &' #1' 1LC1-A1A' <CC 1A8' B' 1 > C& A1' 1 1 ' A? '-.' D1' 01'A' L+ ' 1 10' =& ' B' ?CC&-' 0?==' B'1-' B 0? 1' B&-A? 1-.' &=' D1 ' F &1 10' <-A' F 1 =1 10' 0D& 1 -. I ' > & -.' -A' <0& ' B' 1 1 ' A? -.' D1' 01'A' 1 > 1' =& ' 1=110' B' 1K< A10' &=' D1' , '-.=' ?.10' i 1 .<?- 10' B' & -1 '=& ' D1' > 1' #1 -.' D< ' D1-' # ' D1' 01'A' <DA'& ' '1' D1' =& 01'A' < 1' &-0 <#1 10' B' ! 1&<0D'CC' &=' ' BD<?- =' I ' D1 ' 0?BB100&? 0' & ' 1- ' &=' D1 > ' D<+1' CB1 +1' B' 1 1 -1' &=' 1' ?0 & > 10' B' ?#0'A'10' B& > -.' ' . &K -.' & ' &' B& > 1' B' . &K1' '-' D1' & 1 ' 1 1' & ' 1 10' .=' 1' 01'A' L+ ' 1 10' <0 > &BD1' B' <' 0 BD1' 0& > 10' &=' &-1 ' <0' 0D<' K<-' & ' <a1' &=' 1' =& 01'A' 0 > > 10' &=' L' 0' LL' ' D ' ' ' ' 0' +'' ' A ' D1' ' ' =& ' D1' =110' B' 1K< A10' &=' D1' ?0 ? > 1 0' B' & > C &1 ' 1' & 1' &=' &-A&-' 1' B&-A? ' > &-1 ' A=& 1' 0C1B'=' 1A' 1' > < a1' =& ' 1' =110' B' 1K< A10' &=' D1' , '-.=' ?.10' 1 .1<?- 10' <-A' & -1 ' I ' 1+ ' C< 1' D1 &=

= 1 ' D1'0<'A' 1 >' &=' * (' 1< 0' D1' < & ' I B ' &=' D1' <C1' > < ' 1 <'-' D1' ? & > i 2' 'P' <- ' " 1=' B'1-B ' 0?CC' 1A

' ' ' '0' 1 -<B 1A' & A1 -1A' ;' 10 <#' 00D1A' # ' D1' 01'A' <?Q& ' '1' D< ' '=' D1' 01'A' <' 1' &-0 <#1 10' B' ! 1&<0D'CC' &=' ' BD<?- 10' & ' 1- ' &=' D1 > ' K I\'-' D1' =& 01'A' 1 > 1' &=' L+ ' 1 10' D<+1' -& ' CB1 +1A' -1' 1 1 -1A' <' B' 1 ' &=' 1' 0& > 10' <=& 101'A' D< ' D1-' D1' <' 1' &-0 <#1 10' B' ! 1&<0D'C' <=& 101'A' B' 1R ' =' D1 > ' D<+1' CB1 +1' B' 1 1 -1' '-' D1' D<-A10' &=' 1 > ' B' 1 ' &=' 1 > ' ' -' D1' 1 1' & ' 1 10' D1-' -1L ' =& &K-.' ' <' 0' ? B D1' 0& > 10' &=' &-1 ' <0' D1 ' D1-' 0D<' <a1' & ' K<- 1' &=' D1' =& 101'A' 0& > 1' &=' L' O' LL' ' ' ' ''' 0' +'' ' A ' =& ' 1' F <'.10' ! 110' B' 1K< A10' &=' D1' <C' < -1' D1' , '-.=' '1? 1-<-' B' &?'A'&? 0' <=& 101'A' D1' 01'A' ' ' =& ' D1' =C10' B' 1K< A10' &=' D1' ?0 ? > 1 0' B' & > C &1 ' &=' D1' . 1< 1' ?0 ? > 1' B' ?#0'A'1' K D'-' D1' & 1' &=' &-A&-' D1' B&-A? ' > &-1 ' <=& 1' 0C1B'=' 1A' D1' ' > < a1' =& ' 1' =110' B' 1K< A10' &=' D1' , '-.=' ?.10' 1 .'<?- ' I ' &? -1 ' <0' <=& 1' '0' 0U A' &=' <' ?0 & > 10' B' ?#0'A'10' &=' F &1 10' B' F &&1=1 10' ' =1 10' B<1 A' 0D& ' -.' <-A' > & -.' &=' D1 10' B' 1 ' &=' 1 > ' D1-' &' #1' 0D'CC1A' &' D1' 01'A' <C1' <-A' <0&' &=' <' ?0 ? > 10' B' ?#0'A'10' &=' F &1 10' I ' F & 1=1 10' B' ! 1&<0D'CC' &=' ' BD<?- =' B' 1 '0?BB100&? 0' & ' 1- ' &=' D1 > ' =& ' =' 1' =110' ' 1K< A10' &=' 1' ?0 ? > 1 0' <-A' & > C &1 ' &=' F &1 10' B' F &1 =1 10' K0 '-' =' 1' & 1' &=' &-A& ' 9' D1' B&-A? ' &-1 ' <-A' &,' B' <#&+1' D1' ' > < a1' 1 1' ' A? -.' D1' 01'A' 1 > 1' =& ' D1' K< .10' =110' B' 1K< A10' &=' s-' , '-.=' ?.10' 1 .<?- 10' B' &0 -1 ' >' =& > 1' 1-0? -.' D< ' '0' &' 0< ' &' #1. -' B' = - 0 1' '-' 1 , '01B&-A1' 1 1' &=' =' 1' 0< > 1' 1 10' D1' 01 A' <BB& > C ' =& ' D1' 1 1' B1A1- ' <-A' 0&' 0?BB100 +1' A? -.' D1' 0< > 1' 1 10' &' #1. " <-A' 1-A1' D1 '<B &> C ' &=' D1 ' 1 1 -A 10' <-A' 1B1C 10' B& > -.' B' . &K -.' &=' 1' 01'A' ?0 ? > 10' B' ?#0'A'10' '-' D1' 1 1' 0?#01H?1-' =& ' 1' 1 1' B1A1- ' <-A' <' 0?BD1' 0& > 10' &=' > &-1 ' <0' 0D<' #1' =&?-A1' A?1' ?CC&-' D<BB& > C ' &=' D1' 01'A' <' 1' &-0 <#1 10' ' ! 1&<0D'C' &=' ' B=' <?- =' &' #1' C< A1' ?- &' D1' , '-.' &?0' &? <'.-' & A1' '-' 0 1 -.' > &-1 ' &=' -.&-A1

:5 ' %A ' C1 'C&?-A' &=' -18 -' A' &=' D1' &A' 1 0' F <.10' 0D<' #1' A1A?A1A' <-A' <BB&?- 1A' =&

' KD1 ' D1' <C < -1' '1? 1-<-' B' &?'A'&? 0' &=' 1' 01'A' &K-1' <0 1 10' B' < BD10' D<+1' 1B1 +1A' <=& 1' D'0' > 1' 1' ' 1 A1' C 1' &=' D1 ' K< .10' '-' + <1' &-1 ' <-A' D< ' D1 ' =& ' 5 < -1' B<?010' D<+1' <. 1 A' &' D<+1' <-A' CB1 +1' D1' 0<'A' D1 1' C< 1' '-' 1A 1' > &-1 ' <-A' -& ' '-' +' < 10' ' 0' & A1 -1A' # ' 1' 01'A' <?=& ' '1' D< ' L & A ' &=' 1 ' ' &=' D1' 0< > 1' 1 A1' C< 1' A? '-.' 1' 01'A' 1 > 1' &=' L+ ' 1 10' &' #1' A1A? 1A' <-A' <#< 1A' &K0' &=' D1' K< .10' =110' I ' 1K< A10' &=' D1' 0< > 1' <C' < -1' '1? 1-<-' i B i &?&A' &? 0' B' 1+ ' &=' D1 > ' 0&' 1 &=' &' #1' C< A1' '-' 1A 1' > &-1 ' <-A' D< ' 1' <' 1' &-0 <#1 10' B' ! 1&' 0D'CC' <=& 101'A' <-A' 1=1' 0?BB100&? 0' A? -.' D1' 01'A' 1 > 1' &=' L+ ' 1 10' 0D<' <?-0K1 1' D1' , '-.=' E <B1' '-' D1 1' <BB& > C 1' &=' D1' 01'A' L' A ' &=' 1+0 ' 0?BD1' ' ' &=' 1' 01'A' F <'.10' =110' B' 1K< A10' &=' 1' 01'A' <C' < -1' '1? 1-<-' <-A' &?'A'&? 0' '=' B1 0' 1-B'&-1 0' B' ! 1&A< 10' &=' 1' 01'A' & K-' &=' 1 0' B' <0 1' D1 1' B' & K 1' &=' - 0#<-a1' <-A' <0&' 1' , '-.=' <0 1 10' &=' E? 0-10' B' < > > 10' B' < BD10' &=' 1' 0< > 1' # ' &BB<0'&-' &=' D'0' Q 1

< ' ' &=' D1' <C1' I B ' BD< .1<#1' &-' K' D' D1' ?0 & > 0' &-' F &&' I B '

' ' ' 'Z & A1 -1A' 1-<A1A' B' 10 <#' 00D1A' # ' D1' 01'A' <?Q& ' =1' D< ' -1' D1 ' D1' 0<'A' <' 1' &-0 <#1 10' B' ! 1' 0D'C' &=' -' BD<?- =' -B' 1 ' 0?BB100&? 0' -1' 1 - ' &=' 1 > ' # ' , ?1' &=' '0' T 1 -1' # ' <- ' & D1 ' A' 1' > <A1' & ' &' #1' > <A1' '-' D'0' 0C01- ' C1 > 1 - ' 9' #1' BD< .1A' ` B' 0' BD< .1<#1' K '& ' &=' <- ' & 1 ' & ' > &' 0& > 10' &=' &-1 ' B& > -.' & ' . &K -.' C+' &' B& > 1' & ' . &K1' &=' D1' ?0 & > 10' B' ?#0'A'10' <#&+1' 01'A' & ' 1- ' &=' 1 > ' & ' &=' 1- ' & D1 ' #? ' #-1 ' KO' 1' 0& > 1' B' 0& > > 10' &=' &-1 ' D< ' 0D<' B& > 1' & ' . &K1' &=' D1' ?0 ? > 10' B' 0?#0'A'10' &=' 1' F & 1 10' B' F & 1 =1 10' 0D& ' -.' I ' > & -.' & + A1A' <' 1' &-0 <#1 10' B' ! 1&<0D'CC' &=' - BD<?- 10' <' C< ' 1 1 ' 1' 01'A' L' 'LL' ' ' ' ''' 0' +'' ' A ' 1' ' ' D1' > < a1' <-A' B& -A? 1' > &-1 ' '-' > <-1 ' #1=& 1' 1LC 1001A

'' .'"<1.# !' 2' /&!'2/!2'. ' !'2!&/'& # 0-/&2!2'. ' !'2 &!'@2'"!#!@'!/'.-!+@'1.-!@'&-'*.+/!'.'" 2&+'!"'7 &# !' !'-.' #.0"2'7@/&&-' &2'"!+1!'-.'"#--.'#.1_'.' !' ".0 !!.' !'M@-*<'"!+1!'-.'.' !'1 "# 0- '.7-!"2'.' !'2!&/'*.+/!'C' 1.-!@'7@ .0'!%# -*!'C'"!# -*!'1 /!'&-' !'+-/!2';!@.-/!' !' !!'7 &# !'!%# 0-*!'C'"!# 0-*!'@' !@' -@'1 E!'20+/!';!' -./&!1'Y;!' /&<2'. !"2 0 !'.'!%#!2 @'!+@'*"!'.02'C' !-++' '&2'."/!@-!/'C'!-#!/' .'"!-@'2O# !'!%# 0-*!'C'"!# 0-*!' &-&/!'.'" .';!'1 /!'<+@' !'2!&/' &"!' .2 ;+!2'5B B!+2&'.'&,#]0-'."!-@'.' !1' ."'!$@'@1!'.' !'2!&/'%'H@!"!2'#.-<"&!' .' !'!2 0 ' !@' '"!-@'.' !1';!'-. ' 0" !/'!%!/'&1 +! !/'!1 !# !/'-.'" !1 !# ;+!

]
LBD<-.1'<-A' 181LBD<-.1'&=' &-1'<&&K1A'&' D1' < &'
' D1' < 1

'' =? D1 >&1''' '0'& A1 -1A'1-<'''1A' '10<#&'0 D A1'# ' D1' 01'A' <?A&&' '1' D<' D1' <C&1' KD'BD1' '0'-&K1'<' <&< 0' 0D<&& -& ' #1' 1>& +1A'=&>1 D1-0'A? -.' D1' 01'A' 1 >1'&=' L+' 1 10' -&' <= 1' D<' ?-&' 0?BD1' >1'<0' D1' < 1' &-0 <#&10' I' !1&<0D'C' &=' ,BD<?-=' &=' D1' 01'A' <C&1' <' <&< 0' #1' =?&& ' 0< '0= 1A' I' C<'A' <0' <#&+1' '0' 01'A' &=' <&& D1' =& 01'A' 0&>>10& -A' =' D1' 01'A' <C&1' D<CC1-'=& '1-' >< 'B<?01' E3'#1' 1>&+1A' B&- '1' D1 1?-&' D<' =&>1' D<' >1' D1' 01'A' &-0 <#&10' 5B !1&<0D'C' &=' >BD<?-=' -1' 1-' &=' D1>'#1' BD< .1A' &' BD< .1<#&1' &' D1' C< >1-'&=' 1-' &=' D1' 01'A' K<'.10' =110' I' 1K< A10' '-'<-' K 01

W
F D<' 1 BD<-0' 0D<&& D<+1' &'B1''-' D1' &? 0'&=' D1' <C&1

' ''0' 1-<#&1A' & A1 -1A' I' 10 <#&'00D1A' D ' D1' 01'A' <?Q=& ' '1& D<' $ '' BD<?-' -&K1' #1 -.'&=' &? 1' 01'A' 0 <C&1' & ' D1 1<= 1 ' &' #1' 1& 81'' ' +& B1' -1' D<+1' 1-'0<--.=' '-' 1-' &? 1' &' &? 10' D1 1<= 1 ' &' #1' DC&A1' K D'-' &? 1' 01'A' <C&1' <=& 1' D1' <' 1' &-0 <#&10' <-A' =1&<0D'C' &=' ' BD<?-=' &=' D1' 01'A' <C&1& ' 1-' '-' 1-' &? 1' &' &? 10' D<' D1 1'0D<&#1' D&&A1' <=& 1' D1' '1? 1-<-' &-0 <#&10' <-A' ! 1&<0D'C' &=' -&BD<?-10' 0&' <1-1A' &' #1' 01 <&& ' 10 & 1A& D<' '0' &' 0<' ?>=1' <=!& A1' 0&-1' &=' ? -=1' <==& A' 0H? 1' 'B& ! 1&<0D'C' &=' 'BD<?- '&=' D1' 01'A' <C&1& #?' 0?BD1' <0' <' D<' >1' 0D<&& D<+1' F &&10' I' F &&=1&&10' & ' & D1 ' BD<?-A 01' '-' D1' 01'A' <C&1' K D'-' D1' &K-1' &=' <&< 0' &=' D'0' &K-1' CC 1'' BD<?-A 01' & '0?BD1' <0' <' D<' >1' 0D<&#1' =<Q &? 10' & ' &? -1 0' &' & '=& '1-' '5BD<?-' & ' >< BD<?-=' D1-' AK1&& -.' K D'-' D'0' 1<&> 1' &=' -.&&CA1&' <' D<' >1' D<+ -.' K D'-' D1' 01'A' &K-1' &=' <&< 0' D1' ?&1' '.? A -.'&=' D'0' ><'0 1 0' .&&A '<-A' >< BD<?-A 01&' & ' 0?BD1' <0' <' D<' >1' 0D<&& D1 1' BD< .1' K D'-'9 D1' 01'A' <C&1' =& ' D >' 01&=1' & ' =& ' D'0' <'0 1 &?CC&-' C1 -1' C'=& =<' ' <'1 ' >1' D<' D1' 0& 0D<&& A&(' & ' 01 ' LL' '&' D1' &-1' D<&=1' D1 C=' &' D1' , '-.' C? 1' & <'.-1' & A1&' <-A' D1' & D1 ' D<&=1' &' D1' = -A1 ' & ' C &+1 ' &=' D1' 0<>1'6 D1' , -.=' '1? 1-<-' '<-A' & D1 '&=' D'0' &? -01&& D1 ' =& ' D1' >1'#1 -.' &-1& ' 1LB1C & <0)

1 '&'&0' &='B1 ' 1 0&-0'=& ' D1' 1+1 0<& &=' D1' 0<'-A1 0' &=' D1>01&+10' & ' D1' ' -B10 & 0'

Q 3 6' W

"8'"!2 & 0 !' #&!-/'$&Z 2.-&Z c' -1'6<*!1

', '-.'&? ' & <'.-1' & A1& B&-0 A1 -.' D<' A' <5 >1-'C0&-10& K D &='0&>1'&=' A'1>' I' 0&>1'&=' D1' ' A-B10 10' K1 1' #&' < 1 -1A'&=' '.D' 1<0&-'=& ' A' 0' &==1-010'# ' D1>'B&>' 1A' I' A&&-' <1-0' D1' -< ? <&&1' A?1 '1' &=' D1' ' <&&1.'<?-B1& ><a1' 5B D<+1' ><A1' '-0 <?-1' I' A'&'.1-1' C? 0? 1' '-' D1' >&0' D?>#&1' K 01' &' D'0' '.D-1001' &=' D'0' ' B ' 5B C' '1' &' D<+1' D1' 01 A' < 1 -A&? 1+01A' I' D1' 0<>1' C0&-10' 0&' < 1 -1A' &' #1' 01 <&& ' 10 & 1A& D<' '0' &' 0<' ?>=1' <=!& A1' 0&-1' &=' ? -=1' <==& A' 0H? 1' &D-' < -&-' 0&--1' &=' &#1 ' 1-&-'&< 1' &=' !<&&10A&-' '-' D1' &?-'1' &=' F '& 1 ' &#1 ' < B& ==' 0&-1' &' &D-' < B& ==' , -.D' &< 1' & A1' ! &\K< 1 ' D&><0' &?-=& A1' 0&--1' 5B D1 1' &' '>&-' &?- C A' , -.D' D&><0' F -AD<>'0&--1' &' &D-' F -A1D<>' , -.D' D&><0' 1&& 0&--1' &' <>10' 1&& ' , -.D' &D-' D< &1&-' 0& -1' &' 'BD< A1' D< &1&-' , -.D' D< &10' & ==# A1' &-'1' <-A' D1 1' &' <-1' 0?0 1' I' D1 1' &' D&><0' &? 1-1' &< 1' '1' &=' "1+&-D 1' &D-' <&& ' &=' BD1#< &K1' '-' D1' &?-'1' &=' & D<>C &-' E1-'&><-' D1', '-.=' '.D-10' &=' D'0' 10C'<&& . <B1' ' B ' I' C1 '1 #1 -.' 0& '=& ' 1-' 0?BD1' -- &?. D' <-A' =<&& &=' 1-' &=' D'0' 0?#.'1Q =' '-' 0?BD' B<01 '0' D1 =& ' 1-A -1A' &' D1 1' I' 0C1A1' 10&-<&& ' D1' 01'A' C1 'B'&-1 0 0&' =' D1' K1 1' &-+1-1-' >1' 0C<B1' '-' D'0' 01-' C&'<>C-' <0' '0'-& '=& ' D1'. 1<' 5B K1 .D 1' ><1 0' B&- '+ -.' D1' B&>1-' KC<&1' &=' D'0' &<-A1' 1< 1A' '-' D1' 0<>1' -A' D<' D1' 01'A' C&'<>1-' A <K1 D' 0&' -1<' ' D1' 1-A1' <-A' D<' <=1' D1' 0<>1' D'0' '.D-10' '0' -& ' > -A1A' =& ' D1' 1<0' &=' D'0' 0?#.'1A ' K0&K0' . 1 ' -1B100< 1' 5B ? .1-' B<?010' &=' &&-.1' >1' &' B<&'1' '0&>&-1' <' -1K1' C&'<>1-' # ' KD'BD1' &&-.1' <Q=1' &=' >1' D1' 01'A' 0?1 1 0' 'C1 'B'&-1 08K1 1' 5B 0D?&A<' #1' A'01C?=& 1A' B' '-' A'0C< 1' &=' 1LC1A'B'&-' &=' D1 ' 0?1 =' C1 'B'&-0' 5B B<?010' &-1 1001' B&-+1-'1-' 1> A'1' =& ' D1>'WK1 1' C? +1 A1' '-' D'0' #1D<?&=1;' F D1 =& 1' <-A' '-' B&-0'A1 <B'&-' &=' 1' C>'0010' D1', -.=' '.D-1001' '0' <.. 11A' 5B B&-1-1A' D<' ' '#1' 1-<B 1A' # ' D1' & A=' 0C?1&&=' 1>C& 1&&=' 5B D1' &>1-0' '-' D'0' 01-'C&1>1-' <001>##1A' ' # ' <?A;& ' '1' &=' D1' 0<>1' D<' D1', '-.=' '.D-1001' =&>1D1-0=& D1'A? -.' D'0' =' 1' 0D<&& D<+1' C&<-1' 5B =?&& <?=' & ' '1' 5B CCK1' # ' D'0' 1 1 'C<1-' ?-A1 'D'0' . 1 '01<&& ' 1+1 01' <--?&" 1C1&1' <-A' <+& A1' <&& D1' <1-A&? 0' &=' D1' 01'A' C0A-10' I' 1 ' &=' 'D1>' <-A' D1' D1 10' &=' 1 ' &=' D1>' -A' C=' <&& D1 'C0&-10' 5B D1' D1 10' &='0?BD1' C0&-10' 5B 1 ' C=' D1>' <0' D<D1' #1' < 1 -1A' &=' '.D' 1<0&-' # ' <Q 1' &=' C=1>1-' & ' `#1' D1' B&>1-' <K1' <1' -' >1' =&' D1' LL' ' A<' &=' ?.?0' D1'= 0 1' 1 1' &=' D'0' >&0' -&#1' 1'.-1' &' D1' = 0 1' A<' &=' D' 'C01-' C&1>1-' ' -A' <&0&' &=' <&& C0&-10' < 1'-1A' '-' 5B # ' D'0' C01-C <>1-' <-A' <&0&' &=' <&& D1' C0&-10' < 1 -1A' &=' 1<0&-' <' 1-' >1' A? -.' D1' 1'.-1' &=', '-.' 'BD< A' D1' D1 A' <0K1&& `#1' P' D1' B&K 0' '& A 1' &=' D1' B&>1-' &<K10' <0' # ' <?Q=& ' '1' &=' C&1>1-' & ' & D1 K 01;' -A' =? D1 >&1' D1', '-.=' E <B1' # ' D'0' &1 1 0' C< 1-10' ?-A 1' D'0' 01'A' . 1 ' 01<&& ' D<+1' =?&& <?A& ' '1' I' C&K1' & 10 & 1' D1' 0<-1' C0&-10' 0&' < 1 -1A' <-A' D1' D1 10' 5B 1,' &=' D1>' I' `0&'/'P' 1-D<##&1' D1>' '-' -<>1' #&&A1' ' '-D1' <?-B1' <0' =' D1' 01'A' < 1 -A&? 0' & ' 1-' &=' D1>' D<A1' -1 ' #1' D<A1' -1' >< A1' <-A' D<' D1' 01'A' ' 10' C< 1-=' 1D1 0 C.' D1' 01'A' 1 0<&& 1C1&&1' <A&?&&<B'&-' 5B <A+& A<?-1' &=' D'0' 01'A' &=' 1 -A&? 0' & ' 1-' &=' D1>' 5B D1' 10 ' ?B'&-R' iB' 1-D<#&1>1-' =' &=' D1' 01'A' C0&-10' & ' 1-' &=' D1>' 5B D1-D1 ' <?-B1' B&-1 -1A' '-' 1-' &=' D1', '-.=' 01'A' 10' C< 1-' < ' 1-' >1' D1 1<=1' C' #1' ><A1' <BB& A -.' &' D1' 1==1Qa1' &=' D'0' <T 1' DH' &0' .&&A' 1==1 ?<&&' <-A' <A+< &<##1' '-' D1' <K1' &' 1 ' &=' D1' 0<>1' C0&-10' & KD&>1' D1 ' 0D<&##1' ><A1' <B & A -.' &' D1' 1 !1Q 1' 1-&?' C? C& '. <?-=' 5B K& A10' '-' D1' 0<>1' 0&' ><A1' <BB& A -.' &' D1' 1=!1 &1' &=' D'0' <Q 1' <0' =' D1' 0<>1' >< 1 0' K& A=' 1-&? 10' I' C? C& 'B&-1 -1A' '-' 1-' &=' D1' 01'A' ' 10' C< 1-10' 0&' ><A1' K1 1' =?&& ''-< 1A' 10 <#&'00D1A' '<?Q&& 1A' # '<?=& ' 1' &=' C&'<>1-

&+'0&'=& ' E <-110'# ' 1 1 0' <1-'&=' ,'-.' AK'

C &+ " " <&K1' D<'<&& C0&-10' D<'D<+1&'D&&A1-'1-' D&-&? 0' <0 1&&10' & A10D'CC10' <-1' C-A10' 1D =' =110' && B10'<--?' '10' =1=1 >10' 1-'BD< .10'&'# '10' =<?-BD1' & ' & D1' 1 1A' <>1-' & ' C&00100'&-0&# ' D1', '-.=' 10' C< 1-' C +1' 01<&& C&<B< A1' C' '&&10' <00 .-1A&' '-' =11'0'>C&1' =11' <' B' &'=& ' 1>1' &=' & =!1' & ' 1 10' &' <' K &&&' &' # ' 10' C< 1-=' ><A1' # ', '-.' AK< A1' D1' ''' 0&' 0D<&& D<+1' D&&A1' '1D & 1' &' D1>' D1' D1 10' 5B' <00'.-10&< 1-0'0?BD1' C0&-1 '<0' 0&' D1 1<=1' 0D<&#1' 10 & 1A' 5R D1' D1 10' I' <00'.-10' <-A' < 1-0' <&& D1' & D1' ?01' <-A' < 1-0' -C&-' & D1' C0&-10&& <&& D1' 0<>1' D&-&? 0' <0 1&&10' < 0' & A0D'CC10' &<-A=' 1-=' =110' &=='B10' 1-1' 5B& D1' >'0010&& <=1' D1' =& >1' 1-&?' 5B 1==1Q 1' &=' D1' 0<>1' 10' C< 1-10' C +1' 01<&& C&<B< A' '#'&& 0' <00'.-1A&& <0' =' D'0' A&1' & ' 1-' 0?BD1' 10&& ?B'&-' & D1>' 5 7 # D<A1' -1 '#1-' D<A1' & ' ><A1' 0

0# ' ' 0' P

0' ' BD1A?&1&& <--1L1A' & D1' '.'-<&& A=&& '0' 1-1 1A&& <0' <' 01C< <1' B ' &-' D1' - &&&>1-' '-' D<-B1 ;' 'D<0' <&K< 0' #11-' C '-1A' <0' D<C 1 ']] && ' &=' D'0' 100'&-;' 11' D1' & 1' & D<' D<C 1 && '' ? . ' Y

! ’ 22 2

% .] P + .’ 4 ’ ; %

1B’ <ﬂ &=’ D1’ ,’- ./0’ 1 1 0’ < 1- 0ﬂ A< 1A’ *($?ﬂ4 L$ ’ . <- ’-.’ &’ D1’ ##100’ <-A’ &-+1- ’&=’ D1’ &-<0 1 ’&=’ &-’ <-’ B 1’&=’ <-A’ ’-’ -1 ﬂ K’ D’ D1’ A+&K<&-’&=’ D1’ D? BDﬂ IB

])’ D1’a ’- .’ &?// &? <’.-1’ & A1’ I ’ D1’ 0C?1ﬂﬂ=’ I ’ 1> C& 1ﬂﬂ=’ I ’ D1’ &>1-0’ ’-’ D’0’ 01- ’ C@1>1- ’ D@&0 1’ D?>#ﬂ ’ #101BD1 D’ &’ ’.D-1001’ &0/ A< @ ’ < ’B1R’ D1’ D#< 001’ ’ D1’ &+1- ’&=’ D1’ ﬂ &-<0R ’ &=’&?’ <+ &? 1’ &=2 D1’ 1’- ’ &? ’ #@1001A’ <A ’ < ’ . -’ <-A’ ’.’ 1’&=’ &-’&=’ D1’ & A1 ’&=’ 1 - ’ ?0 1 -’ B<ﬂﬂ1A’ 1’- ’ <+ &? ’ D< ’ KD1 ’›5 -’ ’.D-1001’ # ’ &’ @1 1 0’C< 1- ’ ?-A1 ’ &// .’ ’ 01<ﬂﬂﬂ D1 -.’ A< 1’ D1’L+’ A< ’&=’ ?ﬂ’ ’ D1’ L+’ ’ 1 1’&=’ -’ >&0 1’ -&#@1’ 1’.-1ﬂ &=’ D1’0C1B’<ﬂ A1+&B’&-’ ’ <==1BB’&-’ D1’ KD’BD1’ 1’ D<A1’ I ’ #< 1’ C’ 1 - ’ <+ &? ’ &// & A1’ D?’ ’0 1’ I ’ D1’ #@1001A’ <-A’ .@& ’&?0’+ . -1’ < 1’ D 0’ >&A1 ’ I ’ 1 - ’ . 1ﬂ ’-’ KD&0’D&-& ’ D1’ &-<0R 1’&=’ &-’ #10 A=’ < -1=& A’ ’-’ D1’ &?- ’ &=’ ’AA’ &=’ D1’& A1 ’&=’ < ’ ?0 1-0’B<ﬂﬂ1A’ <’- ’ <+ &0/ 0’ =&?-A1Aﬂ <-A’ = ’& D1 ’ &-0’A1 <B’&-0’ &’ ’.D-1001’ >&+ -.ﬂ &=’ &’0C1B’<ﬂﬂ . <B1’ . <?- 1A’ =& ’ &K’ I ’ &?’ D1 10’ &’ D1’ 01’A’ ##1001’ I ’ &+1- ’ &=’ D1’ &-<0R ’ <=& 01 A’ <-’<B 1’ &=’ @&-A1’ CB1ﬂﬂ’ &=’ &?’ <-1 ’&=’ -1 ’ K’ D’ D1’ <CC? 1-<-B1ﬂ K D’ D1’ <A+&?0&-’ &=’ D1’ D? D1’&=’ -1 ’ K0’ D1’ D<C1ﬂﬂ &=’ F 10 &-’ <-A’ C& B’&-’ &=’ >’ &-ﬂ <-A’ K D’ <ﬂﬂ D1’ &-A10’ I ’ 1D ’ I ’& D1 ’ D1 ’<CC? 1-<-B1’ KD1 ’0&’ ’ D1 ’ #1’ K D’-’ D1’ &?- ’1’ &=’ ?a -.D<>ﬂ &’ D<+1’ I ’ &’ D&@A0’ &’ D1’ 01’A’ ##<001’ I ’ &+1- ’ I ’ &’ D1 ’ ?BB100&? 10ﬂ &=’ &’ ’.D-1001’ <-A’ &=’ &’ D1 10’ ’-’ = 11’ 58 CC1 ?<ﬂﬂ ’>10’ ? -A’ >& 1& ’ &’ ’.D-1001’ &=’ &? ’ 0C1B’<ﬂﬂ . <B1’ . <?- 1A’ ’ D1’ 0<>1’ ##1001’ 5’ &+1- ’ D<’ D1 ’ &=’ &’ ’.D-=1001’ > .D ’ 1B1 +1’ ?a1’ I ’ D&@A1’ D1’ =& 01’A’ <B 1’&=’ @&-A1’ C&00100’&-0’ C=1 =’ I ’ D1 ’ >&@?>1- ’ KD<= &1R’ D1 ’#1ﬂ 58 & D1 ’ >’0010’ &’ D1’ 0<>1’<CC1 1 - -.ﬂ <-A’ D1’ 0<>1’ &’<CC &C 1’ I ’ 0&’<CC <1’’-’ CC ’ ?01’ &’ D&@A1’ &’ D1’0<>1’ ##<001’ <-A’ &+1- ’ ’-’ = 11’ C? 1’ 58 CC1 ?<ﬂﬂ ’>10@ D1’ <?1’ &=’ @<-A=’ 58 1=’ =’ -& ’ &’ #1’C? ’ ’-’ &’ & 1>1 -’ -& K D< -A .@’ + A1A’<@@K1 ’ D<’ D1’ ’B< 1’ &=’ D1’ 01’A’ D? BD1’0?==’B’1- @ ’ K1 1’1-A&K1Aﬂ I’ D< ’<’ B&>C? 1- ’0?>1’ &=’ &-1 ’<= 1 ’ Di’ A’iB 1T ’&-’&=’ D1’ A -< 1’ K1 1’ & A1 -1A’ <-A’ <0 0’.-1Aﬂ &=’ D1’ C=1 =’ 58 = ? 10’ =’ D1’ ’0<>1’ D? BD1’ # ’ D1’ =& 101’A’ ##1<01’ <-A8 &+B- ’<-A’ D1 ’ 0?BB100&? 0ﬂ 1 1@ ’ T ’#1’ C< A1’ 58 A’0 #? 1A’ <>&-.10 1’ D1’ C&?’=1’ C&BD1-0’&=’ D1’C BD1’ D? BD1’ <=& 101’ ’@<=1 ’ D1’ =& >1’&=’ D1’ < ? 1’ D1 &=’><A1’ 58 C+ A1A’@’ <-A’ D< ’ K D&K0’ B- ’ 1-H?’0’B’&-’ &’ 1-H?’0’B#-0’# ’ 1<0&-1’&=’ 1- ’&=’ &’ &=’&=’ =’ D 10’TR’1- ’&=’ D1>ﬂ &’&=’ 1- ’&=’ &’K ’ ’&’&=’ &’D1 10’&’ 1- ’&=’ D1> &=’<A’ H?&%’ A<>C-’’@&’ &=’ 1- ’& D1 ’ &’&=’><?-A1>1=’ ’&’&=’ 1- ’&=’ &’D1 10’KD<’ 0&’1+0 D1 ’ #1’ ’-’ D< ’C 1’ &’ #1’ <a1-’ 58 &’ #1’ ><A1’&’ C? 0?1Aﬂ <-A’K/&K 1- ’&=’ & 3’a 1 0’ C<’1- 10’& ’B&><?-A1>1- C& ’&=’1- ’ &=’ &’D1 10’ <=& 101’A’ ’-’ D< ’ #1D<@=1’ &’ #1’ &C 1 -1Aﬂ <-A’K &K’ =’-1’<-A’=11’ & &’ ’.D-1001’’-’ &’D<>C1 ’ &’ D1’ ?01’&=’ &?1’&’ &?’D1 10’ &’ #1’C< A1’KD< ’0&’1 ’ D1 ’#1@ @0&’ K D&K’1- ’ =1 >1’ <BB&>C’&=’< 1 <.’0’&=’ <BB&>C’ D1 =& 1ﬂ &’1- ’><’C= 1’ &’ &?’ ’.D-1001’&’ &?’D1 10’ &’ #1’D<A1’ C< A’ =& ’ D1’ >’0010’&’1- ’&=’ D1’ >’0010ﬂ -& K’ D0 &-A -.’ D< ’ D1’1LC 1001’>1-B’&-’&=’ D1’ +1 ’ 1 1@ ’ +<@?1’ &’ 1- ’ & D1 ’ +<@?1’ ’B1 1- ’&=’ D1’ C>’0010’&’&=’1- ’&=’ D1>’ #1’ -&’1LC 1001A’ ’ -A’ <@0&’ -& K%0 &-A -.’ D< ’ D1’ =& 101’A’ D? BD1’& ’ D<C1@@ #1’&=’ &’&K-1’C< &-<.1ﬂ <-A’ -& K D0 &-A -.’1- ’0 < ? 1’ <Q 1’& A’-<?-B1’C+ 0’&-’&’ 10 1 -’ <=& 1’010&-0’ &’ D1’B&- 0 ’1’ ><A1’&A1 -1A’ &’C+ A1Aﬂ &’1- ’ & D1 ’ D’-.’B<?01’&’ ><1’KD<’0&’1,’ D’’#1’ ’-&’K @@ -.’ D1’=& 101’A’ ##1001’58 &+1- ’58 D1’ ’0?BB100&? 0’ # ’ &? ’ ’.D-1001’&’ &’D1 10’ <=& 01’A’ ?0 ’B1’ LBD1 &? 0’ D ==10’ < @ ==10’&’1- ’ &’ - 0 1 0ﬂ &’&=’ &’=& 101’A’ D1 10’KD<’0&’ D1 ’#1ﬂ &’#1’&BB<0’&-1A’D? 1A’&’’-’1 ’ D ’.’ &’#1’. 1+1A’=&’ D1’ >’0010X <0’ # ’ D1’0<>1’’ 10’ C @;B- =’ >&1’C@ ’ ’ A& D1’<CC1 1’E -’ B&-0’A1 <B’& ’ KD1 &=’ D<’ ’’ >< ’ C@1<01’ &? ’ ’.D-1001’ # ’ D<001- ’&=’ &’ & A=’ 0C?1@@=’ 58 1>C& 1@@ ’ I ’ D1’ &>1-0’ ’-’ D’0’ 01- ’ C@1>1- ’ <001>#@1Aﬂ &’ 0 <#@ 00D’ &A1 -1’ 58 1-< 1’ D<’ D1’ 01’A’ @1 1 0’ C< 1- ’ >< ’ 0&-A1’ -’=?@@ 0 1 -.D’ <-A’ 1==1A@ﬂ <-A’ 1 D’-.’ B&>C ’01A’ ’-’ D1’ 0<>1ﬂ 58 &’#1’&=’ 0? D1’=& B1’ 58 1==1Q 1’<0’ D&?.D1’ D1’ 0<>1’@1 1 0’C< 1- =’ 58 1 ’ D -.’ D1 ’-’ B&>C ’01A’ K1 1’1- 1A1’&=’ 1B& A1’K& A1’ `#1’hP’ K& A1’@<’ D’0’G 01- ’C@1>1- ’ 58 0&’1-< ’1A’ ’ -A’ D<’ D1’0<>1’@1 1 0’58 B , D’-.1’’-’ D1’0<>1’ 1&- 1 -1A’ =& <- I @1’&=’ C@’<>1- ’D1 <=1 ’ &’ #1’ <a1-

’ ,’ D<’# ’ D1’0<>1’<?I & ’ ’1’ &’ 0 <#@ 00D1’ 58 1-<A@1ﬂ D<’ ’ ’D<CC1-’ &’ ’.D-1001ﬂ <’1-’ >1’A? -.’ D’0’ 1- ’C@1>1-’ & ’1- ’ >1’ #1=& 1’ D1’ LL ’’’ A<’&=’ < BD1’ -1L’B&> -.ﬂ’ &’ B&+1-<?- 1’. <?- 1’ &’ <. 1>1- =’ &’ ><a1’ K0’ D1’ 01’A’ ##10 1’ I ’ &+1- ’/# ’1-A1- ? 10’#1 K1-1’ &? ’ ’.D-1001’ 58 D1’ 01’A’ ##1001’<-A’ &+1- ’B&- - -.’ D1’ 01’A’ B 1’&=’@&-A1’ 58 D1’ <A+&?0&-’&=’ D1’ 1’A D? BD1ﬂ -A’ <@0&’B&-B- -.’<@@ D&01’@<-A10’ I ’ 1D =’KD’BD1’# ’ &’ 01’A’ ’.D-1001’@< 1’ K1 1’58 1’ #1’1-B@& 01A’ &=’ -1KB’ K D’<’ <@1ﬂ <-A’ K ==’’-’ D1’0 A’ <@1’ - 1 - -.’ # ’ 10 ><B’&-’ ’-’B’ B?’ 1’ # ’ D1’ 0<’A’C<@1’ ’L’ @ ” ’L ’=& 1ﬂ <-A’ <@0&’LL ’=& 1’ 9&=’@&-A1’ K D&?’ D1’ 0<>1@ <@1’-1 ’ < & - ?.’ &’ D1’ 0<>1’ <@1ﬂ D1’ 0<>1’ LL0 ’=& 1’ &-1@ ’ &’#1. -1’ B’ 0 1BD1’ = &>1’ D1’.< 1’ 1- -.’’’ & D1’01’A’ @&0? 1’&=’ D1’F 10 ’C ’<-A 0&’.& -.’ &K< A1’ D1’ &? Dﬂ <-A’ D1-’ ? - -.’ &’ <’ +1 1’ B<@@1A’ #o’ #<<’ 01’ & D1 K’01’B<@@1A’ D1’ 1>>100o’ &K< A’ D1’ 0 ﬂ =& ’<’ -1B100< ’1’ 58 <’B&>1-’ ’.D’F 1 ’ = &>1’ D1’01’A’.< 1’ &’ D1’C<00<.1’& ’ D1’01’A’ +1 ’ &= D<> 01ﬂ K ’ D 1’ C’’0D10’ &=’=0 1@K D’ A’ K aa1&D ’ 0’ D1’ &?- ’1’ &=’ ’AAﬂ <-A’ KD1 &=’ D1’01’A’ DD<i’ ’ &+1- ’ 0D<@@ # ’ D1’ 1’A1A1’?-A1 ’ =’1’ 1’ B&1>’01<@@ &-=1@=1’ ==’1’ >&0 ’ 1B1- ’=<A1 ’ ’-’ &A1’ F ’@@’<>’ BD’1#’00D&C’&=’ <?- 1 #? ’ 5 ’& D1’ &’ D1’?01’&=’ &’01’A’ ’.D-1001’ & 1’ 1’01’A’ LL’’’ ’A<’&=’ < BD1’ -1L’B&> -.ﬂ D<’<@@ D&01’1-A1- ? 10’ I ’<@@ . <?- =’B&+1-<?- =’ 58 <. 1>1- ’58 1 ’ D’-.’B&>C ’01A’ K/’-’ D1’ 0<>1’ 1-A1- ? 10’ 0D<@@ 0 &-A1’ B’ #1’ <0’ <-’ Q 1’ &=’ D’0’ 1- ’C@1>1- ’ 5 ’#1’&=’@ a1’ =& B1’ 58 1==1= 1’ <0’ =’ D1’ 0<>1’ 1-A1- ? 10’ <-A’ 1 ’ D’-.’B&>C ’01A’ ’-’ D1’ 0<>1’ K1 1’ 1- 1A1’ ’-’ D’0’ D1’ 0<>1’ ’1- ’C@’<>B-’ K& A1’ `#1 hP’ K& A1’ 58 ’-’ D1’ &@@10’&=’ D1’01’A’ C@1>1- ’ 1><- -.’&=’ 1B& A1@’<-A’ D1 ’ 0D<@@ C < ’ &’ &A1’ =& ’ D1’ +<B’&-’ H=’ & ’ >&0 1’ -&#@1’ <-A’ &’<@@ 0 < 1@

’ D1’ ’$ ’ S (&Z’ +/ - .”!’ &Z’ -.’ ”!2!”@!/’ ’ !’3 +& 1!-’ &#!L

7@ !' ⁺² !' & !1' .;+ ##.-1' .; !-##.91' !1.+01!- ' -/' ⁺² . !'' /' - *!1' < & !1' C' . !'' 0" !- -#!1' ;!+.-*@-*' .' !' 2 1!' 0"# @ !+² /'.02.-' C' ."##. ' .'' !-@ . ' !1' -/' 7 !'' +2.' !' 2!&/' M@-*' #0"!' .0< &*-!' ."/!' ' # 02!/' .' ;!' 1." &2!/' ". "&!/' (# 1 /!'20"!' !'2!&/' -"# !' !+' /'.02.-' # . !'' !' 1+2\!1' .' !'2!&/' ;; 1' # .-'!-' (# .' !&'' &!#!22.0"1' 1'20"!+@' 1'& !' ;!-' #+'@2!/ @' !' !"-!/' .0-2!⁺² . ' !' 2!&/' ;; 1' .'' . ' !'' 0##!22.0"1' .' '!' .' !1' (# !'' 0##!22.0"1' ."' !,⁻² 0"' 2!&/' 0< &*-!' ."/!'#.'!- 0- ! ' #*" 0- ! ' .' !' 2!&/' ;; 1' C' .-'!-' # !'' 0##!22.0"1' ' !' = &>' 1- D0⁹ I B <" !' ;; 1' (# .-'!-' # !'' 0##!22.0"1' 2 +;!' /&2# "*!/' . ' ⁺² /&21!1' S0+-/&21!1' 0;2&/&!1' -/' ⁺² . !'' %!1' !% ###.-1' -/' # "# !1' ." H& !'<1&22!1' (#!,@ . ' !1' +@E!7@2!' 1' . !'' !'' ;!-! &#!1' # .22!22&.-1' ." !-@ . ' !+-' ;!' /&2# "*!/' &-' !"!' .-/!1' # .22!22&.-' ⁿ -/' & '&6H #.1 !-#!' !". ' !' 2!&/' ;; 1' -/' .-'!-' #.'!- 0 !-' # *" 0- !-' ;@' !1' <2!- ' ' .0"!' .0< &*-!' ."/!' 2 ⁺² '!' .##0 @!' .22!/!' # !-H.@!' &-' !' 1 -!' 5# .0"1!' 1' !"! !'' +;!' /!#+ "!/'&-' &!1' !-/!& 0"!2' ⁺² .2!'&../!1' # !- - ' 7 &# !';@' #0"!' !&/ .0< &*-!' ."/!' + !' 7!"!' #@!';!' !-#+.@2!/' . ' -!7!' 7@ ' '3 +!' C' 7@ &-' !' 2 1!' 3& !'#.- !@-@-*';@' !2 &1 ##.-' &-' ##"#0& !' ;@ !' 2!&/' 3 +!' -@-# .02 -/!' 2@%!' 0-/"!' ' # ."@ -/' 7.' . !' -/' +2.' 2 ⁺² '!' 7!- @ . !' . ' .-/!' 7@ .7)' !' 2 1!' 3 +$ -!%' /H.@"@-*' .' !' 2 1!' 3 +!' !' 2 1!' 7!- @ . !' i.-+@ .';!*@--!' # #"!## !' ".1' !' * !'!- !"@-*' &- .' !' 2!&/' #.20"!' .-' !' V!2' &!' #2.'*.@-*' .7 "/!' !' .0 ' -/' !-' 0"-@-*' .' '6@'!'' # ⁺⁺!/' !' 1&2!'./!"7@]!' # !/' !' !1!22!' .7 "/!' !' 2' .'' '-!#!22 "@!' # '#.!1' &* '7 @ ".1!' !' 2!&/' * !' .' !' 22 *!' .,' !' 2!&/' 6@'!'' .' 1@2!' 7 &-' !' &22 !2' .' 2 !+7." '5# 7@EE!- 1' &-' !' .0- &!' .' &//' .' '!' '.+/!' .' (2!&/' M&-*' C' &2' !&"!2' .'' !<1."!H ' &2' +2.'#.'!- 0- !/' # **"!!/';! 7!-!' !' 2!&/' .0'' .0< &*-!' ."/!' -/' !' 2!&/!' ;; 1' # .'!-' ' !' 2!&/!' ;; 1' -/' ."!-'!' ;@ +!"!' /!!/!' 0-/"!' !"!' #.-'!-'C'#.&!-' 2# +!' 2 ⁺² &-!/B!' !' 1.2'6!2!-/'B /!'N-' =& ' &1',-.' ./!'V&++& 1' "# &&!;&22 .H ' . ' - !";0"@' !' 6&* '6!2!-/' 6 /!'' &-' ./!' 6&# "/!' 4&22 . ' .'V@-# !2 !'' b&+!2' 0;!-!@ M-@* ' ."/!' 0;!-!@ @'' .1 1' .'!+⁺² M-@* ' @'' V&++& 1' @+!'' M-@* ' @'' . -' ."/ 0-'M-&* ' -/"!7!' V@0/!2;"!' 62S0@!'' . -'B.%!'b!-&+1 -'6.;!"'V -.'b!-&+1 -' 6&# "/!' @2!'' b!-&+1 -' - .-@B& j !";!"/'b!-&+1 -' # V&++& 1' #!' b!-&+1 -'.' # &-' !' 2!&/'+.-/!2' .'-!7!' !-#+.2!/' 7@ ' -/' 7@ &-' !' 2!&/'3 +!' -/' .' # &-' !' 2!&/'+. /!2.' 7!-@ .!' V@ .7' !'2!&/'3 +!'&-' .0"1!' / ."!2!&/' .'['!' .' !' 2!&/' 1.2!' 6!2!-/' /!'' &-'b./!' V&++& 1' "# !;&22 . ' .' - !";0"@' !' "&* '6!2!-/' /!'' &-' b./!' 6&# "/!' 4022 .< .'V@-# !2 !'' b&+!2' 0;!-!@ M-@* ' ."/!' 0;!-!@ @'' .1 2' .'!+⁺² M-@* ' @'' V&++& 1' @+!'' M-@* ' @'' . -' ."/ &-' &4#&@* ' -/"!7!' V@-/!2."!' $S0@!'' .-'B.%!'b!-&+1 -'6.;!"'V -(b! &+1 &6&# "/!' @2!'' b!-&+1 -' - .-@B@j !";!"/'b!-&+1 -' # V&++& 1' #!' !-&+1 0' 5# .' !"!' !@ !2' # 22&*-!2' .'' !,' .' 02!'.' !'2!&/'M@-*'.0'' .0< &*-!' ."/$' -/'.' &2' !@"!' '0 ;-'#.-/&#&.-' '@' !'$!&/' /'.02.-' "# !' !+&# ."#&.-'7)' !' @< # . !'' !'' 0" !- -#!2' ;!."!' !% "!22!/' .'' !-@ . ' !1'&-' -@' 1 -!'. ' "1!' '!-@' @1!' !'' !' 2!&/' 1." &21!-' # ".) ((-' ;!' !'&# !/'C' E!-' ".1' !' 2!&/!' ;; 1' # .-'!-'.'' ".1!' !' 20##!_2.0"1' 7@ .0' " 0/!'.'' #.'@-' . !' 2!&/!' ;; 1' # .-'!-'.'' . ' !' 0##!22.0"2' ' !-'&' 2 +;!'+! 0 ' .' !' 2!&/' ;; 1' # .-'!-' # .' ;!' 0##!22.0"1' ."!'&- .' !' 2!&/'*".0-/!' -/' + -/!2!-#+.2!' 7@ '5# 7@ &-' !' 2!&/'3 +!' -/'<2.'&- .' !' 2!&/' 7!-@ . !' ' -/'7@ .0' !' 2 1!'3 +!'5# !1' .' '!' '!-H.@!' .' !1'C' .' ;!'' 0##!22.0"1' 1' &-' !"!' @"2 !'!2 !' .'' -/' 1' @ ' !"!' /' ;!-'-.' 20# !' !. 1!-'!2 !'-!' ; "*!@-!' 1 /!' -/'7@ .0' 20@-*' .' !' 2!&/' M&-*' .0'' .03 &*-!' ."/!' .'' .';&1' !@"!1' .@ 20##!22.0"1' ;@ !&#&.-' .0 "!' +!' 1 @-' &#!-1' .'' . !"7@2!' .'' !' <1&22!1' .'' !-@ #!⁺² . ' !1' &!1' !-/!-0"!1' 1' !-@ @-*' -. 7<2 .-<-*

-'Y' &1' .0'' 21/' .0' &*-!' ."/!' *" 0- ! ' .' !' 2!&/' ;; 1' # .'!-' ' !' 2 ⁺² # 02!' &1' 2!-'!-/!-0"!' !'' !' '!"@ "0!' 1! -@-*' #! B!^!' . ' !' 2 1!' .' ;!' !-& !/'" &&!/' ".'!/' # #.- !"1!/';@ 0/."&&!'.' '20 &##&!-' ^!' .' ;!' 1 /$ &-' /<&1' &1' <2!-' +!1!-'-.7!';!*.-' -/' .+/!-' 'V!2 1' !' %%'' / @ .' -0 "H + 2!' 2!' '&1' +2.'#.'!-F-!/' 5# **"!!/' ;! 7!-!' !' 2!&/' M&-*' .0'' .0, &*-!' ."/!' # !' 2!&/' ;; 1' # .-'!-' ' !' 2!&/' ;; 1' # .-'!-'2 ⁺² 1 E!' '20 &##&!-'*" 0-' 0-/V' !'' #.&!-' ! +!'.' -' &1 0& !' .' @'!' 1 "E< .' !' V "/!-'.' !'-!7!' .+!*!' .' V@-# !2 !'' -/' .' !'' 20##!22.0"!2' .'' '0+⁺² "!#.1 !-1' .'' !' +.22!' .' !"!' & !1' !@' 2 ⁺² #2 &&+/!' '!' ;@"! 2.-!' .' !' 2!&/' &-#+. 0"!' .' !' 2!&/' *".0-/!' .!'2 1!' *" 0- `' .' ;!' 1 /!' 0-/!'' 20# !' ".'&2.' -/' #.-/&#&.-' 1' !"! !'' /. !' .+ 7!' g' $'' 2 1!' '&2.' # #.-/&#&.-' .' ;!' !- !"!/' &-' !'2 1`' * 0- !' .' --0@&!' 3".'@/!/' +7!@ '@' !'2!&/' /'.02.-' .'' !' &+!' .' !'2!&/' /'.02.-' ;!';@' 0<+."&&!' .'H<+!1!&' .'' . .!-'@22!' E!-' !'&# !/' '.@H!/' ' !' & ' !".'0 !"+@ E!-' ".1!' !'2!&/' ;; 1' -/' .'!-' .' .!'2!&/' .- 2!"@ .'' !' @1!';!@-*' ' !-'5# ".1!' '@1`⁺² --0&!1' # .!'' # "*!2.' !' 2!&/' .- 2$@ # 72!' //!' # 1 /!';@ "! 2.-'.' !'2!&/' ". "&#&.S' # 1."&21!-' .' !' 2!&/' /'.02.-' 1' +.-*!' 1' !@' 2 ⁺² -.'-.7!' '!' -!' !-H.@!' !' I 1&22!1' .'' !'&1 !/&1!-<"!1!1;"!/' #!22!'(# ;!' ".1! !-1' 1' .'!@/!' .!1' <2!- '&-' -@' &-*' -. 7@ 2 .-/@-*

6.'&K &K +2.' . ' !'2 1!' !. !1' .!&'' !@"!1' -!' 22&*-!2' -.'' -..-' . !'' 7 &# !'2 +;!'!-!. !/'&-' !'c!&/' .-/!2' .' !' N0!' . ' .0"!'2!&/' .0' <-!' ./!' !'M@-*' -!' !'' !@"!1'2 ⁺² 1 E!' -.' !2 !' -.'' !.+ 1!&+'.' !' 2!&/'+.-/!2' .' !' 2!&/' .0"!' .03 &*-!' ."/!'-.'' .' &1' !@"!1' -.'' 20##!22.0"2' -/' !<@ @-&!' ' !' 2!&/' -.7!' !. !1' -/' ⁺² . !'' ' !"! !'' 2 +;!' !-!. !/!'&-' !' 2 1!' +.-/!2' 2.'!-#+.@2!/' -/' . !'' !' <1&22!1' .' .!' 2 1!' 0/!' 2 ⁺² !-' .';!' /!/!' .' .!' -.1;"!' .' ."!' ' !-' !' 2 1!' ."!' '2 ⁺² 2.' 20"'@'!' !'' #. !. !1' 7@ &-' '@!"!' !'' !' 2!&/' #. !. !1' 2 ⁺² /!#! 2!' 2 ⁺² !-!. !' 7!+'!' . !'' 20;_ -Z&< # /&2#"! !' 2.-!' 7 &# !' 2 +;!'-1!/';@ .!' 2!&/' ;; 1' .'' !"!' 0##!22.0"1' .' C'&-' .!' 2!&/'+.-/!2 2.'!-#+.2!/ V@.' !' <1&22!2' ' '!' .' !1' # .' !@"' !@"!1' .'' !$ &-' +@E!' .0"1!' 2' &' &1' ;.'!"!;!"2!/' -/' .' !' 2 1!' 02!' 5#0 .-' 0# `' b.-/E".-2' 1' &1' ;! ."!'U! &!" !/⁻² -/'.') &1' 0"!' 2!&/' .0<&*-!' ."/!' *" 0- !';@) !2!'<2!-' .' \&!' 2 &/' ;; 1' # .-'!-' ' !@' 2 ⁺² '!' 27!⁺² .!2' <2!-' -/!-0"!' 1' ⁺² . !'' *" 0- `< -!#!22 "&!' .'' !' 2!&/' ". "& ##.-' # 1." &21!-' .' ;!' /!' 0-/!'' &1' *"! '2! +!' 7@ .0' !-@ @-!' !!' ' . !'' &-*' .' @1' .'' .' &_02!' & &1' 0-$"&!' .'' - ."!' .'' . !'' + #!' +.' ;!' @/!' # '.0'' 2!&/' .0' &*-!' ."/!' ' ⁺² @1!2' -!#!22 "&!' 2 ⁺² 1 E!' .' !' 2!&/' ;; 1' 5# .-'!-' ' 20 &##&!-' V "" 0-' .'' 20 &##&!-' V "" 0- ' ".1!' @1!' .' @1!' 1' 2';@' .!1' .+;!'/!2@ !/' .'' !SO@"!/!' ' .' .!&-!" & @ ;!'*../' C' + 7! 0⁺² /&2#"*!' .' 5# .'' .!' 2 1!' ' -' V@-!22!' 7 !".' 27!⁺² !' 2!&/' M@"<' #0"!' .< &*-!' ."/!' .' .!' .-' /'`.' &!2!-/!-0"!2' ; !' 2!#!' .' @2 *"! '2! ⁺² 1' +2.' !' 2!&/' ;; 1' # .-'!-' .' .!' (.!'' &!' .' !' 2 1!' !-/!-0"!2' '!' 2! .' !"!' .!-' ! +!' .!' / @ 5# @!' ;.'!2!@/

&+1-<-' # ' D1' '-.'=& ' A'0BD< .'-.' D1' A+&K0&-⁹ I B ' = &>' 1- D0⁹ I B

&+1-<-''-' 1B&>C1-B1'# ' D1' ##100⁹ I B ' D<' D1',-.'0D<⁰⁰ D<+1'<'B1 <'-' -B'&0? 1⁹ <-A'<' &<A'= &>' D1-B1' &' D1' D<>10'

<-A'=& ' !1&==>1-' D1 1&=' &' ?0 110' =& ' &1',-.'

&-A' '&-'&=' 181- ''-' B<01' &=' +' '&-'&=' D1' ##100' = &>' ⁰⁰1' A+ K0&-

D'0' -A1- ? 1' ' 0D<⁰⁰ #1' B&-=' >1A' '-' < ⁰⁰<>1D

--?' ' &' F'-BD10 1' &⁰⁰1.1' =& ' ' D10' &=' -B⁰⁰&0? 1

!1&==110' 0D<⁰⁰ -&' <'=1&=='D1',-.; CC&'- >1-'&=' -1K' !1&==110

E <-0' 0D<D' #1' K' D&?' !'-1⁹ I B

&+1-<-' =& ' F< <-

3 6 ' WWW

K'3 &&.-!'$" <'V&&&'-0 ' "# &.-&2'4!"E!+!@' C' .1!' .1&&2' 0"

&' D1' , -.' &? ' C ,<'.-1' & A

"!!1!-' .'" " & &. -'. ' #!" &-' 2 !2';! 7!!-' . -' 0E!'. ' ." .+E' -/' V&++& 1' "+'. ' . &- 1 ' !"7 "/2' "SO&2' . ' 4!"E!+!@

' D1' >&0 ' D?>#§1' '01' #101BD' D' &' '.D-1001' &' ?1' <-A' =1' D=?§§ 0?#.1 ' <? 'B1' 1 a1§1 ' # &A1 ' <-A' D1' 1' &=' F '§§'<>' §< 1' < H?10' < a1§1 ' <-A' '1' &=' & -.D<>' D< ' KD1 1<0' <CC& - >1-' <BB& A' <. 1>1-' <-A' C< 'B'&-' K<0' D<A' <-A' ><A1' #' K1-1' &D-' §< 1' " ?a1' &=' & ==' =<A1 ' &' D&>0' '1' &=' ? 1 ' <-A' D1' =& 01' A' F '§§' <>' §< 1' 1 H?10' D1-' '1' < 0D<§§ <-A' &=' & -.D<>' # ' K § -.' 0'.-1A' K0' D1' ' 0'.-1' ><-?1§§10' D< ' D1' 01' A' §< 1' " ?a1' 0D?§A' D<+1' D&§A1' <-A' 1-& 1' D1' & A0D' CC10' <-A' <-&? 0' &=' ' '§§ ! <-.D<>' <-K& D' &? D=1§A' !& -B1 ' &A&-' &CD<>' ,1-.D<§§ &? DK<§0D<>' <§+1 '< 1' " BD -.D<>' '01§<-A1' " 'a1'#? D' <-A' 0D<>' D1' D?-A 1A'0' &=' <-A'00D' <-A' E §A1B &001' <-A' A" D?-A 1A' &=' 0D<>' D1' <CC 1-<?-B1' '-' D1' &?-1' &=' & ==' D1' & A0D'CC' <-A' <-1 0' &=' & 0D<>' D& 1D<>' E 1-0 1A' , -<C' 1A -.' F <00D -. &-' &a1' -.§0#< -10' <-A' &?.D &-' D1' =& 10 ' &=' 1'- ' 1&-< A' D1' ? .D' &=' 1>#11' <-A' D1' &==' B1' &=' D1' < § ' <-' '-' D1' &?-1' &=' ?001L' D1' & A0D' CC10' <-A' <-1 0' &=' ! <>§ -.D<>' K ' <L 1A' , 1§0<§§ <BBD10 &-' 101-D<§1' ' 1§#< .D' ?-.< ' & D<>' < 1=1§A' &§§10§1 ' ? &-' <+1 &-' K0' &>10K<§§ &-1D<>' F <§ &-' K' D' 1>1§1 ' "<- -.K& D' <-A' &&§'<-A' D1' ?-A 1A' &=' &&01' K0' D1' <CC? 1-<?-B10' '-' D1' &?-1' &=' ?==§' D1' <-1 ' &=' ' K1§§' K ' D1' <CC? 1-<?-B10' '-' D1' &?-'1' &=' 001L§' D1' <-1 ' &=' F §§ -. &-' K0' D1' <CC? 1-<?-B10' '-' D1' &?-1' &=' 1A3§' <-A' D1' <-1 ' &=' D<B&>#1' '-' D1' &?-1' &=' & D §' <-A' <§§' D1' &-A'0' <-A' 1-=' 1-10' 1+1 0' &-0' <-A' =+' B10' K0' D1' <CC? 1-<?-B10' '-' ' '§§ ! <- -.D<>' <-K& D' &? D=1§A' !& >B1 ' &A&-' &CD<>' ,1-.D<§§ &? DK<§0D<>' <§+< '< 1' " 'BD -.D<>' '01§<-A' " a1§#? .D' <-A' 0D<>' '-' D1' 01' A' &?-'1' &=' & ==' & 0D<>' D& 1D<>' E 1-10 1A' , -<C' 1>#11' 1A -.' F <00D -. &-' &a1' &?.D &-' <-A' , -.10#1 -10' '-' D1' 01' A' &?-1' &=' ?001L' ! <>§ -.D<>' <L0 BA' , 1§0<§§1' <BBD10 &-' 101-D<§1' ' '§#? .D' ?-.< ' &D<>' < =1§A' &§§10§1 ' ? &-' <+1 &-' &>10K<§§10' &-1D<>' F <§ &-' 1>1§ ' " <- -.K& D' <-A' &&' '-' D1' 01' A' &?-1' &=' ?==§' K1§§' '-' D1' &?-1' &=' 001L§' F '§§ -. &-' '-' D1' 01' A' &?-1' &=' 1A§' <-A' D<B&>#1' '-' D1' 01' A' &?-1' &=' & D<>C &-§' <-A' D1' §&-A'0' <-A' 1-=' B<§§1A' &a1-KD< =' '-' &-A&-' K ' D1' <CC? 1-<?-B10' KD'BD1' K1 1' 0&> >1' &=' &D-' 0&>' >1' " ?a1' &=' & ==' D?0D&-A' &' , <R -' §< 1' " ? D10' &=' & ==' <-A' &=' &A1 ' C0&-10' &' D'0' ?01§' '-' <§&K<-B1' <-A' 1B&>C1-B1' &=' D1' <0 1§§'0' & A0D'CC'0' <-1 0' §&-A'0' 1-'0' 1-'0' 1-0'&-0' <-A' +'B10' K0' D1 ' <CC 1-<?-B10' D1 1<=' 1-0? -.§ <§§& 1A' <CC& - 1A' <-A' <00'.-1A' # ' D1' 0<>1' C< 'B'&-' &' D1' 01' A' '1' < 0D<§§ <-A' &=' & -.D<>§ &' D&§A1' D<+1' <-A' 1-& 1§ D<' '0' &' 01 § D1' & A0D' CC'0' <-A' <-1 0' &=' " &- -. &-' DK< 10' D' 0a1' &- -.D<>' , ' a1# ' <§0< ' D& - &-' -A1' E 'C D& C' 1?0D<>' <-A' ? &-' '-' &-A10A<§1' '-' D1' &?-'1' &=' & a1§' D1' & A0D'CC' <-A' <-1 0' &= CC1K& D' 1§ &-' ?0 &-' <-A' <L1 ' '-' D1' &?-1' &=' '-B&§-§' D1' §' & A0D'CC10' <-A' <-1 0' &=' <K-1 ' "&+1 B&? 1' 1 K'BD1' <-A' D10 1=& A' K0' D1' <CC? 1-<?-B10' '-' D1' &?-1' &=' 001L§' D1' & A0D'C' I ' <-1 0' &=' 1. <+1' '-' 1-D1' ' '§§ < §&K1' <-A' F 1-.1' K ' D1' <CC? 1-<?-B10' '-' D1' &?-'1' &=' ?a' D1' <0 1§§ &=' 1A=& A' <-A' D1' & A0D'CC10' <-A' <-1 0' &=' B& =1§A' <?-B1' <-A' L2>1D<>' '-' D1' &?-1' &=' 1A=& A§' D1' <-1 0' &=' <§&?.DA&-' D? §<0 &-' ! §1a1-D&' §0C< D' K0' 1 1A&-' 0C1§§ <-A' , '-. &-' K0' D1' <CC? 1-<?-B1' '-' D1' &?-1' &=' F < K a§' D1' <-1 0' &=' !1--10 <?-&-' §B&>#? ' K ' F 10 &-' <-A' '§ &-' K0' D1' <CC? 1-<?-B10' '-' D1' &?-'1' &=' ?- -.A&-§' D1' < ' &=' &AA10A&-' K ' D1' <CC? 1-<-B1' '-' P)U &?-1' &=' <§&C§'<-A' D1' <-1 0' &=' 1§ &-' &?# < ' &§A& &-' &?-0& 1§" '§1# ' 1. < 1' " <§# ' D<B&>#1' <-A' F ' D1 §1 ' D1' <CC 1-<?-B1' <-A' D1' D?-A 1A' &=' E&0B& 1' K0' D1' <CC? 1-<?-B1' '-' D1' &?-1' &=' 1 B§' D1' <-1 0' &=' 1 # ' - &-' & &-' 1C -.A&-' 10 §<0 &-' < 'A' 00D1#&? -' K0' D1' <CC? 1-<?-B10' '-' D1' &?-1' &=' " 1 #§' D1' < ' &=' F 10 &-' <§A&a1' K ' D1' <CC? 1-<?-B1' '-' D1' &?-1' &=' 1 =§' D1' <-1 0' &=' - &-' ,1-1 ' <-A' ,1-=& A' K0' D1' <CC 1- -BB' '-' D1' &?-1' &=' <>#'..1§' D1' < 0' &=' !?- -.A&-' D& -1 ' &01D<>' <-A' ! -A&-' K0' D1' <CC 1-<?-B1' '-' D1' 01' A' &?-1' &=' ?001L§' D1' < ' &=' & DC1A' ' K ' D1' <CC 1-<?-B1' '-' D1' &?-1' &=' F & B10 1§' <-A' <§§' D1' <-A'0' I ' 1-=' 1-'0' 1 0'&''0' <-A' +'B10' K ' D1' <CC0 1-<?-B ' >' " &- -. &-' DK< 10' D' 0a1' &- -.D<>' , ' a1# ' <§0< ' D& - &-' -A1' E 'C D& C' 1?0D<>' ? &-' '-' &-A10A<§1' '-' D1' 01' A' &?-1' &=' & a1§' CC1K& ' 1§ &-' ?0 &-' <-A' <L1 ' '-' D1' 01' A' &?-1' &=' '-B&§-§' <K-1 ' &>=& A' " &+1 B&? 1' 1 K'BD1' <-A' D10 1=& A' '-' D1' 01' A' &?-1' &=' 001L§' 1. <+1' 1--1' ' 1§>< §&K1' <-A' F 1-.1' '-' D1' 01' A' &?-1' &= ?a§' & =1§A' <?-B1' 1A=& A' <-A' &>1D<>' '-' D1' 01' A' &?-1' &=' 1A=& A§' D1' <-1 0' &=' <§&?.DA&-' D1' 1' A' &?-'1' &=' F < K a§' D1' <-1 0' &=' !1--10 <?-&-' §B&>#? ' K ' F 10 &-' <-A' '§ &-' K0' D1' <CC? 1-<?-B10' '-' D1' &?-'1' &=' ?- -.A&-§' D1' < ' &=' &AA10A&-' K ' D1' <CC? 1-<-B1' '-' P)U &?-1' &=' <§&C§'<-A' D1' <-1 0' &=' 1§ &-' &?# < ' &§A& &-' &?-0& 1§" '§1# ' 1. < 1' " <§# ' D<B&>#1' <-A' F ' D1 §1 ' D1' <CC 1-<?-B1' <-A' D1' D?-A 1A' &=' E&0B& 1' K0' D1' <CC? 1-<?-B1' '-' D1' &?-1' &=' 1 B§' D1' <-1 0' &=' 1 # ' - &-' & &-' 1C -.A&-' 10 §<0 &-' < 'A' 00D1#&? -' K0' D1' <CC? 1-<?-B10' '-' D1' &?-1' &=' " 1 #§' D1' < ' &=' F 10 &-' <§A&a1' K ' D1' <CC? 1-<?-B1' '-' D1' &?-1' &=' 1 =§' D1' <-1 0' &=' - &-' ,1-1 ' <-A' ,1-=& A' K0' D1' <CC 1- -BB' '-' D1' &?-1' &=' <>#'..1§' D1' < 0' &=' !?- -.A&-' D& -1 ' &01D<>' <-A' ! -A&-' K0' D1' <CC 1-<?-B1' '-' D1' 01' A' &?-1' &=' ?001L§' D1' < ' &=' & DC1A' ' K ' D1' <CC 1-<?-B1' '-' D1' &?-1' &=' F & B10 1§' <-A' <§§' D1' <-A'0' I ' 1-=' 1-'0' 1 0'&''0' <-A' +'B10' K ' D1' <CC0 1-<?-B ' >' " &- -. &-' DK< 10' D' 0a1' &- -.D<>' , ' a1# ' <§0< ' D& - &-' -A1' E 'C D& C' 1?0D<>' ? &-' '-' &-A10A<§1' '-' D1' 01' A' &?-1' &=' & a1§' CC1K& ' 1§ &-' ?0 &-' <-A' <L1 ' '-' D1' 01' A' &?-1' &=' '-B&§-§' <K-1 ' &>=& A' " &+1 B&? 1' 1 K'BD1' <-A' D10 1=& A' '-' D1' 01' A' &?-1' &=' 001L§' 1. <+1' 1--1' ' 1§>< §&K1' <-A' F 1-.1' '-' D1' 01' A' &?-1' &= ?a§' & =1§A' <?-B1' 1A=& A' <-A' &>1D<>' '-' D1' 01' A' &?-1' &=' 1A=& A§' D1' 1' A' &?-'1' &=' F < K a§' D1' <-1 0' &=' 1 # ' - &-' & &-' 1C -A&-' 10 §<0 &-' <-A' 00D1#&? -' 1' '-' D1' 01' A' &?-1' &=' " 1 # §' F 10 &-' <§A&a' '-' D1' 01' A' &?-1' &=' 1 =& A§' - &-' ,1-1 ' <-A' ,1-=& A' '-' D1' 01' A' &?-1' &=' <>#'..1' !?- -.A&-' D& -1 ' &01D<>' ! -A&-' '-' D1' 01' A' &?-1' &=' ?001L§' & DC1A' ' '-' D1' 01' A' &?-1' &=' F & B10 §' F 10 > -0 1' '-' D1' &?-1' &=' 'AA§' <-A' '-' <§1 0§' K D'BD' K1 1' &=' D1' 01' A' &D-' 0&> >1' " ?a1' <-A' &=' & D1 ' C0&-10' &' D'0' ?01' &' D<+1' D&§A' <-A' 1-& 1' &' D1' 0<>1' '1' < 0D<§§ <-A' &=' & -.D<>' <BB& A -.' &' D1' 01' A' C 'B'&-' G §§' K D'BD' <0 1§§=' & A0D'CC10' < 0' §<-A' 0' 1-=' <-A' & D1 ' D1' > 0010§' <0K1§§' <CC& - 1A' <-A' <00'.-1A' &' D1' 01' A' §< 1' " ?a1' =<A1 ' &' D1' 01' A' D&>< 0' <0' &' D1' 01' A' '1' < 0D<§§ <-A' &=' ` ' 0&> >1' &=' D1' 01' A' &D-' 0&> >1' " ?a1 &=' & ==' D?0#&-A' &' , <R -' §< 1' " ?BD101' &=' & D=&§a1' §< 1' ` h ª & D1 ' C0&-10' &' D'0' ?01§' ' K<0' & A1 -1A' 0 <#§' 00D1A' <-A 1-<#§1A' # ' D1' <?= & ' 1' &=' & ' C< §' <>1-' ` P' D1' L'' ¼0 A< ' &=' <-?< ' D1' "' OOO 1 1' &=' & ' >&0 ' -&#§1' 1'.-§' D< ' §'1 01' A' <CC& - >1-' <. 1>1-' <BB& A' <-A' C< 'B'&-§' D<A' <-A' ><A1' '-' =& >1' <#&+101' A§' 0D?§A' 0 &-A' #1' <-A' <# A1' .&&A' =1 >1' 0 <#§1' <-A' 1==1B§?1§§' &' D1' 01' A' '1' < 0D<§§ &&-§ §' <BB& A -.' &' D1' 1-? 1' <-A' 1==1 '1' <=& 1' 1D1 01A§' <-A' D< ' D1' 01' A' < 0D<§§ <-A' &=' & -.D<>' D'0' D1' 10' <-A' <00'.-10§' <-A' 1 , ' & D1 ' C0&-1' D<+ -.' & ' A< -' -.' # ' D >' & ' # ' D'0' >1<-10' D1' 01' A' <0 1§§'0' & A0D'CC10' <-1 0' §<-A'0' 1-'0' 1-'0' 1 , 0' &-0' <-A' +'B10§' <-A' & D1 ' C> 0010' K0' D1' <CC 1-<?-B1' &' D1' 0<>1' '1' < §& 1A' <CC& - 1A' <-A' <00'.-1A' '-' =& >1' <=& 1' 1D1 B1A§' & ' '-' <- ' C< B1§§' D1 &=§' 0D?§A' D<+1' D&§A' <-A' 1-& 1' D1' 0<>1' <-A' 1 , ' C< B1§§' D1 &=' &' D1 >' D1' ' D1' 10' <-A' <00'.-10' <BB& A -.' &' D1' ' <00 < '0' <-A' '- 10010' &=' <-A' '-' D1' 0<>1§ < 1-0 ' D1' 01' A' D& > <0' <-A' D'0' D1' 10' =& ' 1 , >& 1' G <+ -.' &' 1 , ' &=' D1' , -.'0' §'1.1' C1&C§18& D1 ' D<-' D1' 01' A' D& > <0' <-A' D'0' D1' 10' <' §' 0?BD1' ' .D ' ' §1' C&00100' &-' <-A' '- 1001' <0' D1 ' ` D<-0P' D<A' &=' '>A' '-' D1' > 0010' & ' '-' <- ' C< B1§§' D1 &=' ' -A' <§0&' KD1 ' '-' B ' 01' A' C< §' <>1-' D&' A1-' < ' F 10 > -0 1' D1' 01' A' L'§ 0O A< ' &=' <-?< ' §' <-A' # ' A ,0' C & &.<B'&-0' B&- -?1A' ?- '§§ D1' L''' ' A< ' &=' Q§&# ' D1' 1 1' &=' & ' >&0 ' -&#§1' 1'.-' < ' F 10 > -0 1=' <=&!01' A' D&' A1-§' ' K<0' # ' D1' <?A & ' 1' &=' D1' 0<>1' C< §' <>1-' D1 1' D&' A1-' D1' 01' A' L''' OOO' A< ' &=' = &# ' & A1' .-1A' <0 <#§' 00D1A' <-A' 1-<#§1A' <>&-.' & D1 ' D -.-§' D< ' D1' 01' A' <CC& - >1-' <. 1>1-' <B& A1' <-A' C< ' '&-§' #1 K 'L ' D1' 01' A' §< 1' " ?a1' &=' & ==' <-A' F '§§' <>' §< 1' < H?10' < a1§1 ' D1-' B<§§1A' '1' &=' & -.D<>' 0D?§A' 0 <-A' #1' .&&A' <-A' 1==1A ?1§§' '-' D1' <K1' <.1 -' <-A' #1 K'L 1' D1>' <-A' 1 , ' &=' D1>§' <-A' D1' D1' 10' &=' 1 , ' &=' D1>' =& § 1 , §' <BB& A -.' <0' '0' 1D1 B1A' <-A' B&- 1 -1A' '-' <-' Q 1' >< A1' '-' D1' 01' A' C< §' <>1-' D&' A1-' < ' F 10 >' D1' 01' A' L'' J0 A< ' &=' <-?< ' §' <-A' D<' & ' '.D-1001' <-A' 1 , ' & D1 ' C0&-' & ' C0&-10' D1' ' D1' 10' <-A

!'2 &/'3 " & &.-' #.-&"1!/';@' -' ' ' !-'

N$ ' ≠ 4 CC ' "≠ 'I

-/';@' -. !'" <§' .' !-'

= ' J' ; '4 CC+' "'5 I

& -.D<>' K1 1' A1B1<01A' <-A' &=' D&' A1-' < ' F 10 > V'§§1.'#§1' &-' D1' - &§§>1- D1-'

H00'.D10ff D<' ` D<-'2P D<A%& '<=R' D<' 0D?ffA' D<+1ff # ' D1' 01'A' ff< 1' < H?10' & ' # '<- ' >1<-1'= & >' D >' # ' D'0' <001- ff <- ' '.D ' ' ff1' C&00100'&-' 1 B'&-' 1>1 -A 1' & ' '- 1001' '-' <- ' ff&AA'0' 1 , '0' & ' 1- ' D1 1A' <=-1- '0ff <ff& &A' ?CC&-' <-A' # ' D1' 01'A' <CC& '' >1- ' <. 1-ff1- '<1& A1' <' A'C< B'&-' &' D1' 01'A' ff< 1' < H?10ff & ' & D1 ' K '01' &' D1' 01'A' ff< 1' < H?10' D1-' #1ff&- . -.' -& ' <ffff& 1Aff 0D?ffA' D<+18'<-A' 1- & 1' <ffff D1' 0<>1' <'-1 0' <-A'0' 1- =' 1-0'&-0' 1>1 -A& ' C&00100'&-' '.D ' ff1' '- 1001' <-A' '-D1 1A' <>1- '0' <-A' 1 ' CB1ffff D1 &=ff < 1 '0 ' D1' 0 'A' '1' -=' ? 1 '<-A' D'0' D1' '0' <-A' <00'. -10' <-A' < 1-0 ' D1' 01'A' ff< 1' < H?10' D'0' D1' 10' <-A' <00'. -10' =& '1,¦ -A' KD1 1' <ff0&' '-' &ff3 C< ff'<>1- ' D&ffA1-' < ' F 10 -' -0 1' D1' L+' 0 'A< ' &=' &=1 ' D1' +' 0' 1 1' &=' &// >&0 ' -&##ff1' 1'. - ' ' K<0' & A1'. -1A' <-A' 1-<= 1Aff AD<' D1' 01'A' <CC& - >1- ' <. 1>1- ' <1& A1' <-A' C< 'B'&-' D<AA1' <-A' ><A1' #1 K'L 1' D1' 01'A' &D-' ff< 1' " ?a1' &=' & ==' =<A1 ' &' D&><0' '1' &=' ? 1 ' <-A' F 'fff'<>' ff< 1' < H?10' < a1'1 ' D<-' B<ffff1A' F 'fff'<>' '1' &=' & -.D<>ff &=' <- ' <-1 0' ff<-A'0' H=' =' 1- '0' 1-0'&-0' +'B10' C&00100'&-0' & ' D1 1Aff <>1- '0' <-A' & D1 ' > 0010' <-A' &=' 1,' CB1fff &=' D1 >ff 0D?ffA' 0 <-A' <-A' #1' .&&A' <-A' 1==1 ?1fff '-' D1' ff<K1' <.1 -'$<-A' #' K'L ' D1 >' <-A' 1+ ' &=' D1 >' <-A' D1' D1 10' &=' 1+0' &=' D1 >' <-A' < 1-0 ' <fff D1' =1==10' &=' ?0 ' <-A' D1' D1' 10' &=' 1 ' &=' D1 >';¦ -A' KD1 1' ' ' K<0' 1-<##1A' # ' D1' 0<>1' <?Q=& ' 1ff D< '8<fff = -10' =1&==1>1- '0' . <?- 10'<-A' 1B&A10' D1-' ff1+ 1A' D<A' & ' ><A1' &' &0' `01'A' '.D-1001' & ' &' 1- ' & D1 ' &' '?01ff # ' & ' <.1 -' D1' 01'A' ff< 1' < H?10' & ' # ' & '<.1 -' 1= ' =1==11' &' D'0' ?01ff 0D?ffA' #1' .&&A' <-A' 1==1A?1fff &' & ' 01'A' '.D-1001' <-A' &' &ff3 D1' 10' <=R' D1' 1-? 1' <HA' 1==11'1'&=' D1' 0<>1ff <.< -' <fff & D1 ' C0H '10' Bff< > -.' 1- ' D -.' B&>C 01A' <-A' B&- 1'. -1A' '-' D1' 01'A' = -10' =1&==1>1- '0' .W?- 10' & ' 1B&+'10' # ' A'1' 01'A' ff< 1' < H?10' & ' # ' 1- ' & D1 ' =1&==11' & ' =1&==110' &' D1' ?01' &=' D1' 01'A' ff< 1' < H?10ff <-A' <.1 -' D1' 01'A' '1' &=' ? 1 ' <-A' D'0' D1' 1 ;¦ D< 9-&K1' ' ' >< ' C¦1<01' &// '.D-1001' &=' -' >&0 ' D<#?-A<?-' .WB1ff # ' D1' <+ 01' <-A' <001- ' &=' D1' & A'0' 0C?1ff ' <-A' &>C& 1 ff <-A' &=' D1' &>1-0' '-' D'0' &' C01- ' C< ff'<>1- ' <001>##1A' <-A' # ' D1' <? & ' 1' &=' D1' 0<>1ff &' & A1'. -1' 10 <#ff'00D' <-A' 1-<Q=1ff D< ' <i K1ffff D1' 01'A' 1' &=' C< ff'<>1- ' ><A1' D1' 01'A' L'" 0 ff A< ' &=' =ff&# ' D1' +00 1 1' &=' &// 1'. -ff <0' D1' 01'A' ^ 1' ><A1' D1' 01'A' L+' W ff A< '&=' Bff&=1 ' D1' 1 1' &=' &0 ' >&0 ' -&##ff1' 1'. -ff '-' 1 ' D -.' <0' &K1D -.' & ' '-'1- ' K'01' B&-5 -.' D1' <-H ' &=' D10 1 =& A' & D1 K'01' B<ffff1A' &BD1' D10 1 =& A' K0' D1' <CC? 1-<?-B1' <-A' D<+&K0&-' =' D1' D? BD' &=' D10 1 =& A' '-' D1' &?- 1 =' 001Lff D1' '" W C< 1' &=' ff'1' <-1 0' &=' '.D D1>'0 &-' ff1 &-' 1A'ff &-' 1BD'-.' 1=& A' <-A' ff -.&-' K' D' D1' <CC? 1-<?-B1ff -T=' D1' '" /00C< 1' &=' D1' >& 1' &=' D1' <-1 0' &=' &a1=1ffA' ?-A1-'<-A', >1 ff<-A' D1' '" W' C< 1' &=' D1' >& 1' &=' D1' D<C1' &=' ff1 '09' D1' !& 10 ' &=' F & D1ff' D1' & &?.D' &=' 1K10' D1' < &- '&=' 1K10' D1' C==' '&=' D1' &? 0' &=' &>-0ff<-A2' <-A' &=' LLL+ '0 ' ' 'A ' &=' 1- ' K0' D1' <CC? 1-<?-B1' '-' =& A1' '-' D1' &?- 1' &=' ?001Lff <-A' D1' C< 1' &=' D1' <-1 0' &=' 1 .< 1' <-A' " & a -.' K0' D1' <CC 1-<?-B1ff <-A' D 'D000 C< 1' &=' D1' >& 1' &=' D1' &fff &=' E?ffA1=& A' <-A' ? DK1 a' K0' D1' <CC 1-<?- ' '-' D1' &?- 1' &=' ? 1 ff <-A' <ff0&' &=' D1' '" 00' C< 1' &=' D1' >& 1' &=' D1' <-1 ' &=' #& -1' & D1 K'01' B<ffff1A' < #& -1' K ' D1' <CC? 1-<?-B1' '-' D1' &?- 1' &=' 'AAff D1' <-1 ' &=' &01D<>' K ' D1' <CC? 1-<?-B1' '-' D1' 01'A' &?- 1' &=' ?001Lff D1' <-1 ' &=' 1--1' <?- &-' K W 1' <CC? 1-<?-B1' '-' D1' &?- ' &=' ?- -.A&-ff 'D1' <A+&?0H-' &=' D1' D? BD1' &=' F ? &-' ?-A1' 1.1' '-' D1' &?- 1'

+ - '
&+'0&' =& '
' ' &D-' 0@B 9

C & ' " "' <@K< ' D< ' D'0' <A =1' D& ' 1 ' ' D - .' 1 1 '-' B&- 1 -1A' '-' 1- ' K '01' 1L 1 -A' -& ' -& ' #1' ?A'A<@@ & ' D? =- @@ &' ' ' &D-' 0@1 ' , - .D ' &+ BD '@.' & ' 1&- - - .' D=1' , - .=' D 10' C< 1 - 10' &' D >' . ?- 1A' # ' D1' , - .' &? ' & 1 " & A' &=' D1' & A0D'C' &=' D<B& > #1' '-' D1' &? - '1' &=' & D< > C & - '/

]
&+'0&' =& ' &D-'
< @ &=' L=& A

$. ' '' <@K< ' D< ' D'0' 01 - ' <(;1' & ' <- ' < 'B@1' B& > C '01A' D1 '-' '-' <- ' K '01' #1' -& ' C ?A'B'<@@ -1' D? =?@@ & - &' &D-' '1' &=' L'-=& A' & ' D'0' D1 ' 10@ & ' &- &' <- ' & D1 ' C0&-' & ' C0&-10' D<+ - .' & ' C 1-A - .' &' D'0' & ' D1' ' ?01' <- ' ''- 1 10 ' ' @1' & ' B@< > 1' &' '-' & ' =& ' D1' < 0' <-A' & A0D'CC10' &=' < K 'BD' <-A' " &+1 B&? 1' K0' D1' <CC? 1-<?-B10' '-' D1' &?- 1' &=' 001L9 & ' 1' D1 ' &=' D1 > 9 <-A' &' <-A' =& ' <- ' @&-A10' <-A' 1 - =' 1 - 10' & ' +'B10' @ ' - .' '-' < K 'BD' " &+1 B&? ' F <# -&01' <-A' B@1 ' '-' D1' 01'A' &?- 1' &=' 001L

]
&+'0&' =&
' ' D& > <0' <-9

$. ' '' <@K< ' D< ' D'0/ 01 - ' <Q 1' #1' '-' -& D - .' ^ ?A'B'<@@ &' 1 - ' C&00100'&-' '. D ' ' @1' & ' '-+10 ' '-' <-A' &=' <- ' @&-A'0' <-A' 1 - =' 1 - '0' <-A' 'B10' KD'BD' K 1 1' @< 1' D1' 01'A' '1' &=' & - .D < > 9 <-A' -&K1' #1@&- . - .' &' _' D& > <0' <-' , - .D ' <-A' D'0' D1' 10@ D1' KD'BD' D1' '0' 01<01A' &=' '-' A1 > 10 - 1' & ' '-' 1RB'&-' & ' 1 - 'C0&-' & ' C0&-0' &' D1' ?01' &=' D1' 01'A' = D& > <0' <-' & ' D'0' D1' 10

]
&+'0&' =& '
" < > 1' @' \<#1 D'
<-A' ' ' &D-' ?01

$. ' '' <@K< ' D< ' D'0' Q@1' -1' <- ' < 'B@1' B& > C '01A' '-' D1' 0 < > 1' #1' '-' <- ' K '01' D? =?@@ & ' ?A'B'<@@ &' " < > 1' @' \<#1 D' ?0 9 -& ' &' =' &D-' ?0 ' , - .D 9 -& ' &' <- ' &=' D1 ' D1' 10' -& ' <00' . -10@ &=' <-A' =& ' D1' < a' B<@@1A' +1 &-' < a1' '-' D1' &?- 1' &=' 1 B10 =' -& ' &=' & '=& 8' <- ' &=' D1' <0 1@@'0' & A0D'CC'0' < 0' &-A'0' 1 - =' 1 - =' 1+'0'&-0' +'B10' <-?' 10' C&00100'&-0' &=='B10' & ' D1 1A' < > 1 - '0' KD'BD' D1' 0 < > 1' " < > 1' @' \<#1 D' & ' =' &D-' & ' <- ' & D1 ' C0&-' & ' C0&-0' &' D1 ' ?01' D< D' D&@A1 D' & ' &BB?C'1 D' D< ' K 1 1' & ' #1@&- .1A' < ' <- ' > 1' &' D1' 01'A' '1' < BD<@@ <-A' &=' & - .D < > ' ' &' <- ' & D1 ' C0&-' & ' C0&-0' &' D'0' ?01

]
&+'0&' =& '
< 9 < @ &='
& D? > #1 @<-A

$. ' '' <@K< ' D< ' D'0' Q=B1' -& ' <- ' B@<?01' & ' < 'B@1' B& > C '01A' '-' D1' 0 < > 1' < '1' 1L 1 -A' -& ' #1' '-' -&K 01' D? =?@@ & ' M?A'B' <@@' &' 1 1' '1' &=' & D? > # 1@&-A' & ' &' D'0' D1' 10@ & ' &' <- ' & D1 ' 01'01A' &' D1' ' ?01@ &=' & ' =& ' D1' 01'A' < 0' &=' 1?0& > ' " -A' 'C D& C1' <-A' D& - &-' '-' D1' &? - 1' &=' & a1@ & ' &=' & ' =& ' <- ' @&-A'0' 1 - =' 1 - '0' 1+ '&-0' =+'B10' & ' & D1 ' 1 1A' < > 1 - '0' KD'BD' D1' 0 'A' '1' &=' & D? > # 1@&-A' & ' <- ' & D1 ' C0&-' & ' C0&-0' &' D'0' ?01' D< D' D&@A1 D' & ' &BB?C'1 D' D< ' K 1 1' & ' #1@&- . A' < ' <- ' > 1' &' D1' 01'A' '1' < 0D<@@ <-A' &=' & - .D < > 9 &' &' <- ' & D1 ' C0&-' & ' C0&-0' &' D'0' ?01

]
&+'0&' =& '
' ' " <+'A' K1-

$. ' '' <@K< ' D< ' D'0' Q 1' -& ' <- ' < 'B@1' D1 '-' B&- 1 -1A' '-' <- ' K '01' 1L 1 -A' -& -& ' #1' ?A'B' <@@ -1 D1 ' D? =?@@ &' Y' " <+'A' K 1 -' , - .D 9 -& ' &' D'0' D1' 10' > <@10' &=' D'0' #&A ' #1.& &-9 -& ' &9<- ' .W?- 10' @1 R0' C< 1 - 10' <0 < 1' '. D ' ' @1' '-+10 ' & ' C&00100'&-' KD'BD' D1' 0 < > 1' " <+'A'9 & ' <- ' & D1 ' C0&-' & ' C0&-0' &' D'0' ?01' D< D' '-' <- ' <0 1@@'0 <5 0' & A0D'C0' @<-A'0' 1 - =' 1 - 10' 1RO'&?0'R+'B10' =1 > 10' =11=1 > 10' & ' <- ' & D1 ' D1 1A' < > 1 - '0' & ' <- ' CB1@@ &=' D1' 0 < > 1' 0C1B1='1A' '-' D1' 01'A' E ;1

]
&+'0&' =& '
@' \<#1 D' " ?BD100'
&=' & =&@a9 <0 &'
D1 ' " &K1

$. ' '' <@K< ' D< ' D'0' Q 1' -& ' <- ' < 'B@1' D1 '-' B&- 1 -1A' ; !' -& ' '-' <- ' K '01' C ?A'B' <@@ -& ' D? =?@@ &' @' \<#1 D' " ?BD1001' &=' & ==9 & ' &' <- ' C0&-' & ' C0&-0' #1 -. ' 01<01A' &' D' ' ?01 9 &=' & ' '-' <- ' <0 1@@'0' @< 0' @&-A'0' 1 - =' 1 - 10' =+'B10' , - .D =' =110' <-?1 110' <A+&?0&-0' C< &-<.10' C&00100'&-0' <-A' D1 1A' < > 1 - '0' '-' =11' =1 > 1' & ' =& ' R > 1' &=' D' ' @ =1' 1 > 1' &=' 1 '0' & ' & D1 K '01 9 ' # ' <- ' . '= 1' & ' . ?- 1' &' D1 ' # ' D1' , -.' &? ' &+0< -' & A' & ' &' <- ' & D1 ' C0&-' & ' C0&-0' &' D1 ' ?01' D1 &=' # ' <- ' @1 ,0' C< 1 - 10' > <A1 @ -1' &=' & '=& ' <- ' <0 1@@'0' < 0' @&-A'0' 1 - =' 1 - '0' =+'B10' , - .D 10' =110' <-?' 101' <A+&?0&-0' C< &-<.'0' C&00100'&-0' <-A' D1 1A' < > 1 - '0' KD'BD' 0D11' & ' <- ' & D1 ' C0&-' & ' C0&-0' &' D1 ' ?01' D< D' # ' 1<0&-' &=' <- ' F '@@ # ' &D-' " ?a1' &=' & =='@< 1' D' ' D?0#&-A' > <A1' <-A' A1B@< 1A

]
C &+'0&' =& '
&D-' - 1

$. ' '' <@K1 0' D< ' D'0' !' '-' -&' > <5' &=' K 01' 1L 1 -A' -& ' #1' C=?A'B' <@@ ?- &' &D-' - 1 ' &=' < A - . &-' '-' D1' &?- 1' &=' 1A=& A' -& ' &' D'0' D1' 10@ =& ' <@@ 0?BD' @&-A'0' <-A' 1 - =' 1 - 10' =+'B10' <-A' < 9 1 1 K ' D' D1' <CC? 1-<?-B1' '-' < A - . &-' '-' D1' &?- 1' <=& 01'A' CB1@@ &=' D1' < 0' &=' <K - 10' -< > 1A' '-' D1' 0 < > 1' <Q@1 9 KD'BD1' @<-A'0' 1 - =' 1 - 10' OM+'B10' <-A' < 9 1 1' K \' D1' <CC? 1-<?-B10' D1' 01'A' &D-' - 1 ' C? BD<01A' &' D > ' <-A' &' D'0' D1' 10' =& ' &=' ' ' 1 -&@A' < ' , - .D

]
E1-1 <@ <+'-.

. 9' <@0&' &' 1 , ' C0&-' 0?BD' '. D ' ' @1' C&00100'&-' <-A' '-R1001' <0' D1 ' & ' < ' &=' D1 > ' D<+1' & ' 0D?@A' D<+1' & ' 0D?@A' D<+1' D<A' '-' <- ' &=' D1' <#&+1' - < > 1A' <0 1@@'0' & A0D'CC'0' < 0' @&-A 0' 1 - =' & ' <- 'CB1@@ &=' D1 > 9 & D1 ' D1 -' D1' <#&+1' - < > 1A' <0 1@@-' < 0' & A0D'CC'0' @&-A10' 1 - =' I ' D1 1A' < > 1 - '0' KD1 &=' D1' 01'A' & 0' < a1@1 ' # ' D'0' <' 1' '0' 10 & 1A 9 <0' D&?. D' D'0' C01 - ' < 1' <-A' 1 ' < 'B@1' D1 &=' D<A' -1R' #1' D<A' -1' > <A1 9 <-A' KD1 &=' 1 - ' = -1' & ' 1B&R1' '0' D<A' ' @1+ 1A' &' &? ' 01'A' &R1' . -' & A' & ' &' <- ' & D1 ' C0&-' & ' C0&-0' &' D'0' ?01' '-' <- ' &=' D1' 01'A' < 0' @&-A'0' <-A' 1 - =9 B& > C '01A' '-' <- ' = -1' & ' 1B&R1' D<A' @1+ 1A' & ' > <A1' #1=& 1' D1' =' 0 ' A< ' &=' D'0' C01 - ' < @' <> 1 - ' & D1 ' D<-' &=' <-A' '-' <@@ D1' 01'A' < 0' @&-A'0' <-A' 1 - =' KD1 ?- &' D1' 01'A' & 0' < a1@1 ' '0' -&K1' 10 & 1A' ?- &' # ' D'0' C01 - ' Q 1

K ' ##&. -&; ' # . - &-0 - ' ' -. '&& ' &+& &; ' / 2' #0' .' 3"&-#& !

-' 1< '&-' &=' D1
'-B1 1 ?'- '
1 0&-0' a-'. D 1A' '

!

Đ&-& <#@1' &? - 0 < '@@9 D< ' D1' . D ' D'. D1' I ' > . D ' -B1' 1 ' " ?a1' &=' & a1' D&&-@ ' #1. & 1 -' & -1' I ' D1 1' <CC< <?- ' ?- & 01'A' &R<'. - 1' & A1@ # ' D1' . <B1' &=' E&A1' D1' LL '' A< ' &=' D1' > & - 1 D1' &=' ! 1# ?< ' ' '-' D1' L'LO \' 1 1' &=' D1' 1'. - 1' &=' &? ' 01'A' &R<'. - 1 & A1' 0D<@#1' B 1< 1A' '-B1' ' =& ' D1 - B 1<B1' D&-& ' @<K1' I ' ? > CD1' &=' D1' KD'BD1' B 1<B'&-' A'+1 0' &=' D1' , '- .=' ?#. '1 =' &=' D'0' D'0' 1<@ > 1' &=' - .&-A1' -& F 1' #1 - .' -&' , - .D =9 D< + - .' <BB&-0' 5@ 0 ?1 0' A1C1 - A - .' '-' D1 ' - < > 10' '-' D1' , '- .=' &? 10' 5@ & D1 ' @&K1 ' &? 10' # ' K ' 1' #'@@ & ' C@< - 1 9 < ' B& > <?- A1A' # ' D1' , '- .=' '. D - 1001' <BB& A - .' &' D'0' > &0 1' D&- & <#@1' <K10' ' <a1' ?CC&-' D1 > 9 D1' D&-&?0/ 5@ A1. 11' &=' , - .D D&A1 9 < ' D1' > 1' &=' D1' 01'A' 1<B'&-9 KD'BD1' 01'A' A1. 11' 5@ D&-&?' &=' @- .D D&A1' 0&' D ' D1 > ' 1B1 +1A 9 1 - ' > 1' A1C1 - A - .' D1' 01'A' <BB'A - 0' & ' 0?1 0 9 0 0D<@@ <#< 1' 'D1 '8K ' '=#' @@10' & ' C@< - 10' &=' D1' 0 < > 1' <BB'&-0' & ' 0?1 0 9 &' D1' . 1< ' D DA1 <?- B1' B&0 1' I ' BD< . 1' &=' D1' 0 < > 1' D1' , '- .=' 0?# . '1Q@=9 @1 < 01 D' ' ' D1 =& 1/' D1' , '- .=' '. D - 1001' D1' & A10' 0C?<@@ 5@ 1 > C& <@@ 5@ D1' & > 1 - 0 ' '-' D'0' C01 - ' C@1 > 1 - ' < 001 > @@1A' 5@ # ' <? & ' 1' & =' D1' 0 < > 1' &' 10 <#@' 00D1' & A1 1' I ' B - << 1

D '<ff I '1R ' J' =11' A' =f'1' F' = s' #1' 01'A' 1'B'&' ' & ' K D'-' '' A< 0' <=& = ' & ' ''' ' A< 0' <= 1 ' D1' 1 0&-0'0&'a-'.D 1A6/
<>1' 1<1 &='f 0DA#1' ><A1' A ' 1 B1 +1' I ' <a1' ?CCAD' =DA' " D1R 01'A' & A=1' &=' , - .D D&A1f -A' D< ' 1 ' & D1 ' .0&-1' ><A1' & ' D<
0 '<ff D<CC ' D1=1<= ' #' #1' - <A1' , D .D ' '-' 0?BD0R f a1' B<01f &=' & D1 K 001' # ' D1' , -.' &? ' & <'.-1' & A1' D'0' D1 10' & ' <'f'& ' & D1 K'01f
?B 100 == 0' = ==' & =' -.f& A1f & =' D< ' D1' &=' D1 ' D< ' #11-' & ' 0D<ff D<CC1-' &'#1' ><A1' , - .D ' & ' , - .D =' '-' 0?BD1' f a1' B<01' & ' B&- '-?1 '<-
A D1= 01' # ' 1 - ' -1' D<+ D.' D ' , =.' &? ' & <'.-1' A A=' <? & ' '1' D'0' D1 10' & ' 0?BB100&? 0' &' ><a1' , - .D f #1' 1 -<#f1A' 8++' D&?
&' C? 0?1' '>< D 1 -1' <ff 0?BD1' 0?1 0' <BBf&''0' C f1 - =' #'f f10' & ' K ' 10' <0' D<-f 0D<f#1' A1C1-A -.f &-1f ' '-' D1' -<>1' & ' -<>10' &=' #< 1>1- 0
D ' 01'A' ?#.'1= =f' &=' & - f ' K ,' 1 - ' A D1 ' C0& 1' & ' C0&-10' -A <fO&' D<' A'1' 0<>1' <BB&-' & ' <BB'&-0' 0?1 B' #'ff10' C f1 - 10' &
F ' ' I '1+O ' &=' D1>' &-A1' .&&A1' I ' 1=f = ? f <-A' #1' <0' <+< f1<#f1' ?- &' D1' A1><?-A<- ' C f1 - == ' & ' C? 0?1=0' &=' D1' 0<>1
<BB'& '0f <0' D&?.D' D1 ' -& ' 1- ' &=' D1 >' D<A1' 1B1 +1A' (' <a1-' D1' & A 1' &=' , - .D D&A1

! ' 222

*K' 0%&+&.' #9-#!22.' C' ."1 ' !H02/!1

'<0' D1' , -.' &? ' & 1'.-' & A' '0' '.D =?ff ' > ' f1A' &' D<+1' K&' 10&-<#f1' <'A10' <BB& A -.' &' D1' <K10' &=' D'0' D1' , '-.'1- ' f1A'
<-Af D1' &-' <'A1' =& ' D1' ><a -.' , - .D ' &=' D1' '.D ' -& f1' '-B1' D'0' =' 0 ' #1.& 1-' &-' D? 1' f< 1' '-B1' &=' F <f10' A1B1A001A' &'<-' 'Af =& ' a-'.D '-.'D'0' &-'
KD&01' 0&?f1' E&A' CA&-f <-A' D1' & D1 ' <'A1' =& ' D1' >< '<.1' &=' D1' '.D ' -&#f1' '-B1001' D'0' =' 0 ' #1.& 1-' AT2?.D 1 ' DA< .< 1 ' C&+Z1' D? f <-A' >< '-.'D'0'
>< '1A' ?- &' D1' , -.' &=' B& 10f <-A' <f0&' D<' D'0' '.D-100=1' D< D' 0?0 1 -1A' <-A'#& -1' . 1 '<-A' '-10 '><##1' BD< .10' =& ' D1' A1=1-01' "<?.D 1 '
&=' D'0'D'0' 1<f> 1f <-A' =& '<' =1 >1' <-A' <' CC1 ? f C1<B1' K0' D1' 1<f> 1' &=' B& f<-A' <-A' & D1 ' >< - ' ?- 10' <-A' 1.'&-0f #' D1' < .< 1 ' '
. 1 ' K1f1' B& > =& '<-A' H?'1 -1 i ' &=' <ff D'0' ?# 1 A'0f' D1' & > 1-0' '-' D'0' 01- < f'<> 1- ' <001 > ##1Af B&-0'A1 -.' D1 >'001 '<-A' D<' 1 ' '&-' # '
'=' D1' <>1' <'1A ' 0D?f A' #1' 1' D1 ' &=' D1 >' f1+ 1A' <-A' D<A' # ' 1<0&-' &=' D1' ' 1-? 10' <BB& A -.' &' D1' <?-B'1- ' <K10' &=' D'0' f<-Af &>>&-0' &' C< ' %&%&&7 ' '-' ?1?' &='
0D?f A' #1' &' D1 >' A&? 1=?ff ?-B 1 -'<-A' . 1 ' '-H?'1 -10' =& ' D1' 01 BD1' <-A' -&-' a-&K f1.1' &=' D1' ' 01 <ff 1-? 10' <-A' &=' D1' ' f&-A-'0' D1' 0<'A' K &' 'A '
BD< .1<##f1' &' D<' 0<>1f D<+1' ><A1' D? > ##f1' C1 'B'&-' ?- &' D'0' '. , -1001' . h B'&?0f ' &' <BB1C ' <-A' <a1'&=' D1 >' D1' 0& > 1' &=' L f N Df
<0K1ff '-' 1B& > C1-01' <-A' 0< '0=<BB'&-' &=' D1' 01'A' K &' <'1A f <0' =C ' D1' 01'A' . 1 ' <-A' '-10 ><D f1' D< .10' KD'BD' D'0' EhB1' D< D' 0?0 1 -1A'
<-A' D& > 1' <0' '0' <=& 1 1'Af &' D1J K1f1' 0?1 '1' <-A' B& > =& ' CC1 ?< ' &=' D1 >' D1 ' D1' 10' <-A' 0?BB100&? 0f ?CC&D' D1' KD'BD' C1 'B'&-' <-A' D1' &-0'A1 < '&-'
==# ' 0& ' > <A1' D'0' E <B1' #1 - '. -1f ' B&0'A1 -.' D1. &&A'<-A' f&+ -.' > -A1' & =' D'0'0' 1 '0' <-A' &' 10BD1K1' <-A' <+& A1' D1' . 1 '+1L<1'&-0' D1 1&=X
= C?##10' <-A' '-H?'1 -10' KD'BD' &' D1 >' 0D?f A' D<+1' 1-0?1A' '=' D1' 01'A' '1A10' K1 1' f1+ 1A' CB1 A' <-A' <a1-' <=R' D1' <?-B'1- 'f<K10'
<-A' =&? > 1f <0' D1' 01'A' &1-0' '-' A'1 ' i 1'A' C1 'B'&-' D<+1' BC-0'A1 1Af <-A' <f0&' B< f -.' &' D'0' > &0 ' -&##f1' 1 > 1 > # <?-B1' D1' .&&A' <-A'
<BB1C <##f1' +'B10' D<' D1' -&##f10' &=' D'0' 1<f> 1' <-A' & D1 ' D'0' => D=?ff <-A' ?1' ?# 1 '0' &=' D1' <>1' '-' D1 ' &K-1' C0B > <.10' <-A'
& D1 K'01' D<+1' A&&-' &' D' ' E 1f' <-A' D1 # '0?0 1 -1A' > <- =&f A' B&0 '0' <-A' BD< .'0' &' D'0' . 1 ' &-&? ' <-A' f1<0? 1f <-A' <=i &' &' D1'
&1-' F 1f1' &=' A''0' D'0' 1<f> 1f &=' D'0' > 1 1' > CB'& " <-A' D<# -A<?-' . <B1f <-A' =& ' D1' 1-A1 ' <1f1' <-A' f +1' D<' D'0' '.D-1001'
#1 1 D' &' D'0001'A' -&##f10' <-A' ?# 1 f D< D' 1 > 1A' CAB?''A' <-A' L1f1001AR' <CA'# ' D'0' 01- ' <^G1' A&=D1' 1 > 1' CA&-' <-A' 1f1001' ?-&'
D'0' 01'A' -&##f10' <-A' <ff D'0' 01'A' ?# 1 =' '-' <- ' K'01' BD< .1<##f1' & ' B&- '#? & ' &' D1' 01'A' <'1A10' & ' 1' D1 ' &=' D1 >' & ' <C 'C< 1' &=' 'A0G
D1 > f <-A' &' D1' ' D1' 10' 1L1B? &? 0' <-A' 0?BB100&? 0f <ff =''0' '.D ' f1' <-A' '-+10 ' K D'BD' D'0' EhB1' D< D' & ' '-' <- ' K'01' > < ' & ' &?.D '
&' D<+1' # ' 1<0&-' &=' D1)' ' ' <'A10' & ' 1 D1 ' &=' 1 > G' -A' <f0&' D'0' .J 1' D &f A1 D' D >' '.D ' K 1 f ff C f1<01A' K0' D1' 01'A' f&+ -.' &== 1' <-A'
. <?- 1' &=' D'0' 0?# 1 '0' # ' D1 >' 0&' > <A1' =& ' D'0' . 1< ' <-A' '-10 > <##f1' B&0 10' <-A' BD< .10' # ' D'0' '.D-1001' #& -1' <-A' 0?0 1 -1A'
<0' '0' <#C+101' A ' <-A' D'0' &=' D'0' > & 1' <> C ' .WB1' <-A' C ' 1f =& ' D< ' D1' C& <' ff &=' D'0' & > 1-0' &=' D'0' D'0' f<-A' 0D?f A' -& ' '-' 1- ' K'01'
#1' B&- '#? & ' 'BD< .1<##f1' &' < 'C< 1' -=' #o' 5TAA' 0& > 1' C=' L f' =' ' #? ' &' #1' D1 =' A'0BD< .1Af D< D' CAC-1A' 1 > = 1A' -A' < ' &=' D1' 0<'A' % 9 '
1f1<001A' D1' 0J > o' &=' L' 'f' ' CB1ff &=' D1' 01'A' 0& > 1' &=' A' f' f' ' 1-A' '0' B&- 1- ' &' <BB1C ' <-A' <a1' &=' D1 >' D1' 0& > 1' &=' LL' ' (0&' &='1 1A;
&-C f ' '-' =?ff 1B& > C1-B1' <-A' 0< '0=<CB'&-' &=' < A'=& ' <ff D1 > 0010' ' K D'BD' 0& > 1' &=' LLL' 0' =' ' ' '0' 1-<##1A' & A1' .C1A' <CA' 10 <##'0 i D1A' D1' ?>' T0=
' D1' <?(6T?' 1' C=' D=1' 1 - 'C< f'<> 1 - ' &' #1' & A1 1A' <001001A' f1+ 1A' C< A1' <-A' D<A' <=R' D1' >< ' ' <-A' =&C > 1' 1-0? -.' D< ' '0' &' 01 ' ' T 4 9 ' 0D<ff #1' <'01A' # '
D< ' 1 ' D' 1' K '-' D'0' 1<f> 1' 0D<ff D1 1' <-A' C< ' 0?BD1' 0?> 10' &=' & -1 ' <00100' A' ?CC&-' 1R ' &=' D1' 01'A' D' 10' <0' D1 1' ?-A' ' '-' D'0' 00100 > 1- 0' &-'
1' C 'B?f< f ' ' ' A& D' <CC1 ' < A' D< ' D1' ' 110' <-A' ? .D0' &K-10' <-A' C f<C10' #o ' .' 1 ' D' 1' -& ' # ' D1 >' 01f=1' 1<BD' &?- ' (BBU
<BB& > C <##f1' '-' D1' , -.' =' 0BD1a1 ' =&=' L+3W0 <-A' LW 00 #1' BD< .1<##f1' K0' f' 1' 01'A' D' 10' &' D1' 0< '0=<B '&-' <-A' C< > 1-' &=' DC' 01'A' #1' B f< .1<##f1' '-'
0& > 1' &=' LLL' N =f ' -A' <ff ' '10' ? .D0' <CA' &K-10f -& ' B&- '#? & ' -& ' BD< .1<##f1' K W D' 10' I ' <BB& > C <##f1' # ' D1 >' 01f=18' 'C' F D< ' 1 0&-0' 0D<ff
D1' 01'A' 0BD1a1 ' =& ' 1- ' L+W U <-A' LW Hf 0D<f#1' BD< .1A' &K< A'0' D1' B&- 1- <B'&-' <-A' 0< '0=<BB'&-' &=' D1' 01'A' 0& > 1' &=' LLL' 0' 9' KO' #1' B f< .1<##f1' '-'
f a1' <-A' 0?BD' & > 10' &=' & -1 '<0' 0& ' D1 1' ? -A' ' '-' D'0' B 1' C='B?f< ' ' ' A& D' <CC1 C' -A' D< ' & ' D1' C< > 1-' &=' D1' 1'A' & > 1' &=' LLL' 0' ' ' 1 ' C0& -1' & ' C0& -10' D< + -.' f& -A10' C ' 'C =' ' & D1 ' #1 1A' <' 1- ' ' & ' C&00100' & -0f ' -' f<-A' 0' & ' 1 I =' '-' =11' 0 > C f C' =11' 10C1 ' &=' D1' '
< '1' = 11' D&f A' < ' K 'ff <=R' D1' ?0 & > 1' &=' D1' < ' K< A1' 1L1B?B' &-' & ' <?-B'1- ' A1 > 1-1f KO' -' <- ' &=' D1' 01'A' ' C10' D' 10' & K-10' 1<f & ' 1 0 ',A'
& ' ? .D0' &' D1' 1 1f ' +<f?1' &=' LLO00' C=' = 11' D< '1 ' f&CA' & ' &=' LL+ ' 0 ' +'' A ' &=' f&-AD&f A1-' < ' K 'ff <#&+1' <ff BD< .10f K D1 &=' 0 < 1' G
D1 ' & ' <- ' &=' D1 >' #1 01<01A' ' C&001001A' & ' <- ' & D1 ' C0&-' & ' C0&-0' &' D1' ?01' &=' 1 >' 8& ' <- ' &=' D1 > ' <-A' -& ' #1 K '
BD< .1<##f1' K0' 0C?<ff A'0 > 10f & ' <- ' C0&-' & ' C0&-0' 0D< -.' .&&A'0' & ' B< <ff '0' &' D1' ' CC 1' ?01' &' D1' +<f?1' &=' L' > < B' C-A' <##&+1f -& '
<BB& > C -.' D1' ' B< <ff =' =& ' D1' ' C f&?.D' -& ' D1' ' -1C100< ' 0 ?=+' <-A' ' > C f1 > 1- ' ' &=' D& 0D&f Af 0=' <ff =& ' D1' 0< > 1' #1' BD< .1<##f1' &'
D1' C< > 1- ' &=' D1' 01'A' 0& > 1' &=' LLL' N ' ' G <-A' -&-' & D1 ' C0&D0' &=' f1<01' 0?#0 <?CB1' '-' f<-A 0' & ' .&CA10 ' -A' D< ' 0?BD1' ' ' > < B' &=' D1' 0<' A' I 4 9 '
.&&A'0' 0D<ff #1' 01001A' <-A' BD< .1<##f1' K W f a1' <-A' 1.<ff 0& > 10' < <##1' < ' LL0 &=' = 11' D&f A1' & ' LL+ ' 0 ' +'' A ' &=' &C D&f A1' '-' 1 ' 0D<ff #' 1 <'1A' # ' 1 <=' 1
D' 1' ' 1' <-A' ? .D' <-A' '-' -&-' & D1 ' =&? > 1 ;' F D'BD1' 0& > 1' &=' LLL' ' ' ' ' C' #1' f1+ 1A' '-' D1' 01'A' D' 10' 0D<ff #1' & A 1A' <-A' <001001Af &' D1' A'0B 1B'&-' &=' D1' &> 00'&-1 0' '-' D'0' < 1' -<>1Af #1=& 1' D1' =10 '&=' 1 >' aD1ff D< BD<?-.B ff -1L ' BC > ''.f & ' ' ' &=' D1 >' < ' D1' f10 f C<ff -.' C' D1 >' & D1 ' A'0B 1 1' C0& -10' AK1ff -.' K f -' D1' 01'A' ='' 1 ' 0?BD' <0' D1 ' 0D<ff D -a' -1B100< ' K D'BD' 0D<ff .1=1' ?= &' D1 >' D1' ' <A+ 01' <-A' <00'0 1-B1' =& ' 1L1B?0' &-' &=' D1' > 0010' ' <-A' D< ' <ff C0&-10' #1' BD< .1A' <-A' ##&?-A' # ' D1' 01'A' & A1 -.' <-A' <00100 -.' <BB& A -.' &' D1' 1 1= 1' &=' D1' 0< > 1f D1' 01'A' 0& > 1' &=' LLL' ' ' ' ' &' #1' <0K1ff D1' 01'A' A > 00'&-1 0' '-' D1' 01'A' D' 10' & ' ''' ' &=' D1 >' < ' D1' f10 f <0' 'C' DC' 01'A' ' '10' <-A' ?=.D0' & ' ''' ' &=' D1 >' < ' D1' f10 f <0' D1' 01'A' 0& > 1' &=' LLL' ' ' ' '-' =& > 1' <=& 1' 1D 01A' & ' & A 1A' <-A' <001001Af 2 +f ;!' .&- ! / =

D1' &ǁ1B & 0' >< '* ' D1' 0<>1' # ' "'0 100'

0D<ǁǁ -<>1' &ǁ1A &? 0' =& ' D1'ǁ1+ 1' &=' D1' 0<>1ǁ <-A' '=''1'?'aǁD=' D1' '0'1<ǁ10 '1'-<>10' &=' D1'01'A &ǁǁ1= &? 0' '- <' D1' , -. '!0BD1aa1' #1=& 1' D1' =10' &=' ǁǁ 1 - =' -1L ' B&> -. ' -A' D<' D1' & 1A'&? 0' &' #1' -<>1A' <-A' <00'. -1A' &' .1AA1 ' <-A' ǁ1+ 1' D1' 01'A' 0&>1' &=' ∪ɛɛ' '=' ' 0D<ǁǁ D<+1'=?ǁǁ <? '& ' 1' <-A' C&K1 ǁ' ' '+"' ' A< 10' -1L ' 1-0- ' D1' 01'A' <0 100 -. ǁ' &'ǁ1+1 ' <-A' .<A' ' D1' 0<>1' <-A' =& ' -&-C< >1- ' D1 &=' &' A'0 1 -1' <a1' <C 1 01' '-A'==1 1- ǁ ' <-A' 01ǁǁ <0>&BDB' &=' D1' .&&A'0' <-A' B< <ǁǁ'0' &=' 1, ' C0&-1' K0'-' D1' D' 10' ' '10' & ' ? .D0' K D1 1' D1 ' D<ǁ#1' &ǁǁ1Aa&? 0' <0' 0D<ǁǁ ,+1' =& ' D1' C'. >1- ' C=' 0?BD' &>1' & ' >10' &=' &-1 ' K D'BD' 1 '&=' D1 >' 0#<ǁ#1' & A1 1A' <-A' <001001A' &' C< ǁ' -& ' BD< . -.' <- ' C0&-1' #?=' &-ǁ ' =& ' D1' 0&>1' ?CC&-' D >' <001001A2' <-A' =& ' -&-C< >1- ' &=' <- ' 0(>1' &=' &-1 ' & A 1A' <-A' <001001A' '-' =&? >1' <=& 101'A' &-' 1 ' C0&-1' D<' ' ' 0D<ǁD1' ǁ1=?ǁǁ &' D1' 01'A' &ǁǁ1=ǁ&? 0' &' A'0 1 -1' 1<-A' <CC 1 01' '-A'==1 1- ǁ ' <-A' 01ǁǁ <0>&BD1' &=' D1' 01'A' .&&''0' <-A' < <ǁǁ'0' &=' A='1' 1 >&? 0' <-A' 1-<?- 10' &=' <- '&=' D1' 0<>1' C0&-1 ' 0& <001001A' -& ' C< '-.' <0' 0D<ǁǁ R+1' =& ' ǁ'1' C< >1- ' &=' 0?BD1' &>10' &=' &-1 ' <0' 0D<ǁǁ ?CC&-' D1' 01'A' C0&-10' =& ' -& ' ><a -.' C< >1- ' #1' & A 1A' ' <001001Aǁ <-A' D<' -&&' C0&-1' &=' C0&-10' #1' A' 1 -1A' & ' .&&A'0' &=' B< <ǁǁ'0' <a1-' =& ' <- ' 0& >1' ?CC&-' D >' & A 1A' & ' <001001Aǁ #? '<= ' ' 0?BD' < 1' <-A' '-' 0?BD' &K-10' ' '10' ? .D0' <-A' ǁ<B10' K D1 1' D'0' ǁ<-A'0' & ' D'0' .&&A'0' #1' =& ' D1' K D'BD1' D1' '0' <001001A ' ǁ0&' D<' D1' 01'A' &> 00'&-1 0' '-' 1, ' D' 1' & ' ''' ' &=' A'1 >' <' D1' =10 ǁ' <-A' D1' <'00100&? 0' <-A' & A1 1 0' '-' 1, ' &=' D1' 0<'A' ' '10' <-A' #? .D0' & ' ''' ' &=' D1 >' <' D1' ǁ10 ǁ' 0D<ǁǁ # ' K -.' '-A1- 1A' ?-A1 ' D1 ' 1<ǁ10' A1ǁ ' &' D1' &ǁǁ1= &? 0' &=' D1' 01'A' 0&>1' &=' WWW K' D' -' +'' ' A< 10' -1L ' <= 1 ' D1' 01'A' <00100 -.ǁ D1' -<>10' -ƒ 0&>10' &=' C0&-10' K D'BD' D1 ' 0D<ǁ#1' <CC& - 1A' <-Aǁ > 1A' &' .<A1 ' # ' D1' 01'A' F ' -. ' 0

<>10' &=' 1 0&-0' <001001 ' -A' D1' ?>0' C< <##1' # ' D1>ǁ &' #1' ' A1ǁ'+1 1A' &' D1' &ǁǁ1AC 0

C ' D<' ' ' '0' & A1 -1A' # ' D1' 01'A' <?B & ' 1' D<' '=' D1' 01'A' .&&A'0' & ' B< <ǁǁ'0' &=' 1- ' =1 >&? ' &' 1-<?- ' &=' <- ' C0&-1' <001001A' &' C< ' '0' <=& 101'A' #1' <a1-' A'0 1 -1A' &=' 0&ǁA' # ' &ǁǁ1B &? 0' &=' D1ǁ 01'A' 0&>1' &=' LLL' '?' =& ' -&-C< >1- ' &=' D1' 0<>1' C0&-0' 0&' <001001Aǁ D<' D1-' 0?BD' =1 >&? 0' &' 1-<?- ' <-A' D1' ' 1L1B? C? 0' D1'=10' <-A' A1C? '10' 0D<ǁǁ 1 1'. -' '-' D'0' <-A' D1' ' D<-A'0' ?CC&-' D1' ' -1L ' C< 'D1- ' <' A'C< >1- '0' 1R' <0>&BD1' >&-1 ' <0' D1' & ' D1 ' 0D<ǁ#1' '-A<><.1A' .'" D? ' .'" D1' 01'A' -&-C< >1- ' ' -A' '=' D1' 1- ' A?1' & ' &' #1' A?1' # ' D >' & ' D1 >' K'ǁǁ -& ' 1L 1-A' &' D1' B&- 1- <K-' Bˆ 0< '0=<BB'&-' &=' D1' 01'A' 0&>10' <0010 'A' ?C&-' D1' &K-1 '& ' &K-1 0' C=' D1' . &?-A1ǁ <-A' =& ' B&- 1- <B'&-' <-A' 0< '0=<BB'&-' &=' A<><.1' <-A' D? ' &' D >' /. . ' ǁ =& ' D1' 01'A' -#-' C< >1- ǁ D<' ` D<-' Pˆ 0?BD' =1 >&? ' & ' 1-<-' 0&' . 1+1A' <-A' D1' '1L1B? &? 0' 0D<ǁǁ D<+1' <-' <BB'&-' =A1 1ǁ < 1-0' D1' &K-1 '&=' D1' 01'A' ǁ&-A'0' <-A' 1- =' BD< .1<##1' Kǁ D1' 01'A' " ? '1' =& ' <0>&BD1' >&-1 ' <0' D1' & ' D1 ' D<+1' C< A1' & ' 0D<ǁ#1' '-A<><.1A' & ' D? ' =& 1' A'1' 01'A' -&-' C< >1- ǁ '-' D1' KD'BD' <BB'&-' D1' 01'A' A1=1-A<?- ' 0D<ǁǁ -& ' #1' <A> 1A' &' K<.1' D'0' <K1ǁ -& ' 00& -' -& ' C=1BB'&-' &' #1' <ǁ&K1A ' V

C ' ' D'0' #1' ' '& A1' .-1A' # ' D1' <?Q & ' 1' &=' D'0' 01- ' C< ǁ'<>1- ' D<' -&' C0&-1' B&> -' # ' &/' D'.D' B&><?-A1>1- ' &' '-0' C01- ' C< ǁ'<>1- ' =& ' 1- ' D 11' ' 1' ? .D' & '& '&A1 ' Cǁ<B1 '& ' <- ' &=' D1' 01'A' &>'00'&-1 0' <-A' ǁ1 a ' ?C&-' D1' 0<>1' C< ǁ'<>1- ' < 1-A -.ǁ #1' '-' 1- ' K '01' ><A1' &ǁǁ1B & '&=' D1ǁ <'A' 0&>1' &=' LLL' =' ' & ' <- ' C< 1' D1 &=ǁ #?' &=' 0?BD1' &ǁǁ1BB'&-' '-' 1, ' ><-1 ' #1' ? 1 ǁ ' ?'1 '<-A' A'0BD< .1A

&ǁǁ1B & 0' 0D<ǁǁC< ' -&' !110' &Uˆ <BB&?- '-.;

ǁǁ&K<-B10' &' D1>' C&-'<&B&?- '-.0

'ˆ =1 D1 ' ;!ˆ ' '& A1 -1A' # ' D1' 01'A' <<Q & ' 1' D<' 0?BD' &ǁǁ1 ǁ&? 0' <-A' 1+ ' &=' D1 >' D<' 0D<ǁ#1' <00'. -1A' =& ' D1' &ǁǁ1BB'&-' &=' D1' 0<>1' ?CC -' D1' ><a -.'&=' D1' '<1B&>C '0' '-' D1, -. ' 0BD1H? '#1' H? 1' <-A' A'0BD< .1A' '-' D1' 0<>1' 0BD1aa1 ' &=' <ǁ>< ' &=' =110' <-A' 1+Z< A'0' D1 1' &' #1' <0a1A' B&-R- -.' D1' 0<>1' <BB&>C 1' <-A' 1, ' C< 1' D1 &=ˆ. -A' <ǁ0&' D<' D1' 01'A' &ǁǁ1Qǁ&? iˆ <-A' 1+ ' &=' D1 >' D<+1' =1a1' <ǁ&K<-B1' ?CC&-' D1' '<B1&>C '0' &=' =11h' K<.10' <-A' 1K< A'0' =& ' D1 ' 1&ǁǁ1BB' -' &=' D1' 01'A' LLL' 'ǁ'ǁ '-' <0' ǁ< .1' >< ' <-A' =&? >1' <0' <- ' & 1'ǁ&? ' & ' & 1Qǁ;&? 0' &=' L+hh0 <-A' Lhh0 D<+1' D<A' < ' 1- ' 1<0&-' '-' >10' C<0

ǁǁ&K<-B10' &' &>>'00'&-1 00

'ˆ Sˆ D<' ǂˆ #1' 1-<B 1A' D<' D1' 01'A' &>'00'&-1 0' '-' 1, ' D' 1' <a -.' ?CC&-' D1 >' D1' BD< .1' <-A' #10 -10' =& ' D1' <00100 -.' ᴛ ' D1' 01'A' 0J>1' &=' LLL' ' ' 0D<ǁǁ D<+1' <0>&B '1' &-1 ' =& ' D1' ' B&0 '0' 1L0C1-0'0' <-A' BD< .10' =& ' D1' & A1 -.' <-A' <00100 -. &=' D1' 01'A' 0&>1' <0' D1' &ǁǁ1= &? 0' D<+1' =& ' D1' ' 01'A' &ǁǁ1BB'&-' &' D1 '' &' #1' C< A1' # ' D1' D<-A'0' &=' D1' 01'A' C&ǁ1Q ;&? iˆ ?A' D1' 0<>1' &ǁǁ1Qǁ&? 0' D<+1' ǁ a1' <ǁ&K<-B1' ?CC&-' D1' ' <BB&>C '0' =& ' D1' 01'A' &>'00'&-1 0' <0' D1 ' 0D<ǁǁ D<+1' =& ' D1' ' 01'A' &ǁǁ1BB'&-

! & ' C?-'0D'-.' 1 0&-0' 10B?'-.'])'0 1001'0 U-<A1' ?-A1 ' D'0' B

C ' ,' D'0' #1' ' '1-<Q'1A' # ' D1'01'A' ? & ' 1ǁ ' '=' 1- ' 10B?1'#1' >< A1' ?CC&-' <- ' &ǁ 1Qǁ&? ǁ' <-A' ` D<-' Vᴾ D1' 0<>1' & 1='ǁ&?' -<>1A' & ' &' #1' -<>1A' 51='1' &' <- ' &= D1'8 ?0 'B10' &=' 1<0' K -' <- ' 0?BD' D' 1' ' 1' ? .D' & ' &K-1' K D1 1' <- ' C0&-' ><a1' 0?BD1' $ 10B?1' &=' <- ' A'0 1001' &' #1' <a1-' # ' 0?BD' & 1A'&? 8& ' & 1T ;&? 0' ' D1' ' +<?- =' & ' <00'. -10' =& ' <- ' B<?01' <=& 01'Aǁ D<' ` D<-' 0ᴾ ??-1A'< 1ǁ ' ?CC&-' D1' 0<>1' ' '=' B<' D1' 0<>1' ?0 'B1' &=' 1<0' & ' <- ' & D1 ' ?0 'B1' &=' 1<0' K -' D1' 0<>1' D' 1' D<+1' C&K1 ' & 1 > 1' D >' & ' D1 >' D<' - a1' 0?BD1' 10B?10' F < A1ǁ & ' &' ><a1'<' <C'<0' &' <a1' 0?BD' C0&-' & ' C0&-10' ><a -.' 0?BD' 10B?10' <-A' &' B&> 1' D1 >' &' C '0&-ǁ' D1' ' &' 1>< -' K &?' #< ǁ1' & ' >< -C '01' # ' D1' Aǁ0B 100'&-' &=' D1' 01'A' ?0 'B1ǁ -A' D<' D1' 01'A' ?0 'B10' <-A' 1, ' &=' D1 >' D<+1' C&K1 ' KO&?' A1ǁ< 1' &' D1 1' <-A' A1 >-' D1' 01'A' ==1-B1' <0K1ǁ # ' C+1' 1L<>'-<B'&-' <0' & D1 K'01ǁ <-A' '=' 1- ' 0?BD' C0&-' #1' B&-+'= 1A' D1 &=' D1-' D1' &' 1>< D1' '-' C '0&-' ǁǁ D1' &-1 ' =& ' D1' K D'BD' D1' 01'A' A'0 1001' K<0' <a1-' #1' =?ǁǁ ' B&- 1- 1A' <-A' R A1ǁ -A' =1 D1 ' ǁǁ #1' & ' D1 '0&' B&-+ B 1A' D<+1' ><A1' = -1' =& ' D1' ' &==1-B10' '-' D'0' #1D<ǁ=' # ' D1' A'0B 100'&<' &=' D1' 01'A' ?0 'B10' ' V

-' "1=<?ǁ' &=' "'0 100' < ' BD< .1A' 0D<ǁǁ C< ' "&?##1' D1' ?>' <001001A'

0 C '<ǁ0&' #1' ' '1-<B 1A' # 'A'1'01'A'<?B & ' 1' D<' ''=' 1- 'C0&-' i '<00100'A' & ' #1' < 001A' C< ' -& ' <BB& A -.' &' D1' 01'A' 0100 D.ᴛ <-A' D1' 01'A' &ǁǁ1A'#? 0' B<-' -& ' = -A1 <C '0?==B'1- ' A'0 1001' =& ' D1' C< >1- ' &=' 0?BD' 0&>1' &=' &-1 ' &' #1' 01001A' <-A' ǁ1+ 1A' ?CC&-' <? ' 0?BD' C0&-' <=R' D1' =&? >1' <=& 101'Aǁ'U-A' CA<ǁ-<1'&-' D1 &=' ><A1' # ' D1' 0<>1' &ǁǁ1Q &? 0 ' '-' D1' -1L ' < a1 ' &K-1' D1 &' <A & - -.' '-' D1' 01'A' &?- ' ᴛ -A' D1-' D1' 01'A' &ǁǁ1 '&? 0' 51='1' '- &' D1' ,'-. ' 0BD1aa1 ' D<' `0?BD' 0?==B'1- ' A'0 1001' 1<-' -& Pˆ #1' =&? -A1' =& ' D1' C< >1- ' &=' D1' 0<>1' 0&>1' &=' &-1 ǁ D<' = D<-' 0Pˆ D1' 0<>1' C0&-' 0D<ǁǁ C< ' ?- &' D1' , -.' D1' A&?#ǁ1' 0&- 1' &=' D1' 0<>1' >&-1 ' 0&' ?CC&-' D >' <001001A' -& ' C8< A1' K ᵂ-' L+ ' A< 10' -1L ' <=t' D1' 01'A' 5'=' B<' ><A1' ᴳ -A' D<' D1' &ǁǁ1Aa&? 0' &=' ǁ'1' 0<>1' 0&>1' &=' &-1 ' D1-' &' #1' A'0BD< .1A

&-0 <##10' 0D<ǁǁ <00'0 ' &ǁǁ1B & 0

' ' '<ǁ0&' 1-<##1A' ;@ˆ D1' ᗅ/' <?A&& ' 1' D<' <ǁǁ &-0 <##10' 7 1' D'0' 1<ǂ>1' 0D<ǁǁ =<+&?' D1ǂC' <-A' <00'0 ' D1' 01'A' &ǁǁ1Aǂ&? 0' ." D1' 01'A' &ǁǁ1BB'&-' &=' 0<>1' K0'-' D1' ' 1' ? .D' ?-A 1A' &K-1' & ' ǂ=<.1' K D1 ' <- ' &=' D1 >' 0D<ǁ#1' &-0 <##1

] ! & ' <00100'-.' &=' & C& < '&-' &K-0' BD< .1<##1' K' D'-' D1>01ǂ+10ǂ

' &+'" "' <ǁK< ' D<' D1' 1' ' ǂ ''ǁ'=0' & D1 ' &='1, ' '.D' C& < ᵍ K D1 &=' D1' 1-D<#' <?- =' D<+1' -& ' ?01A' &' #1' BD< .1A' &' >< a1' &ǁǁ1BB'&?' &=' 1- ' .1 <ǁǁ' L+OJ h<-A']hH &?' &=' D1' 01'A' ? .D10ǁ D<' D1' 1-D<#' <?- '0' K ᵂ-' D1' 0<>1' ? .D10 ' #1' -& ' BD< .1A' &' D1' &ǁǁ1BB'&-' &=' <?ǁ ' 0&>1' &' 0A>10' &' #1' <001001A' <=t' D1' =&? >1' <#&+101'A' &?' &=' D1' 01'A' ? .D0ǁ -A' D<' D1 ' K 'C' D1 >' 01ǂ=' 0D<ǁǁ ><a1' B&ǁǁ1BB'&-' &=' 0?BD1' 0J>10' &=' &-1 ' <0' 0D<ǁ#1' <001001A' K0'-' D1' ' ? '0Aa1&-' &' #1'ǂ1+ 1Aǁ -A' D1' 0<>1' 0&>10' &=' >&''1 ' &' A1ǂ ;' &' D1' 01'A' &ǁǁ1B &? 0' #1' -<>1Aǁ<0' '0' <##&+101'A' =& ' D<' D' 1' K D1 1' D1 'D<+1' D1 ' #1 -.

$. ‘ ‘’ +2.’ +- ’ &.’ &2.-!’-.’” 2.-!2 ;!’ 2 !/ .’” # ”*!/ ;@ *FO-’ . ’ !’ 2!&/’ 2.1!’ . ’ %%%% Ù &’ .’” -@’ *../ ’ .’” # + 2 &-’ !-@’ . !’” + #!’ -’ !”!’]’ !’ ” !@’ /7!++& ’H !%#! ’ ’!’)@ 2.-!’ -/’ 2.-!2 ;!’ # ”*!/’ .’ !’ 2.1!’ .’” !&’” SO@E’ # !+# 7 !”!’ !’ 2 1!’ SO@E’ # ! ’ &2 #.7# 0-’C’ +!’ 0- ’ -/’ ” !&’” .1!’7 !”!’ !’ 2 1!’ .1!’ *”!7!’ -/’ ”!1 @-! ’ &-’ !’ ; ”-!’ b ”-!’” .’” &-’ EE&2’H’ -/’ ’!<@’ 2.-!’ -/’ .-2 ’ ’.’” .+/& ’ -@’ .72!’ .’” + #!’ 7 !”!’ !’ .’” !@’ .’” -@’ 2.-2’ .’” @1’.’” !@1’02& ’ .’ ;@’ ”&/’2!+#’ -@’*../&2’.’” # ++ ’ ”! @+!’ @’ .’ !’2!&/’2.1!’ . ’ %%%% U&& ’ &’” !’6 !’ ;.’!2!&/’ ’ !”!’ 2’ !’ .’” !@’ 2.’ ”! @++! ”

W 3!”2.-2’# ”*! ;+!’ .-+@’ 7 !”!’ !@’ +&’!’C#

$! ‘ ‘’ +2.’ ’-.’ 2 0!+# 2.-’-.’2 ” 0-*!’” +!@-’ ;!’ # ”*! ;+!’ -!’ # ”*!/’ .’” !&’”*../<’ -/’ # ++&2’ .’ !’2!&/’2.1!’ ;0’ .’” 20# ’*../&2 -/’ # ++&2’ 2’ !@’ ;!’ ”*! ;+!’ 7)< .’ !’%’F?’ -/’ %()`)

W ”*!’ 0 .-’ +&!-2

36 & K’ +2.’ ’ +# 20# !’*../&2’ 2’ -@’ .”/’ .’” . !’” 2.-’2!#0+!’” ’ #.-5-@-*’ ’& &+# .’ ;!’ !%2 !-/!/’ &-’ !&’” .02!2’ .”2!2’ -/’ 1!2’ .’ ;!’!-H +.@/!’ &-’ !<V!””!’ .’” .’” !&’” .7-!’02!’ -/’ +# . !”@1 +!1!-’ .’ .02 .+/’ .’ ;!’02!/’ &-’ !&’” .02!2’ -/’ !-2&+&!2’ .’ !’2 &-!’7 !” #@’ !’.’” !@’ E!’-.’ * @-!’-.’” 7@--@-*’ ;!’-.’#.1 ”&2!/’ -.’” # ”*! ;+!’ .’ !’2 &2 ###&.-’ .’ !’2!&/’2.1!’ . ’ %%%%)

L ’ %!1 &.-’ .”’ &# 0 +2’C#’ . ’ .”/2’ -/’ !#0+ ”’ 3!”2.-2

$. ‘ ‘’ +7 @’ -’ ’-.’+.-/&2-.’” ! & ’ -.’” . !’” !”!/& -&!- ’ -.’” .22!22&.-2’1.”&2!/’ ”. ”&!/’.”’ ;!+.-*@-*’ .’ -@’ .++ *!’ .2 & +d’ ++’ .’” .02!’ . ’ #.+!”2’& &-’ -@’ . ’ !’W -&< & !2’ . ’ %!- .”/’.’” 1;”&**!’ !’ ”!” .02!2’& &-’ ++’ -*+.-/’ !’ .02!’ !%!1 !/’ ”.1’ ++’ ”*! . ’ @.-’.’” .’ !’ .++!*!’. ’.0”;+!22&/’ /@’. ’ .-’Y.’” !’ .++!*!’. ’.0”;+!22&/’ /@’. ’V@-# !2”!’;@2&/!’V@-# !2”!’.’” -@’ *../!2’ .’” ++&2’. ’ !’2!&/’ .++ *!2’ .’ .’ -@’. ’ !@&-’ ;!+.-*@-*’;!’# ”*!/’.’” # ”*! ;+!’ .’ .’” .’” !’2 &2 ###&.-’ .’ !’2!&/’2.1!’. ’%%%% &’ .’” -@’ #!++’. ’ !’2 1!’< ;0’ ’ !’2!&/’ .++ *!2’ .2 & +2’ ++!2’Y ”!” .02!2’ .02!’. ’ @.-’ -/’ !<@# ’. ’ !@1’;@’7 ’2.’!$’-1!’. ’ -1!2’ !@’.’” -@’ ./!” # !’1 /!’.’” .’ ;!’1 /!’#.- -@+*’ !’ 1@22!j’-.7)2.-/@-* 2 ; #/.&’’. ’ !’2!&/’2.1!’ &2’ 2!-’ # !’.’” -@’./!” # !’1 /!’.’” .’ ;!’1 /!’#.- -@+*’ !’ 1@22!j’-.7)2.-/@-*

1!2’. ’ !’ .1&22&.-!”2’ -/’ 0” 2’.’;!’ 22!22!/’ &-’! # ’ .0- @’C#

/- ’4!/

&” . -’ @-’ . -’M-@* ’
&” . -’ .”/ 0-’M-@* ’
&” . -’B@22 !” 02&#!’
&” /-0.-/’ 0#!’ M @* ’ ’ %’H &’ %’&&H2’H/’ .;
V&&+& &’b 2#.@-!’
.1 2’V 0 .-’
. -’3.0+!@’ !’@.-*!”
V&++& 1’ ”2 ++

. 1’ !’.-

/10-/02’ ”-!’ &’
3! 0” **!#.1;!’M-@* ’
1@2’ @/!+!@
.1 2’ .”!+’
. -’b&+;!”/’
6.\’ .++ -/’
. -’ ” ’ & &&H’+&’W’2’&%/’ . ’S
6. ’<.V!’
. -’V@+ ’
-/”!7!’ & !”2/.-’
6&# ”/’ ++2’
6&# ”/’ . 2@-

. 1’ 0-<

&” ’&/’3 &+&’M-@* ’
.1 2’ .7 !’
V&++& 1’ @+ ”/’ ’ ’ %%H &’ 85) W/’.
.1 2’ . .-’
. -’3!-@#.E’
. -’ 2! ’H0

; 1’ 0””

!7!’4”.0-’M-@* ’
6&# ”/’ ”!7!’M-@* ’
. -’ !* ’M-@* ’
. -’b @-@2 .”/’ 2SO@!”
. -’ #. ’
6&# ”/’ ”+.-/’
. -V!2 ;”.E!’
. -’M@” .-

’ %%&&H’+&’&% /

. 1’ V”@*.”

&” . -’ .”@1!<M-@* ’
V&++& 1’ .7j! .-’M-@* ’
b@+!2’b”!’@+’ 2SO@!”
.”&’2’ !’!+’ ’ b ’&&H &’%’H &&&H’R>’.!
.1 2’ @*.-’
V&++& 1’6@/ +’
.;’ .”* -’M2SO@!”
. -’V +/&!’ 2SO@!”

; 1’6. ’
G
’!” ”/’3&+/@-*’M-@* ’
V&++& 1’ +1!2’ 2SO@!”
V&++& 1’3.+!’ 2SO@!”
. -’ ””@-* .-’ ’ ’ %%&H’&+’VWW/’ ;’S
’!” ”/’ @*;@’
6&# ”/’B+.S”
”&2 . !”4”.0-’
b!.”*!’ E7.” !

. 1’V&+ !2

/7 ”/’ ”!+’M-@* ’
.1 2’ .-*!’M-@* ’
6&# +@.’$H :’ ’ !’ 7!’
. - !”&!@’ G’V . &’ 2 &&&H’/’.;
/1.-/’ ./@’ D
-.-@’ 1 -’
!/1’ 1<-’
.1 2’b @-

.H-’V !2 &

6.*!”4! +@-*! 1’M-@* ’
1;”.2!’ ” E!-/ ”<’
b! ”!@’ -# 2!”
. -’6@**!’
.1 _’V ” .-’
. -’B+!1@-*’
.1 2’ ;.0”-!’
6&# ”/’ .E##@’
V + ’ ”@E& -/’
/7 ”/’6!/1 -’ 2SO@!
- &

U .’ J ”!” .02’ J O#&!’

** 5’M

'+'@ &=K'R

D&><0' <K10'
&#'E< A -1='
&D-' '.D K 01'
F'@@'<>' <>01'
&#' ? .D'
E1& .1' @1 a

ﬂ ''' J='X'' + '0' LX'A

'+'@ &+1' <

D1' 1 1'&=' D1'0<>1' '1'
&#' &? D'
&D-' 1@K&A1'
'BD< A1' < '@>1K1'
F'@@'<>' <>#< A

9 L+' '' + 0 ' LA

&'-' <- =

D&><0' & 1@1 ' , - .D '
&D-' & D1' , - .D '
11 0' 11' , - .D '
'B' &@A' , - .D '
&D-' &K DK& D' , - .D ' -' Q 'L '' ' '' '0' '' 'A' &#' H<
D&><0' <? 1-B1' , - .D '
F'@@'<>' D& -#& &?.D'
0H? 1
? #1 A' @ = &-' 0H? 1

&>' 1 BT

<?Q' D' @1 ' , - .D '
&D-' @@1 0' , - .D '
&D-' "'.# ' , - .D
&# ?A1-1@@ <-' `< 1 P' " LLL+' '' ' L@' 0 ' LA
@<K1
E1& .1' ? &-' , - .D '
<? 'B1' < a1@ ' , - .D

.1' ." 01 !"

<?='E 1 ' , - .D '
&D-' < -. &-'
'BD< A' -. &-'
AK< A' < B@ =' 0H? 1 '
<?=' < #& 1@@' , - .D '
A>?-A' <= 1 ' @0H? 1 '
?>= 1 ' @1' , - .D '
&D-' 1 &-' ?-'K'
A-1@@' 1 &-

&h'3 !

F'@@'<>'F'@@&?.D# ' , - .D '
&.0' 1K 1#& &K1' , - .D '
F'@@'<>' @D&@1' , - .D '
& .<-' , AK1@@ ' , - .D ' ')' 'L+'' '' L 0 ' LA
?>= 1 ' <0a1 =1@A' 0H? 1 '
F'@@'<>'F<AD<>' 0H? 1 '
&D-' & 01 '
&D-'!<?- @1 &

&-"1 #

1-' 1>1 ' , - .D '
BA>' &?-.&>1 ' , - .D '
<?=' &-.=& A' , - .D '
E&A= 1 '`!&@'<>#@1'0P' 0H? 1 '
F'@@'<>' &?BD1' 0H? 1 '
F'@@'<>' & D1' 0H? 1 ' '''' L' '' 'L'0@' +''' A
&D-'!1 D1 #1 A1' 0H? 1 '
D&><0' <# -. &-' 0H? 1 '
&D-' .< A' 0H? 1 '
&D-' & 1' 0H? 1 '
'B' &?-=& D' 0H? 1 '
&D-'E@ 0 &-0

.1' +.

D&><0' @?- 1' , - .D '
&#' & #1 ' , - .D '
D&><0' 1.D &-' , - .D '
&D-' 1KC& ' 0H? 1 '
D&><0' &-' 0H? 1 ' ' ''' ' ' ''' '0@' +'A'&#'H
E1& .1' &>@1 ' 0H? 1 '
&D-' <@ 1 ' 0H?'1 '
D&><0' <a1-' 0H? 1 '
D&><0' a +1-' ? 1

.1' @-#.+-' R<8' @-/!2!@

F'@@'<>' KD' ' , - .D '
&D-' @?001' , - .D '
&#' D1=!1@A' , - .D '
&#'" >>&a' , - .D '
&D-' a CK' D' , - .D '
F'@@'<>'` 0B1K1' , - .D '
D&><0' ? .D' G 0' ' ' ' +' '0' +''' A' &#'
&D-' 1--<.1'
'BD&@<0'E '@@ -. &-'
&D-'!& B1 '
&D-' '@@'0# 8'
&#' ? &-'
'BD&@<0' C &-'
&D-' D<@&-1

'+' <0' ''@ ?<

&D-' 1K1 '
D&><0'E'@#< A'
<?=' &?-'
&D-' <@1'
&D-'! 00D'
F'@@'<>' & @<-A

''' ' ' L''0' ''' A' &#

.".' 22!%

'BD< A' 1K10' , - .D '
1>' <>1 ' , - .D '
D&><0' L1@@' , - .D '
&D-' < -10=& D' , - .D '
&.1 'F1- K& D' , - .D '
1-' 1 ' , - .D

&-#.+-' !2'/!'M!2!'!-

F'@@'<>' KD' ' , - .D '
&D-' ?001' , - .D '
D&><0'"<@<@<?-A' , - .D '
'@10' ?00D ' , - .D
<-B&' <>&-')"' ''''0 +' '@'+''0' L'A'&#'H
F'@@'<>' @> 0'
&D-'F >#00D'
'0 &=1 ' &?-'
&#' &@-1@@

. 1 ' M ! ! U (' #

+. & ! - ! '
. - ' ' M - @ * ' %@%% I <) ' & H ' & & H /
6 . ; ! " ' @ " ! + ' M - @ * '
0 1 " ! @ ' @ " ! + ' 2 S 0 @ ! "
6 S ; ' 3 + . 1 ! "
/ 7 " / ' 0 + @ ! " / '
6 . ; ' ." - 7 + ! @ '
V < ! " B " . 2 '
V & + + & 1 ' ! @
. -) ' b < / ! - ! "

' - B & @ - ' C 1 0 ' A 1 ' & @ < - A

NV & + M - & & " 7 & ' M - @ * '
. - ' 0 2 ! ' M - @ * '
V & + + & 1 ' 4 ! / & + '
@ " & + 1 ' 0 " / '
. 1 ' . + - / ' G ' + % ' + & ' % & & H ' A & ' / <
. 1 ' 6 . ; " 2 . - '
b ! " ! @ 3 @ - ! + '
& . 1 ' b @ . - '
. 1 ' + . 2 !

. ` ' 4 ! " e

6 . ; ' + @ ." / ' M - @ * '
. - ' ! - ." '
V & + + & 1 ' @ ' M - @ * '
6 . ; ' @ . - ' M - @ * '
0 1 " ! @ ' . - @ 2 ; @ '
6 . ; ' ". 0 ; ! + ! + / '
. - ' ." ! ' ' G ' % & & H + ;
V & + + & 1 ' 3 0 + ! "
V & + + & 1 ' . 0 ! "
6 ! @ - . + / ' 3 ! * '
. 1 ' . ; 2 . - '
. 1 ' 4 + E ! '
6 & # ! + / . -

' + ' - ' & + 1 -

) & . 1 ' 3 / + . - / '
. - ' / / . - '
! - " " + "
+ & # . . E ! '
6 & . ' 4 " @ . !
V & + + & 1 ' B . &

' % & H & & ' % @ & H 2 ' ' /

& > ' & > ? #

. - ' "0 - / ! + ' . ' - ! !" . - ' '
M - @ *
V - & : - = " "! ' - @ . - '
. - ' "0 - / ! + ' "! " @ 2 ! ' M - @ * '
6 . < ' b " ! - ! ! + / ' G ' ' & & H ' & & H ' 2
3 ! " ! ' 4 ! - ! + '
6 & # @ ' H - '
. 1 ' ! @ - 7 ; @ - '
. - ' . 7 % + ! '
. - ' b + @ - ! ' . ' <7 ! + +

' @ @ < I #?

6 . * ! " ." - ! '
. 1 ' V @ & ." / '
. 1 ' & . - '
. 1 ' "! - 1 '
3 & # & . - ' G ' % @ % & ' ' & & H /
6 . * ! " B . 2 ! "
. 1 ' ." / ! '
6 & # ." / ! '
. - ' 3 " . - ! '
V & + + & 1 ' 4 " . 1 ; ! @

' + ' e ' < D & -

V & + + & 1 ' V . / 7 " / '
6 . ; ' 4 ! - '
V & + + & 1 ' @ + ! " ' % & & H M ' ' H 5 ' ' & * ' /
. - ' b ! ! " ! @ '
0 " ! - # ! ' ! # !

& > ' <==

0 1 " ! @ -+ ! @ M - @ * '
. - ' B ! @ " " ! ' M - @ * '
. - ' 2 . - ' M - & * '
. ; ! ' -+ ! @ 2 S 0 @ ! "
' + < & + ! - ' M 2 S 0 @ ! "
R) 8
. & H V ! + + @ ' 2 S 0 @ ! "
. 1 ' V ! ' 2 S 0 @ ! "
/ 1 ' b @ B . " / ' M S 0 @ ! "
V & + + & 1 ' <

G ' ' & H ? & & & H ' & ' % & & ' 2

. 1 ' 0

. - ' V @ - * ! + / ' M - @ *
. 1 ' " - / . - M - H H <
6 . ' 4 " . 0 * . - ' M - @ * '
6 . ' " ! " ! ' M - @ * ' Q
V & + + & 1 ' + . . - ' M - @ * '
V & + + & 1 ' V + * " ' ! ' M - @ * '
. - +@ - 4 " . - . # ! E ! '
1 ! ' . ; " '
6 . ; ' 4 " - / . - ' M - @ * '
. 1 ' B & < ! 2 ' M - @ << '
3 & ' @ + - ! @ ' M - @ * ' < ' ' % O & H & & ' ' 2 ' & & & H / ' 4

' + ' - ' #&

. 1 ' 1 2 . . ' &"
& # ! + + ' 9 0 @
b . . " * ! ' M @ " E .
. - & ' b " @
V + & 1 ' ! + ! 2 .
. - .E / + !
6 & " / ' ." - . -

K ' + % & ' W 5 ' . ;

' &>' ; o › #('
&D-' ?A1@1 ' , - .D '
&D-' <L@1' <?- ' < ' <K1'
D&><0' ?B<0' D1' , -.=
` &@'0R
E 1.& 1' A.& 1R <- ' < ' 0)
<K1
'BD< A'F 1- K& D' 0H? 1 '
& '"< B ' 0H? 1 '
&D-' E< - 00D1' 0H? 1 '
D&><0' <@A 1'&=' C10K'BD'
<>10' ! <>@ -.D<>' 0H? 1

.1' ."

D&><0' &+1@@' , - .D '
AK< A' &K< A' , - .D '
<>10' ?##1 A' , - .D '
F '@@'<>' , -1+1 ' , - .D '
F '@@'<>' &@1 -' , - .D '
D'@'C' <@ D &C' , - .D '
&D-' <0 &-' , - .D '
&#' @1 1' , - .D '
&(' &+1@@' , - .D ') 0 " @+ ' ' + 0 ' LA
E 1.& ' &+1@@' , - .D '
&#' ? DK1@@' , - .D '
D'@'C' '-1 ' , - .D '
& ' <?-.1' , - .D '
1- ' &.< A' , - .D '
&M' &K-101-A1' 0H? 1 '
! <?-B1001' <@ #? 1'
F '@@'<>' 1

.1' 40 !

&D- 1'-1 ' , - .D '
D&><0' <-' , - .D '
'BD< A' >C0&-' , - .D '
-A 1'K1'F -0& 1' 0H? 1 '
'BD< A' @&?- ' 0H? 1 ' ' "' L+'' 'D ' L''P'0' +? 'A ' &#' H
D&><0'" -D<>' 0H? 1 '
D&><0' .& ' E1-=
'BD< A' 10 K&@A'
D&><0' -.=&&-'
&D-' D1 -1' 0H? 1 '

40"* '/!' 0 7!"E'

D&><0' <-A&-' , - .D '
&D-' " '.# ' , - .D '
D&><0' & &-'
F '@@'<>' <?-BD1'
E @10' E& &-'
&D-' F ' @B&aa 0' Ƶ Ɦ0
'BD&@<0' < & '
E1== 1 ' <.D<-
&#' &>D<>'
'B' E&&A><-

&'&' V@*."-

&D-' <==1@A'
F '@@'<>' & 1 ' ⇳ L+'' '' L+':
F '@@'<>' D'BD1 1 A'
F <@ 1 ' &-1

.1' . &2

> <0' &?@1 ' , - .D '
'BD&@<0' F <AD<>' , - .D '
?.D' ? 1 1@@' , - .D '
&D-' C1a1' , - .D '
&D-'!' \' <> 0' `01-'& ' ' 'LL'L''' ' L''' 0' H
&D-' & 1 '
&D-' 1 &-' 0H? 1 '
V &D-' ` 1- -' 0H? 1 '
&D-' &@1

&//

D&><0'! &K a' D'1=' ?0 'B '
A1' <-B&
D&><0' &+1@@' , - .D '
&#'¡ ' R , $ '
$ '= !¡ ' R , $ ' -ˢ HEEᵡ ' ;>!'HƱ#
< 'b 7 4'R , $ '
G$!'" 7 '!› ' '¡ 7 '
-A 1K1'F -0& 1' 0H? 1 ' '
&D-' 1?A .< 1'

.1' - ! "

F '@@'<>'! -A1 -' , - .D '
&#' 1 &-' , - .D '
&#' & &-' , - .D '
F '@@'<>' "1- &-' 0H? 1 '
&#' < 0' 0H? 1 '
'BD< A' -' 0H? 1 '
<?=' D<>#1 @1 -' 0H? 1 '
&D-' ? .& -' 0H? 1 ' " @' ' ' L+'0' ''' 'A
D&><0' & .& -'
&D-' K&A1'
1- ' "&a1 ' 0H? 1 '
"<+'A' 1@@' 0H? 1 '
F '@@'<>' R< A'
&#' & A&-'
&D-' F &@+1 0 &-

.1' V ""

&#'! &.>1 &-' , - .D '
AK< A' 1@a-<C' 0H? 1 '
&D-'E 1+1@@' 0H? 1 '
'BD?0' &?-' 0H? 1 ' " L@+ ' '' 0 ' ' A
&D-' ? A1 ' 0H? 1 '
F ' >' &?-' 0H? 1 '
'BD&@<0' ` <@& 1' 0H? 1 '
1- ' > D'E1-R

&++ ' . @-*

&D-' F A1 @1 '
F '@@'<>' ..&-'
D&><0' F < -1 '
&D-' 1@ &a1'
'B' 1@'&? <' LLL+' '' ' L' A
&D-' &0 1'
&D-' &K1 1'
'0 &=1 ' BB< A'
&#' ? 10

.1' 0

F '@@'<>' <-A 0' , - .D '
F '@@'<>'! &0 '
F '@@'<>' , < @1K< ' , - .D '
&D-' <?@1 ' , - .D '
E1& .1' & 1-D<>' , - .D '
&D-' &?-A1' , - .D
&D-, -.10> R <- '<'@<K1P' " LLL''' D ' ? 0 ' ?X/
&D-'` 1?C& '
&D-'"<@1
3F '@@'<>' BD1D& -'
D&><0' & 0'
F '@@'<>' 0 1A1'
'BD&@<0' BD1#&>

' &@'B'R' s(' ? ' S '
/ D1@A1 ' s 1+ -' s

Ơ <@& 1' '
U 1KC& D

-; ,9</ ' &>+' . 4)) ' ;2 >.-

. 1 & #

6&# "/' 1 2.-' M-@* '
.1 2' !@&H!'H -@* '
.1 2' b"!- ' M-@* !'
<&# .+ 2' b"& @-' M.@* '
6&# "/' M-@* +!@' -@* '
B.E!' /!+' 2SO@!'"
. -' "!2 1' 2SO@! '
6. !' V& !+;0"@' 2SO@!'"
.1 2' . '!' <SO@!'"
6&# "/' 40" .-' 2SO@!'"
.1 2' 2&+79/!' 2SO@!'"
b!."*!' +@2.-' 2SO@!"

%

$U%- &' %&%/' ."

&>' E@&?A

6. +' 3.@- j' M-@* '
b&+!2' 4"&**!2' M-@* '
. -' 0//!+2 .-' M-@* '
V + !'" !-@2' M-@* '
V& & 1 "7!+ 3H 0- + 7!'
@1.-' @+;.1!' 2SO@!'"
. -' 40 !+!'" 2SO@!'" G
6&#' 3.+! !' 2SO@!'" &H2
V& & H " #@' 2SO@7'
. -' V & @-* .-' 2SO@!'"
/1.-/' 1!' 2SO@!'"
V + !'" 6.7/.-' 2SO@!'"
"&2 . !'" 6 @-! 1' 2SO@!'"
. -' ." "./!' 2SO@!"

#(' 'A -.'-' &>' Q#& U

"1 /0+#! .-2 +!' M-@* '\
V + !'" b"& & ' M-@* '
. -' . 1' M-@* '
. -' .-2 ;+!' M-@* '
4"@ -' 3 +1!2'
V&++& 1' +2.-

< ' ' '%'&H &' W#2' %H'/' .!' S:

&++' /!' M@-*!2 .-' 20 ' 0++'

6.;' b "- '" &'"
!-'" @-/"@-
6.;' 0+#' <'+%& &
.1 2' .E!'
V&++& 1' .-* .-

F 10 A .' '-' &>' # =

V&++& 1' b 2#.@-!' M-@* '
.1 2' V ." +!@' M-@* '
/7 "/!' ' *!' M-@* '
.1 2' !1 !2' M-@* '
4"& -' 3 +1!2'
. -' ++!--!"

& &&&H<<%' &H&&' % '2' &&&H/

.1' 022!%L

'&/' 7!-' M-@* '
. -' !'!-@22 !' M-@* '
+1 1 2B@-!2' M-@* '
/1.-/' 0/+!@' 2S @!'"
6&# "/' E !+/' 2S;@!'"
. -' .E!' 2SO@!'"
. -' b."@-*' 2SO@!'"
.<' 1+!@' b!- &&1 -'
!-'" 6..2' M-@* '
6.c']!@E!-.<.' K\1!"

W +%H&&' %&&&H2' '&&H/' .;P

& D A -.' '-' &>' #& @

" 8' ') =8 5' 4B
6' 8 7 3)8 5' '
(*5 '7 * 8' 3)8 5' ' <' H' <' <
6 0' '!"2' M-@* ' P')
6&# "/' -;@'
' ."#1' M @* '

&>' & -.='

&'-' 1 '

V&++& 1' $<.""!@2' M-@* '
. -' V&++& 12' M-@* '
.- 2' B! & + #!' <@* '
V&++& 1' 4!2&++!2' 2SO@!'"
6&#' B! & + #!' 2SO@!' ' +%'&H &' '&&H2' H/' .!' S
. -' _;!"@' 2SO@!'"
. -' B! & + #!' . ' -!@' '
2SO@!'"
"&2 . !'" 4!+@-*!) 1' 62SO@'" '
6.;' ." !' 2SO@!'" :

&' ' 1 ' 2SO&!'" S

.&-' !"! ."/

&'" 6 &/</' ". !' M-@*<' E'
&'" b"& < ' 6!!2' M-@* ' '
&' 6&# "/' +! !"!' M-@* ' '
&'" .1 2' -*+!2 !+/' M-@* ' &'
. -' S -*!-' !' @.-*!'"

6.< ./!- 1 62S/ <' &&S2' H/ ·!
/' b61' ."* -' 2SO@!'"
6 0' E!+! !' 2SO@!'"
6&# @-.0"2' 2SO@!'"
. -' 6"!@- .-'
6.+ -/02' ." .-

Ü "!'!+' U'
'3..+!'

'

&>⁝ . 4))⁝ ⁝99 > . 9

! ⁝ 2 2 ()

' ' " & > '-<' 1B'ĝ'<' 'B' F 1ĝĝ10' I ' <D

.⁝ !⁝ M@-*⁝ .0"ⁿ ., @-⁝ ."/⁝Ĥ

' D?>#ĝ ' 0D1K1 D' &? ' '.D-10' " <>1' 'A@1' ĝ< 1' F =' ' &D-' ĝ< 1' 'B&?-' F 1ĝĝ10ĝ' < 'A' F 'ĝĝ'<>' F ĝ'&?.D# ' ,-'.D ' & A' F ĝ'&?.D# ' <-A' &=' 0# ĝ' &# ' =' < '&a' ,-'.D ' D&>0' <? 1-B1' ,-'.D ĝ' <-A' ,<R -' F ==' &=' &=1' 1>C10 ĝ' KD'BD' & A' F ĝ'&?.D# ' &# ' A' D&> ' <? B1' #11-' B&?0 -0' <-A' D1' 10' &' &-' ĝ< 1' & A' F 1ĝĝ 0' 'BD< A' F 1ĝĝ 0'<-A' &# ' F 1ĝĝ10' <-A' &' 1, ' &=' D1 >ĝ' <-A' D1' 0<'A' ,<R -' A&?.D 1 ' <-A' &&-' &=' D1' D1' 10' &=' D1' 01'A'6 G' D< ' KD1 1' <' <' < ĝ'<>1-' D&ĝA1-' D1' +' ' 1 1' &=' &? ' >&0 '.0B'&?0' 1'.-'1' <' C1 'B'&-' K<0' ><A1' # ' &D-' ĝ< 1' 'B&?-' F 1ĝĝ 0' <-A' " <>1' 'B'ĝ1' D'0' F =ĝ' D< ' F D1 '?CC&-' B&'B<& '&=' 1' >< -<.1' #1 K'L ' D1' 0<'A' 'B&?-' ' < 'A' D1' 0<'A' " <>1' 'B'ĝ1' ' ' K<0' C> 01A' D< ' D1' 0<'A' 'B&?-'0D?ĝA1' >< a1' & 'B<?01' &'#1' >< A1' < 0?=='#'1 '0? 1' <-A' ĝ<?=? '10 < 1' &=' <ĝĝ' A'1' <0 1ĝĝ0' & A0D'C0' < '0' &-A=' I ' 1-=' 1.'&-0'<-A' & D1 ' 8 1 1A' <>1-'0' `KD'BD' K1 1' ?-&' 'P' D1' 0<>1' 'B ?-' # '<-' <Q ' &=' 10 ' ?B'&-' >< A1' '-' &? 'C< ĝ'<>1-' D&ĝA1-' < ' F 10 >' D1' =' 0 ' 1 1' &=' &? ' 1'.-1' K<0' 10 & 1A' &' #1' D<A' &' D1' 01'A' 'B&?-' <-A' " <>1' 'B'ĝ1' D1-' D'0' K ==' <-A' &' D1' D1' 10' &=' D1' #&A ' &=' A'1' <'A' 'B&?-' ĝ<?=? '#1.& 1-' -A' &,' D< ' D< ' D1' 0<'A' " <>1' 'B'ĝ1' 0D?ĝA' -& ' #1' D1 &=' '>C1BD1A' &=' F <0 G' KD'BD' 0 < 1' 8A'1-' K<0' -&' >< A1ĝ<'RA' D< ' D1' 01'A' 'B&?-' D1-' K<0' <CC& - 1A' &' < 1-A'?CC&-' &? ' E ;1' '-' &? ' '<.1' & <ĝĝ1' '- &' D1' C '10' # &-A1' A'1J11G' D< ' ' ' K&ĝA' C@1<01' &? ' '.D-10' =& ' D1' C=&? > -.' &=' D1' 01'A' 0 < 1' <-A' 10BD1K -.' &=' D1' . 1< ' D< .1' <-A' &0 1' D< ' 0D?ĝA' #1' &' B<H01' A'1' 0<'A' 10 < 1' &' #1' ><A1' 0? 1ĝ' &' & A1'.-1' 1-<B 1' <-A' 10 <#ĝ'00D1' #' D1' <A+ 01' &=' D1' & A10' 0C?<ĝĝ' <-A' 1>C<ĝĝ' <-A' D1' &1-0' '-' D< ' C< ĝ'<>1-' <001>#ĝ1A' <-A' #' <?=& ' 1' &=' D1' 0<>1ĝ' D< ' D1' 0<'A' 'B&?-' 1' <-A' " <>1' 'B'ĝ1' 0D?ĝA' = &>' D1-0=& D' <+1' D&ĝA' <-A' 1-& B' <ĝĝ' D1' 0<'A' <0 1ĝĝ10' & A0D'C0' < '0' &-A=' <-A' 1-=' <-A' & D1 ' D1' >001Ø' & D1 >' <-A' & D1' D1' 10' &=' D1' #&A ' &=' D1' 0<'A' 'B&?-' ĝ<?=?ĝĝ ' #1.& 1-' ' -A' D< ' D1' 01'A' " <>1' 'B'ĝ1' 0A'?ĝA' -& ' #1' '>C1BD1A' &=' F <0 ' ' <+ -.' & 1 ' C0&-1' & D1 ' D1-' D1' D1' 10' &=' D1' 01'A' 'B&+>' <-A' =1&==10' &=' D1' 0 >1' 'B&?-' <-A' 1' ' D1' 10' 0?BD1' '.D ' ' ĝ1' <-A' '-+10 ' <0' D1 ' D1-' D<A' & ' &?.D ' &' D< 1' D<A' '=' D< ' D<A' -& ' #1' ><A1' ' KD'BD' C1 'B'&-' < ' D1' 0<>1' C< ĝ'<>1-' 8K<0' '-' D1' 0<'A' C< ĝ'< 1-a' 10 <#ĝ'00D1A' V I' 1-<(;1A' <0' # ' 0<>1' ' >& 1' C@1 -ĝ ' ' ' A& D' <CC1 1;' 1 D1@1001' D< ' ' ' >< ' ĝ'a1' &? ' '.D-10' D1' 0<'A' 10' -& K 0 &-A -.' # ' D<A+'01' <-A' <001-' &=' D1' & A10' 0C?<ĝĝ' <-A' 1>C<ĝĝ' <-A' D1' ⁝' '-' D'0' C 1-' C< ĝ'<>1-' <001>#ĝ1A' <-A' # ' <? & ' 1' &=' D1' 0<>1ĝ' &' 1-<#ĝ1' & A1'.-1' g ' 0 <#ĝ'00D1' D< ' D1' , '-.'&?' #+< -' & A' D<+1' D1ĝA' I ' 1- C 1' =& ' R>1' &=' D'0' ĝ =' K=&? ' '>C1A'1>1-' &=' F <0 ĝ' D1' ` <-1 hP' &='3` <>#1 K& D9h'P' ?>1 D& C' ? &-' <-A' ?0 D# C' '" D1' &?- '1' &=' '-B&ĝ-ĝ' <-A' <ĝĝ' & -A=' ' 1- ' A+&?0&-0' 1- 10' 1 B' -0' <-A' 01 +'B10' '-' & -#1 K& D' ?>1 D& C' ? &-' <DA' ?0 D& C' <=# 101'A' B<ĝ'1AA' B& -1 '=11' K' D<CC 1-0-B ' KD'BD' K1 1' '&-' ĝ< 1' & A' F 1ĝĝ 0' & '<-' C0&-1' & ' C0&-10' & D'0' ?01' ⁝ <-A' <=1 ' &? ' & < -' & A ' D1' , '-. ' A1B1001' D1' 0<>1' < 0' &''A=' I ' 1=' =' KO' D<CC? 1- -1=' &' #1' <-A' 1>< -1' &' D1' <>1' " <>1' 'B'ĝ1' =& ' D1' R>1' &=' D' ' ĝ ==' K0&?' ' >C11D>1& ' &=' F <0 ⁝ -A' =? D1 >& 1' D< ' D1' 0<>1' " <>1' 'B'ĝ1' = & <D1-0=& D' 0D<ĝĝ' D<+1' D&ĝA1' <-A' 1-& 1' <ĝĝ' & D1 ' <0 1ĝĝ=' <='<' & -A=' <-A' 1-=' 1-=' 1 B'&-0' <-A' +'B10' <A+&?0&-0' ĝ'D '10' = <-BD1010' <-A' <ĝĝ' & D1 ' D1 1A' <>1-=' KO' D<CC? 1-0-B10' D< ' K1 1' ĝ< 1' D1' 0<'A' &-' ĝ< 1']O& A' F 1ĝ 0' & '<-' C0&-1' & ' C0&-10' & D'0' ?01' & ' D< ' K1 1' D1' 01'A' &D-' ĝ< 1' ' &?-' F 1ĝĝ 0G' LB1C ' D1' <'A' &=' & -#1 K& D' ? -1 D& C' ? &-' <-A' ?0 D& C1' <-A' D1' 0<'A' &-A ' #1' 1-=' B<ĝĝ1A' B& ' 1 ' ! 11' <-A' f ' 0<'A' &-A=' ' 1-=' '-' & -#1 K& D' ? 1 D& C' ? &-' <-A' ?0 D& Cĝ' &' D<+1' <-A' &' D&ĝA1' <ĝĝ' D1' 01'A' <='0' &-A=' <-A' 1-=' 1 1A' <>1-=' <-A' & D1 ' D1' C> 0010ĝ' 1LB1C ' D1' 0<'A' <='0' ĝ&-A=' I ' 1 =' #1=& 1' 1LB1C ĝ' &' D1' 0<>1' 'B'ĝ1'=& ' >1' &=' D' ' ĝ ==' KO&?' ' >C1BD>1-' C=' F <0 ' -A' D< ' <= ' D1' A1B1001' &=' D1' 0<>1' " <>1' =<B'ĝ1' <ĝĝ' D1' 0<>1' <0 1ĝĝ=' < 0 &-A=' 5ĝ 1-=' 1-=' 1 B'&-0' <-A' ,+'B1 ' <A+&?0&-0' ĝ'# '10' <-A' = <-BD1010' <-A' D1 1A' <>1-=' KO' D<CC? 1- -B=' D< ' ĝ< 1' K1 1' D1' 0<'A' &-' ĝ< 1' & A' F 1ĝĝ 0' & '<-' C0&-1' & ' C0&-10' &' D'0' ?01' #1' <-A' 1>< -1' &' &? ' & < -' & A' D1' , -.' <-A' D'0' 1L1B? &? 0' =& ' D1' ,>1' &=' L ' 1=10' -1L ' <-A' ' ->1A' < ĝ ' =&ĝĝ& K ?.' D1' A1B1001' &=' D1' 0<'A' 'B'ĝ1G' <-A' D< ' <= ' ' D1' A1B1001' &=' D1' 0<'A' 'B'ĝ1' <-A' D1' 0<'A' L ' 1 10' A1R> -1A' D1' 0<'A' F 'ĝĝ0>' & A' F 'ĝĝ&?.D# ' 0D<ĝĝ' D<+1' D&ĝA' <-A' 1-# 1' D1' <='0' &=' 1ĝĝ&K1' # ' F 1ĝĝ1' <-A' ĝ=& A' KO' D<CC? 1->1=' '-' D1' &?-'1' &=' '-B&ĝ-' <-A' <ĝĝ' & D1 ' &-A=' I ' 1-=' 1-=' 1 B'&-0' +'B10' ' D1 1A' <>1-=' D< ' ĝ< 1' K1'U' D1' 801'A' &-' ĝ< 1' & A' F 1ĝĝ 0' & ' <-' C0&-1' & ' C0&-10' &' D'0' ?01' '-' D1' &K-10' &=' &?-# ' F 'ĝĝ&?.D# ' KO' D1' <A+&?0&-' &=' D1' =11' D<C1ĝĝ' &=' F 1ĝĝ 0' <-A' '-' D1' C'00D1' &=' 1ĝĝ&K1' # ' K<# ' F 1ĝĝ1' ĝ=& A' >10# ' 1..#<? -1' <-A' F &ĝ>10.< 1' KO' D1' <A+&?0&-' &=' D1' D? BD' &=' 1ĝĝ&K1' #1=& 10<'A' <-A' &=' D1' & 1' &=' D1' ?--10' &=' E 1-1=1ĝA' '-' D1' 0<'A' &?-'1' =' '-B&ĝ-X -A' <ĝ0&' D1' <='0' &=' E1 -10C< a1' <ĝĝ' < 'A' 1>-<ĝĝ10' '-' D1 A&-' E< <&-' <-A' D1' <=" &=' <A1ĝ0' '-' CC -.' '-' D1' &?-'1' C=' 001LĝG' <-A' <ĝĝ' ĝ&-A=' I ' ĝ1D =' 1-=' 1+0B'&-0' I ' ,+'B10' '-' D1' &K-10' <-A' C'00D10' &=' D1 A&-' E<>&-' =CC -.' D1 A&-' & 10' <-A' & DK1ĝA' '-' D1' 01'A' &?-'1' =' 001LĝG' KD'BD'1' K1 1' D1' 0<'A' &-' ĝ< 1' & A' F 1ĝĝ 0' <=' ' D1' A1 D' &=' D1' 0<'A' 'B'ĝ1' <-A' '>>1A'< ĝ ' <=1 ' DC' 0<'A' L' 1 10' 1-A1A' &' D1' 0<'A' F ' >' & A' F 'ĝĝ&?.D# ' <-A' D'0' D1' 10' '-' <ĝĝ&K<?DB1' &=' D'0' D&ĝ1' C 1' <-A' C C< '1' D<'?-&' D >' #1ĝ&-.1 D' &' &?.D ' &' #1ĝ&-.1' <0' &-' &=' D1' D1' 10' <-A' B&CB1-1 0' &=' D1' 0<>1' &-' ĝ< 1' & A' F 1ĝĝ 0'G' -A' D< G' D1' 0<>1' &# ' " >>&a' D&><0' <? 1-B1' R-A' , < -' D< 1' D&ĝA' <-A' 1-&1' &' D1 >'<-A' D1' ' D1' 10' D1' 1+B'&-' &=' <ĝĝ' D1' 0<'A' <='0' &-A=' <-A' 1-=' ; (' ĝ' C)? 1^U-B=' &' &? ' <'A' i& < -' & A' =& 'R'-1' &=' D'0' ĝ ==' # ' '#'0' C01-' ;1' . <-1A' <-A' <CC& - 1A' <=' ' D1' A1B1<001' &=' &? ' 0<'A' & < -' & A' <-A' <=1 ' D1' A1B1001' &=' D1' 01'A' 'B'ĝ1' <-A' <=' 'V D1' 0<'A' L ' 1 10' 1LC' 1A' <-A' 1-A1Aĝ' =a'ĝ0&' D1' 1+B'&-' &=' D1' 10'A?1' &=' <ĝĝ' D1' &A 1' =& 0<'A' <0 1ĝĝ=' <='0' ĝ&-A=' 1-=' 1-=' B'&-0' +'1.0' D1 1A' <>1-=' <-A' & D1 ' D1' >0010' KD'BD' K1 1' D1' 0<'A' &-' ĝ<1' & A' F 1ĝĝ 0' <CA' -& ' <ĝĝ& 1A' . ?-1A' -& ' <CC& - 1A' # ' D'0' C01-' <ĝ1' &' D1' 0<'A' & A' F 'ĝĝ&?.D# ĝ' &' DC‡A1' '-' B&CB1=' 1' <0' B&CB1=' 0' <-A' &' #1' C 1<#ĝ1' <>&-.=' D1' <'A' &# ' " >>&a' D&><0' <? 1-&1' <-A' , < -' <-A' D1' ' D1' 10' ĝ'a1' ><=" <-A' =&? >1' <0' '=' D1' 0<>1' <='0' ĝ&-A=' 5ĝ 1-=' D1 1A' <>1-=' <-A' & D1 ' D1' > 0010' -& ' <ĝĝ& 1A' . ?-1A' -& ' <00'.-1A' &' D1' 0<'A' F 'ĝĝ'<>' & A' F 'ĝĝ&?.D# ' =C ' D'0' C C< 1' #<A' 0&=' A'0B1-A1A' &' D1' 0<'A' &# ' " >>&a' D&><0' <? 1-B1' <-A' , <R -'<-A' D1' D1' 10' &=' D1' 01'A' &-' ĝ< 1' & A' F 1ĝĝ 0G' <-A' D<' D' ' 0D<ĝĝ#1' ĝ<?=?ĝĝ' &' D1' 0<'A' &# ' " >>&a' D&><0' <? 1-B1' <-A' , <R -'<-0' 0&ĝ1' D1' 10' D1' 10' D1' <'A' &=1 ' ` 1>C 10 'SG' , <R -' D'0' F ==''-' D1' '.D ' &=' D1' 0<'A' , <R -'<-A' D1' D1' 10' &=' D1' 0<'A' , <R -'<' ' <ĝĝ >10' D1 1<=1 ' &' ><a1' C 'B&-' <>&-.=' D1 -01ĝ=' &=' D1' 0<'A' 10'A?1' &=' D1' 0<'A' <='0' ĝ&-A=' ' 1-=' D1 ' <>1-=' <-A' & D1 ' D1' > 0010' -& ' <ĝĝ& 1A' -& ' <CC& - 1A' &' D1' 0<'A' F 'ĝĝ'<>' & A' F 'ĝĝ&?.D# ' # ' D'0' 01-1' ('1

1B' <ĝ &=' D1' 1-& ' &=' <ĝ $ 1- 'B' *$' =& ' BD1' ><a'-.' 00?<-B1' &' &D-' '0B&?-' F 1ĝĝ0' <-A' 1B'ĝ D'0' F '=1ĝ &=' B1 <'-' <-& 0ĝ I Bĝ N 10 & 1A' & ' D1' 0<'A' '0B&?-ĝ # ' B ' &=' 10 ' ?'&-' ' 1-

N$ ⅈ *' "M @*/ 4CC

1 <'-' 0<10' &=' 0<'A' & A' F 1ĝĝ0' 0D<ĝĝ #1' D&ĝA1-' # ' D1' , '-.'=& ' D'0' '=1G

<-A'<=1 'D'0' "1B1<01' &' D1' 0<'A' "<>1' 1B'ĝ=& ' D1 ' '=1;

ĝĝ' D1' T D1 ' 0<10' &=' & A' F 1ĝĝ0' 0D<ĝĝ #1' D&ĝA1-' # ' D1'0<'A' "<>1' 1B'ĝ=& ' D1 ' '=1G

<-A'<=1 ' D1 ' "1B1<01' D1' , '-.' & ' #'0 00'.-0' 0D<ĝĝ D&ĝA' <ĝĝ & A' F 1ĝĝ0/0 0<10' =& ' 1-' 1< 0;

=1 ' D<' '>1' B1 <'-' 0<10' &=' D1'0<'A' & A' F 1ĝĝ0' 0D<ĝĝ +10 ' '-' & A' F 'ĝĝ&?.D# ' <-A' D'0' 1' 0ĝ =& ' D'0' 3 " "@0 ĝ "<' &=' D1' 1' 0' &=' & A' F 1ĝĝ0

1' 10' &=' D1' 0<10' &=' D1' 0<'A' & A' F=A@<ĝ <=1 ' 0?BD' h-' 1< 0ĝ +10 1A' '-' 1 <'-' & D1 ' C1 0&-0' <0ĝ 1a0&=' & A' F 1ĝĝ0' '-' &C< B1-1

=' & A F 'ĝĝ&?.D# /0' < ' 1LB11Aĝ # ' 1-' &?-A0'C1 ' --?>ĝ -18-&? D' &=' D1' KD&ĝ1' 0<10ĝ D1' & D1 ' < '10' >< ' 1-1 '<0 &C< B1-1>' K' D' D'>' '-&' <-' 1H?'+<ĝ1-' < '&=' D1' <-A0' <00'.-1A' &' D'>

ⅈ KD1 ?-&' ;P ' I' < (%↓$' ' I <='0' 4 & -#1 K& D' ∪ @ 1>C10 '

2 &/' & A' F ##&?.D# ' <-A' &2' !&"!2' < 'A' !. @' & D1 ' C0&-1' & C0& '10' #1 - .' 01< 1A' &' D?01' &=' D1' 0<'A' &-' <-A' D 0' D1 10' '-' <- ' &=' D1' > 0010' &' 1' 0<'A' & A1' F ##&?.D# ' # ' D'0' - ' <Q#1' <C & >1A' <-A' <###& 1A' =& ' D'0' C< ' <-A' C0 C< 1' <0' '0' <=& 10<'A' &' 1- 1' '- &' D1' 0<>1' < 0' #&-A=' ' 1 - =' 0A&' &' D >' <##& 1A' <# ' D1 >' &'D<+1' <-A 1 - & 1' &' D >' <-A' D'R'D1' 1 & ' &' D1 >'<'+A' D1' 'D1' 10' &' D?0R' &=' D1' 01'A' A' F ## ?.D# ' <-A' D'0' D1D10' <i' D'0' C< ' <-A' C < ' &=' <### D1' 0<'A' < 0' #&-A ' 1=' =' <-A' & D1 ' 1' D1' C> 0010' D< ' K1 1 ' D1' 0<'A' &-' & ' <- ' & D1 ' &' D'0' ?01#' <-A' <#0&' D< ' ' ' 0D<##1' #<?=? ' &' D1' 01'A' &# ' " > > &a' D& > <0' <? 1-B1' <-A' , <R -' <-A' D1' ' D1' 10' <-A' i ' D1 ' C0&-10'#B - .' 01<01A' &' D?01' &=' D1' 0<'A' &-' <-A' D'0' D1' 10' '-' <- ' &=' D1'01'A' 10'A?1' &=' D1' C > 0010' KD'BD' K 1 1' D1' 0<'A' &-' & ' <- ' & D1 ' &' D'0' ?01' &' 1- 1' > &' D1' 0<>1' 10'A?1' <-A' D1 >' &' D<+1' I ' 1- & 1' &' D1 >' <-A' D1' ' D1' 10' &' D?01' &=' D1 >' B' D1' ' D1' 10# <-A' D< ' D1' 0<'A' A' F ##&?.D# ' # ' " > > &a' D& > <0' ? 1-B1' B' , <R -' #1' <#1' I ' 1-<##1A' '-' C0&-1' <-A' F &A1' <0' D1' 10' &=' D1' 0<'A' &-' # < 1' & A' F 1## 0' <B1& A -.' &' D1=1 1' &=' <-8< 1' > <A1' < ' F 10 > ' D1' %%&&H))' A< 1' &=' <-?< ' D1' ==B 0 ' 1B1' &=' D1' 1'. -1' o=' D1' - .' &? ' &+ < -' & A' D< ' -&K1' '0 G' <-A' 'D<' D1' 0<'A' & A' F '##&?.D# ' <-A' D'0' D1' 10' <= ' ' D1' 0<'A' %)' 1 10' 1LC' 1A' D<+1' D&##A1' < 'A' 1- & 1' D1' > 0010' &' D >' <### 1A' <-A' <00'. -1A' =& 'D'0' C< ' <-A' C < 1' <0' '0' #1=& 1' 1D1 01A' A'0BD< .1A' &=' <### > <-)' 1- =' < 'A' C##D1 ' BD< .1' # ' 1<0&-' &=' <- ' .U?- ' & ' .0?- =' # ' D1' , '- .=' <-A' C < 1' <0' '0' #1=& 1' 1D1 01A' A'0BD< .1A' &=' <### > <-)' 1- =' < 'A' C##D1 ' BD< .1' # ' 1<0&-' &=' <- ' C< ' D1 &=' & ' <- ' & D1 ' BD< .1' &? ' &=' D1' 0<>1' & ' <- ' C< ' D1 &=' # ' D'0' '.D-10' & '# ' D'0' > 1<-10' &' <- ' C0&-1' > <A1' & ' D<A' KD< ' 0&' D1 ' #1 G <-A' <#0&' D1' 0<'A' &# ' " > > &a' D& > <0' K' <? 1-0' <-A' , <R -' <-A' D1' ' D1' 10' '> > 1A' < ' <= ' ' D1' 01'A' %' 1 10' D<+1' D&##A' <-A' 1- & 1' <### D1' 0<'A' 10' A?1' &=' D1' C> 0010' A'0BD< .1A' &=' <### > < ' & =' 1- =' <-A' & D1 ' BD< .10' # ' 1<0&-' &=' <- ' .0?- ' & ' . ?- =' # ' D1' , '- .=' '.D-10' ?-A 1' D'0' . 1<' 1<#1' '+1 ' 1<#1' & ' C#<aa< A' &=' D1' 0<>1' & ' <- ' C< 1' D1 &=' & ' <- ' & D1 ' BD< 1' &? 1' &=' D1' 0<>1' & ' <- ' C 1' D1 &=' # 'D'0' '.D-10' & ' # 'D'0' >1<-10' &' 1- ' C0&-1' & ' C0&-10' > <A1' & ' D<A' <-A' A < ' D1' 80<>1' . ?- 1\' 10' C< 1- 1\' C '+1 ' 1<# 00' C#<aa< A=' &= B1\' <-A' '-H?'0'B'&-0' D1 &=' & ' <- ' C< 1' D1 &=' =&C-A1-' <a1-' & ' D<A' <= ' ' D1' 01'A' L ' 1 0' 1' ? 1 # '+&'A1' <-A' &=' -&&-' 1=#1 1 G' -A' <#0&' A'< ' D1' 0<'A' & A' F ##&?.D# ' < 'A' D'0' D1' C0' 0D<### 1- 1' D<+1' <-A' 1- & 1' <### D1' 0<'A' <-#0' #&-A=' <-A' 1- =' <-A' & D1 ' D1' > 0010' &' D >' <### 1A' <-A' <CC& - 1A' '-' > < ' I ' =&? > 1' <#&+10<'A' G' <-A' <#0&' D1' 0<'A' &# ' " > > &a' D& > <0' <? 1-B1' <-A' , <R -' I ' D1' ' D1' 10' 0D<### 1- 1' D<+1' <-A' 1- & 1' D1' 01'A' 10' A?1' &=' D1' > 001\' <= ' ' D1' > <)' I ' =&? > 1' #1=& 10<'A' K &? 1' 0? 1' &=' <- ' F ' 1' &=' A'1 > ' B#<?0' ' 1L 1 > ?' C1 'B'&-' # 1' .1 #<### & ' 0C1B'<### ? '1 #1 > < -'1' &==' B1' <C01' & ' & D1 ' 0? 1' D1 &=' & ' <- 'CB1### D1 &=' &? 1' &=' D1' , - .=' D<-A=' & ' D'0' D1' 10' # '<- ' F ' -H?'0 B&-0' 0? 10' & CB10010' <B1& A -.' &' D1' , '- .=' #<K10' &' #1' > <A1' '-' D< ' #1D1<#=' <-A' K &? ' C< 1 > 1- ' &=' <- ' '00?1' C=' \' & D1 ' A'< .1\' &' D1' , '- .' & ' '0' D1' 10' -& K ' D0 &-A -.' D< ' <- ' &=' D1' > 0010' < ' <- ' > 1' 1 1' D&##A1'" &=' D1' , '- .' '-' <- ' > < I ' &=' K '01' & '# '<- ' > < ' ,+' B1

E1-1 <# <+' -.0 I E' &' 1 '1 =' D1' , '- .=' 0?# 1= =' <-A' ''1' ' D1' 10# & D1 ' D<-' D1' 0<'A' " <> 1' 'B'#1' F '##'<>' & A' F '##&?.D# ' &# ' " > > &a' D& > <0' <? 1-B1' I ' , <R -' D1' F ==' &=' &# ' 1 > C10 ' I ' D1' ' D1' 10' <-A' D1' D1' 10' &=' 1 '&=' D1 > G' 0?BD1' '.D ' ' #1' C&00100'&-' B' '-+10 ' '-' <-A' &' D1' > 001\' <-A' 1+0 ' CB1### D1 &=' <0' D1 ' <-A' 1 , ' &=' D1 >' D<A' & ' > .D ' & ' 0D?#A' D<+1' D<A' '=' D'0' < 1' & ' <- ' D -.' D1 '-' B&- 1 -1A' D<A' -1R' #11-' #<AA1' -& ' > <A1

&+'0&' =& ' >10-1' &=' 0' <a1-' F ' D1' 0<'A' " <> 1' E1B ' <-A' D1 ' C 101- ' ?0#<-A

' D<' ' ' #1' 1 '< 1A' # ' D1' 0<'A' <- & a1' D<' D&> <0' , > #1' <-A' D1' 0<'A' " <> 1' 'B'#1' -&K1' D'0' F =' <-A' #< 1' F =' &=' D1' 0<'A' 'B&?- G' <-A' <###' & D' 0' KD'BD' D<+1' 1B1 +1A' <-A' <a -' <- ' '00?10# <-A' C=' =' &=' <- ' &=' D1' C> 001\' <-A' 1- 'CB1### D1 &=' & ' D1' 0<>1' &BB?C'1A' & ' > 1AA ##1A' K' D' # ' D1 '8B&> <?-A1 > 1- ' & ' D1' B&> <?-A1 > 1'' ' &=' 1' D1 ' &=' D1 > ' 0' D' D1' A1B1001' &=' #'1' 01'A' 'B&?- G' #1'V-& ' '-' <- ' K '0 ' D =& 1' BD< .1A' & ' BD< .1<#1G' #< ' D1 1 =' #1' H? 1' <-A' A'0BD< .1A' =& ' 1+0'

' ! ' 222 0

4&++ ' &-###&.-&2' 2&' !' #.-'&##.&2

1#1##'&-' <-A' &C1-' F < ' # ' B1 <'-' 1 0&-0' <.<'-0 ' D1' . '- .G' <' #<BaD1< D' 55 0-!& &+

! 2 '] ' <0' <>10' ?BD1 ' &=' ?A1#1 ' #< 1' &=' &K1 ' '-' D1' &?- '1' &=' &' 0' , -'. D ' #< 1' & A' ?A1#1 G' &D-' ?A1#1 ' #< 1' &=' &?A ' ' E1- '#> <-G' &D-' 1+ 0<### &=' 1 >' <A1 -' '-' D1' &?- '1' &=' & -K<### E1- '#> <-' F '##' <>' - &-' &=' - &-' '-' D1' 0<>1' &?- '1' E1- '#> <-' <?=1' 10 <###<a' &=' 1 - ' &#?> #1' '-' D1' 0<>1' &?- '1' &> <-' 'BD< A' ? #<0' &=' 1 - ' F 1-' '-' D1' 0<>1' &? ' 1' &> <-' D&> <0' &'. 1-1' &=' &#. 1-1' '-' D1' 0<>1' &?- '1' &> <-' &D-' &01K< 1-' &=' &01K< 1-' '-' D1' 0<>1' & '- '1' &> <-' &D-' # -' &=' &a1' '-' > > 0#B-A' '-' D1' <>1' &?- '1' &> <-' F '##' <>' <> > 1' &=' &a1' '-' # > > 0#&-A' '-' D1' 0<>1' &? ' '1' &> <-' &D-' &##1' &=' <>1 &-' '-' D1' &?- ' ' &=' " 1+&-' &> <-' D&> <0' &K1' &=' D -10=1#A' '-' D1' 01'A' &?'' '1' &=' &-'#0' 1- '#> <-' &D-' &a1' &=' " &AA1# &a1' '-' D1' 01'A' &?- '1' &=' " 1+&-' &> <-' &# ' F < K1a1' &=' # > > &? D' '-' D1' 0<>1' &?- '1' &=' " 1+&-' &> <-' 'BD< A' ! <A1 ' &=' ? 1B&> #1' '-' D1' 0<>1' &?- '1' &=' " 1+&-' &> <-' G' K ' D' A +00' & D1 ' ?--< ? <### 0?# 1' #'0' &' D1 >' <AD1 1- '0' <-A' # ' D1 >' < 1 &?0# ' > &+1A' 1 1A' <-A' #1AA1' '- &' <' . 1< 1' -&?-# 1' <-A' > ?# ' ?A1' <001> ##1A' B&> C<00 -.' D1' A& D' <-A' A'0 ?BB'&-' <0K1'G' &=' D1' , '- .1' &? ' & ,1' .-' & A' <0' &=' <### D1' -&##1' #&&A1' &=' D'0' #<-A' <-A' D1' 0?# B'&-' &=' D1' 0<>1' D'0' 1<#> 1G' < ' <' C#<B1' B<##1A' D1' ##<aD1 D' '-' < D' &=' E 1-1K BD' '-' D1' &?- '1' &=' , 1 - ' D1' LL' ' A< ' &=' ?-1' D1' L'002 1 1' &=' D'0' > &&0 ' -&##1' 1' .-1G' D1-' <-A' D1-G' '- 1-A -.' D1' 1L1B? ' ' &=' D1' ' >&&01' <' 1 &?0' <-A' > <#'B'&?0' C? C&01' '-' C#< -1' =1a#' '-' #< 1##1A' D1 '& 01'=' <CC< 1##1A' D ' < >10' B&- '1' &' D1' " ? '1' &=' D1' ' < 1.1<?-B1' #1+'1A' <-A' 1< 1A' K< 1' <-A' > <A1' #< <'##1' < 1-0 ' &? ' 01'A' & 1'.-' & A' KD1 ' # ' D1' =<+&? ' <-A' 0?='1 <?-B1' &=' ###> .D ' E&A' K ' D' D1' , '- .10' #&&0 ' &' <### &' D'0' . 1< 1' <-A' 0?> C ?&?0' BD< .10' # ' D'0' E <B1' D1 C' B<##1A' D1 ' K1 1' 1B&?- 1 1A' +< -H?100D1A' A'0C1 01A' &,B&> 1' <-A' A 0' C? ' &' A1 D' G' -A' KD1 1' <= ' ' &D-' <-a1+1##' &=' 1 - ' <?.<-' '-' D1' &?- '1' &=' & -K<### E1- '#> <-' F < # 1 ' 'CB&- ' &=' 1 - ' &#?> #1' '-' D1' 0<>1' &?- '1' E1- '#> <-' ?> = 1 ' <#K&A#1 ' &=' 1##<-A' '-' D1' 0<>1' &?- '1' E1- '#> <-' 0' D'#'C' &=' &#K1#1' '-' D1' 0<>1' &?- '1' &> <-' F <#R' E '. .1' &=' D1' 0<>1' &?- '1' &> <-' D&> <0' E&0K& DA&..<' &=' 1 - ' &K -' '-' D1' 0<>1' &?- '1' &> <-' 'BD&#<0' ?#a -D&>' &=' 1 - ' ^ ? -1 1 ' '-' D1' 0<> ' &?- '1' &> <-' &D-' 1D<--1a' &=' 1 - ' D<' '-' D1' 0<>1' &?- '1' &> <-' &D-' 1.1- -&K1' &=' 1 - ' &#?> #1' '-' D1' 0<>1' &?- '1' &> <-' &D-' E ##1' &=' <>=& A' C -< 1' '-' D1' &?- '1' &=' " 1+&-' &> <-' &# ' & . .1' &=' 00DC &-' '-' D1' 0<>1' &?- =1' &> <-' D&> <0' 1 1' =' <> 10 <C #=1' '-' D1' 0<>1' &?- '1' &> <-' +'A D' & D1 ' C0&-10' &=' D1' -&?-# 1' <=& 01'A' <001> ##1A' B&- -? - .' '-' D1' ' > &&0 ' > <#'B'&?0' <-A' <' 1L&?01' C? C&01G' =<#0# ' <-A' <' 1 &?0# ' >< . - .' <-A' 0 '## B&> C<00 '.' D1' A1 D' <-A' A'0 ? A&-' &=' &? '01'A' & 1'. -' & A' <-A' 0?# B'&-' &=' D'0' D'0' 1<#> 1G' =& ' D1' <BB&> C#'00D > 1- ' <-A' C=& > <-B1' &=' D1' ' =<#0' <-A' <' 1 &?0' C? C&01' a-&K - .' &&-' 11 0' F < #1a' D1-' 1-1 > ' &=' &? ' 01'A' & 1'.-' & A' <-A' & D1 ' D'0' 1##1##10' D1-' #1 - .' K ' D' D >' ' -' D1' C< '10' &=' #1 &-A1' D1' 11' <-A D'0' <AD1 1- '0G' > &+1A' <-A' 0 1 1A' D1 >' # ' A ,0' > 1001.10' <-A' K ' '-.10' &' D >' 01 ' ' &' '- 1' <-A' `'' -K<A1' T ' D'0' D1' , '-.10' 1<#> 1' <-A' &' #1+'1' K< 1' <.1 -0 ' D'0' > &&0 ' -&##1' C0&-1' K' D'-' D1

0<>12' KD1 ?C&-' D1' 01'A' '1 0' F 1 #1a' K' D' & D1 ' D1' , '- .10' 1- > 10' 1#1ⷷ10'<-A' <' &? 0' '-' <' . 1< 1' > ?ⷷ ' ?A1' <-A' ^ '&? -# 1' &' D >' <00&B'<' 1- 1A' <-A' < +1A' '- &' D'0'] <-A' '-' <ⷷ C‖<B1' B<ⷷ1A' F D 0&-#< ' '-' D1' < 00D' &=' 1 - ' 1 B -' '-' D1' &?- '1' &=' & -K<ⷷ D1'+' ' A< ' &=' 1C 1 > # ' D1' L'' ' 1 1' &=' D1' , '- . ' 1'. ' <-A' ⷷ1+'1A' K1 1' < 1-0 ' D1' , ' - .1' &? ' & 1' .-' & A' <BB& A'- .' &' D1' 01'A' =<ⷷ0' <-A' <' 1 &?0' > &B'&- 0ⷷ < ' KD'BD' > 10' D1' 01'A' C0&- 10' =<ⷷ0ⷷ ' <-A' <' & &?0ⷷ ' <BB& > C<- 1A' D1' 01'A' '1 0' '- 1-A'- .' D1' 1L1B?B'&-' &=' A'1' ' =<ⷷ0' <-A' <' 1 C 0' > <ⷷ'B'&?0' > &B'& '0' R-A' C? C&01ⷷ &K1' #1' ' ' D1' 01'A' '1 0' '-' D'0' & -1 ' <-A' 01 -.' =& D' &' A'1' 0<> 1' =<ⷷ0' <-A' B? 1A'P 0'dL&01' K<0' +< -H?100D1A' <-A' <a1-' <-A' # ' D1' , '- .10' '.D-10' B& > 1A' &' D'0' C '0&-' &=' D1' &K1 1' &=' &-A&-ⷷ KD1 1' <-A' '-' 'BD1' C‖<B1' &&-' AK< A' ‖< 1' '1' F < K a' &=' F < K a' '-' D1' &?- '1' &=' F < K aⷷ D&> <0' 0 K&A' ‖< 1' &=' &-A&-' E1- 'ⷷ > <-' F <ⷷR' ⷷK1 ' ‖< 1' &-A&-' E1- 'ⷷ << -ⷷ BD< A' ⷷK -' ‖< 1' &=' &-A&-' < BD<? -' F 'ⷷ'<>' &?A1' ‖< 1' &=' &-A&-' " <C1 ' D&> < ' <0#? .D' ‖< 1' &=' &-A&-' &K 1 ⷷ &D-' ! -BD1' ‖< 1' &=' &-A&-' <#1 A<00D1 ⷷ B&-=1A1 1A' K' D' D1' 01'A' '1 0' > <. - -.' <-A' (> C<00 -.' =<ⷷ0ⷷ ' <-A' <' 1 &?0ⷷ ' D1' A1 D' <-A' A'0 ?BB'&-' &=' D1' , '- .1' &? ' &+01'.-' & A' <-A' D1' 0?# B'&-' &=' D'0' D'0' <-A' '- 1-A'-.' &' > <a1' D1' 01'A' '1 0' , ' .1' &=' D'i' 0<> 1' D'0' ‖<-A' ⷷ # ' A 0' =11 '0' #1 K1-' D1 > ' B&-01 +1A' <-A' B&-0C' 1Aⷷ ‖<#& 1A' &' A ,ⷷ0' D'0' <Aⷷ' 1 1- 'ⷷ0' -0 <- ⷷ ' # ' A 0' 0' . -10' > 10 i 1.10' <-A' &=B -0' &' 01 1' D > ' < ' D'0' ⷷ'# '1' <-A' ‖< .1' &' D1- 1- ' &' 1L1B? 1' D1' ' =<ⷷ0' <-A' <' 1 &?0' C? C&01' C > 0 -.' D > ' &' D1ⷷC' <-A' <00# 1' D > ' &' D1' #10 ' &=' D1' ' C&K1 ' ' -' D1' 0<> 1' ! ! & ' D1' KD'BD1' D1' '01'A' ‖< 1' '1' K<0' # ' A?1' B&? 0' &=' D1' , '- .10' <K1 ' # ' D'0' &K1 -' B&-=100'&-' B&-+' = 1A' <-A' < 1 - 1A' &=' '.D' 1<0&-' <0' D'0' A101 '0' 1H?' 1A' '-' D< ' #1D<‖=' ' -A' KD1 1' <0' D1' ''' ' A< ' &=' ?-1ⷷ D1' 'ⷷh' 1 1' &=' D1' 1' .-1' &=' &? 1' & 1' .-' & A1' , '- .1' 1- ' D1' +' 0Z &&-' AK< A' a1ⷷ &-' ‖< 1' &=' < ‖ ⷷ' '-' D1' E& - '1' &=' ?> #‖<-A' E1- 'ⷷ > <-' D&> <0' F <A1' &=' , -< 0#? .D' '=' #1' &?- '1' &=' & a' &> <-' =<ⷷ0ⷷ ' <-A' <' 1 &?0ⷷ ' > . D1A' <-A' A'A1' B&> C<001' D1' A'0 ?BB'=-' &=' &?' 01'A' & 1' .-' & A' D1' , '- .1ⷷ <-A' &' D1' ' =<ⷷ0' <' & &?0' <-A' > <ⷷ'B'&?0' C? C&01' &'#1' =?ⷷ'ⷷ1A' <-A' C=&? > 1Aⷷ D1' 01'A' AK< A' <-A' D&> <0' D1' '‘' 'A< ' &=' ?-1' D1' 01B&-A1' 1 1' &=' D1' 1' . -1' &=' &? '01'A' & 1' .-' & A' D1' , '- .1' K<0' <ⷷ0ⷷ ' <-A' <' 1 &?0ⷷ ' D1-' < A -.' <00'0 -.' <-A' <AD1 1- ' &' &D-' D1-' '1' &=' '-B&ⷷ-ⷷ KD'BD' '1' <-A' D1' 0<'A' AK< A' <-A' D&> <0' K' D' > <- ' & D1 ' 'ⷷ A'0C&01A' C0&-1 ' =<ⷷ0ⷷ ' <-A' <' 1 &?0ⷷ ' 0&' &' D1 ' ' <AD1 1- ' D1' 01'A' ' 0 'A< ' ⷷ1+'1A' F 1 1' <-A' > <A1' #< <'ⷷ < 1-0 ' D1' 0<> 1' , '- .1' &? ' -< ? <ⷷ' <-A' & 1' .-' ⷷ' 1 .1' & A' D1-' '- 1-A -.' &' D<+1' A1C&01A' D >' = &> ' D'0' &? -1' <-A' 1 .<ⷷ 1' ' -A' KD1 1' A> &-A' '1' &=' ?=='ⷷ< 1' &=' F ' .=1ⷷA' '-' D1' &? - '1' &=' ?=='& D1 K'01' B<ⷷ1A' A> &-A1' A1' ⷷ<' &ⷷ1' '1' &=' ?=='ⷷ< 1' &=' F -.=1ⷷA' '-' D1' &?- '1' &=' ?=='ⷷ<>' &? 1-1 'ⷷ< 1' &=' F 10 > ' ⷷ '-' D1' &?- '1' &=' 'AA' , -' .D ' &-' <-A' D1' 1' <CC< <?- ' &=' AK< A' &? 1-1 ' '1' &=' "1+&-' F 'ⷷ'<>' &ⷷ1' ⷷ< 1' &=' F -.=1ⷷA' '-' D&' &?- '1' &=' ?=ⷷ' , -'.D ' 'BD< A' &ⷷ1' ⷷ< 1' &=' F -.=1ⷷA' '-' D1' &?- '1' &=' ?=='H?'1 ' <>1 ' 1' &=' E'CC -.' '-' D1' E&?- '1' &=' ?=='ⷷ' , -'.D ' &D-' F -AD<>' ⷷ< 1' &=' ! 1ⷷ# ..1' '-' D1' &?- '1' &=' & =='0H?'1 ' E1& .1' 1+ ⷷ' <0 < A' ⷷ< 1' &=' F 10 > ' '-' D1' &?== '1' &=' 'AA' , -' .D ' D&> <0' , 'ⷷ'-.K& D' ⷷ< 1' &=' F -.=1ⷷA' '-' D1' &?- '1' &=' ?==' E1- 'ⷷ > <-' D< ⷷ10' CC&-' ⷷ< 1' &=' & #D10 # ' '-' D1' &?- '1' &=' ? D=' E1- 'ⷷ > <-' A> &-A' ! 1 1 0' ⷷ< 1' &=' ⷷ&?KA1 &-' '-' D1' &?- '1' &=' F' 1 ' E1- 'ⷷ > <-ⷷ F 'ⷷ'<>' <0a1 =1'A' ⷷ< 1' &=' 1<K1ⷷ 1 ' >' D1' C?- '1' &=' ? = R' E1- 'ⷷ > <-' ?.D' &ⷷ > 10' ⷷ< 1' &=' 1<K1ⷷ 1 ' '-' D1' 0<? 1' &?- '1' &> <-' 'BD< A' <AB&a' ⷷ< 1' &=' 1<F 1ⷷ 1 ' '-' D1' 0<> 1' &?- '1' < -1 ' &D-' .=#==' ⷷ< 1' &=' 1<K1ⷷ 1 ' '-' D1' 0<> 1' &?- '1' &> <-' &D-' F < 0&-' ⷷ< 1' &=' &-A&-' ⷷ1 a1' &# ' F ' .D ' ⷷ< 1' &=' F < =1ⷷA' '-' D1' &?- '1' &=' ?==' &> <-ⷷ K' D' A R ' & D1 ' 1+ ⷷ A'0C&01A' C0&-10' =<ⷷ0ⷷ ' <-A' <' 1 &?0ⷷ ' > <. - -.' < A' B&-0C -.' D1' A1 D' <-A' A10 ?BB'&-' &=' ⷷ'1' , '- .1' &? ' & 1' .-' & A' <-A' D1' 0?# B'&-' &=' D'0' D'0' 1<ⷷ > 1' <-A' =& ' KD'BD1' =<ⷷ01' <-A' <' 1 &?01' C? C&01' A +0' &=' D1 > ' K1 1' <-A' #1' # =& 1' A 0' &=' D1' , '- .'0' &> 00'&-1 0' &=' 1 ' 0)' A1R > -1 ' '-' 01 <ⷷ D' 10' K' D'-' D'0' +1<ⷷ > 1' 01 <ⷷ ' B&-+'B 1A' <-A' < 1 - 1A' &=' '.D' 1<0&-' <= ' ' D1' ' A1 1 'ⷷ '-' D< ' C '1' <0' '-' A 0' 1B& A10' 01+0<'ⷷ ' B&-B- -.' D1' C 0010' > & 1' < ' ‖< .1' '' A& D' <CC1 1' ⷷ 1' ' '1-<#ⷷ1A' & A1 -1A' <-A' 10 <#ⷷ'00D1A' # ' D1' & A10' 0C?<ⷷ=' <-A' 1> C& <ⷷ ' <-A' D1' & > 1-0' '-' D'0' 01-' C< ‖' <> 1-' <001> #ⷷ1A' <-A' # '<?= & ' 1' &=' D1' 0<> 1ⷷ D< ' <ⷷ D1' 01'A' <> 10' ?BD1 ' ‖< 1' & A1' ?A1ⷷ1 ' &D-' ?A1ⷷ1 ' &D-' 1+ 0<ⷷ F 'ⷷ'<>' - &-' <?= 10 <ⷷ<a' 'BD< A' ? ‖<0' #& > <08 &ⷷ. 1-1' &D-' &01K< 1D' &D-' ⷷ -' F 'ⷷ'<>' <> > 1' &D-' & 1' D&> <0' &K1' &D-' &a1' T ' ' F < K1a' 'BD< A' ! <A1 ' &D-' <-a81+1ⷷ F <ⷷR' 'CB&- ' ? > ' <D+&A‖1 ' 'Q D'ⷷ'C' F <ⷷR' E 1' D&> <0' E&0K& DA&..<' 'BD&‖<0' ''' a -.D& -' HD-' 1D<--1a' &D-' 1.1--&K1' &D-' E ⷷ ' &# ' & ..1' D&> <0' 1' AK< A' <1' '1' &=' F < K a' #&> ' 0 K&&A' F <ⷷR' ⷷ?1 ' BD< A' ⷷK -' F 'ⷷ'<>' &K 1' D&> <0' < 00D1#? .D' &D-' ! -BD1' AK< A' i a1ⷷ &-' D&> <0' F <A1' A> >ⷷ '1' &=' ?ⷷ=' & D1 K'01' <ⷷ1A' A> &-A' A1' ⷷ<' &ⷷ1' F 'ⷷ'<>' &? 1-< ' F 'ⷷ'<>' &ⷷ1' 'BD< A' &ⷷ1' <> 10' 1ⷷ &D-' F -AD<>' D&> <0' F -AD<>' E1& .1' 1+ ⷷ' <0 < A' D&> <0' , ' -.K& D' D< ⷷ10' CC&-' A> &-A' ! 1 1 0' F 'ⷷ'<>' <0a1 =1ⷷA' ?.D' &ⷷ > 10' 'BD< A' <AB&a' &D-' <-. &-' &D-' F < 0&-' <-A' &=1 ' F '.D ' =& ' D1' ' 01 <ⷷ' &==1-B10' <#&+'1' 1D1 B1A' #1' B&-+' 1A' <A ?.1A' <-A' < 1 - 1A' &=' '.D' 1<0&-' ' <-A' =& =1 ' ' &' D1' , '- .1' &? ' & 1' .-' & A' <-A' D'0' D1' 10' <ⷷ &-&? 0' <0 1ⷷ0' < 0' & A0D'C0' D?-A 1A10' = <?-BD1010' ⷷ' #1 '10' C '+'ⷷ1.10' <A+&?0&-0' -&'<B' -0' 01- <B'&-0' , -' .D '=' =110' ‖<-A10' 1=' ' 1- '00+'B1'0' 1 B'&-0' 1> < -A1 0' C& B'&-0' <--?' 110' C1-B'&-0' '.D '0' C&00100'&-0' D1 1A' <> 1- ⷷ0' .&&A10' B< <ⷷ10' <-A' A1 '0ⷷ KD1 &=' D1 ' & ' <- ' & D1 ' &' D1' ' ?010' & ' & D1' ?01' &=' <- ' &=' D1 > ' K1 1' 01<01A' & ' C&001001A' D1' 01 <ⷷ' 1<0&-0' B& > 1A' <-A' A&&-' & ' <- ' > 1' <= ' ⷷ K' D'-' D1' 1<ⷷ > 1' &=' -.‖<-Aⷷ ‖<-A' F <ⷷ10' <ⷷB'0' & ' '-' D1' < BD10' = D1' 0<> 1ⷷ' -=11' 0 > C‖1' =11' <'ⷷ1' & ' 1' &=' ⷷ =' & 'ⷷ +108& ''- &' KD'BD1' <- '&=' D1 > ' D<A' D1-' & ' < '<- ' <1' <= ' ' ⷷ<?=?'ⷷ B<?01' '1- 1 'K' D'-' -.‖<-A' ' a-A' F <ⷷ10' <ⷷBh' '-' D1' -'BD10' &=' D1' 0<> 1' r -A' & ' D< ' 1+0 '&=' D1' 01'A' C0&-10' =& =1 ' ' & D1' , '- .1' & ' 01'A' J& 1' .-' & A' <-A' D'1' D1' 10' <ⷷ &-&? 0' <0 1ⷷ0' < 0' & A0D'C0' ?-A 1A10' =' <?-BD'01<' , < '10' +'ⷷ1.10' <A+&?0&== ' -&'<B'&-0' 01- <B'&-0' , -' .D '0' =110' ⷷ<-A10' 1- 10' 1- '0' 'B10' 1 0'&=08' 1> < -A 10' C& B'&- ' <--?' 110' C1-B'&-0' '.D '0' C&00100'&-0' D1 1A' <> 1- '0' .&&A10' B< <ⷷ10' <-A' D1 1A' <> 1- '0' .&&A10' B< <ⷷ10' <-A' A1 a' KD1 &=' D1' 01'A' <> 10 ?BD1 ' ‖< 1' & A' ?A1ⷷ1 ' &D-' ?A1ⷷ1 ' &D-' 1+ 0<ⷷ F 'ⷷ, <>' - &-' <?=' 10 <ⷷ<a' 'BD< A' ? ‖<0' D&> <0' &ⷷ. 1-1' &D-' &01K< 1?' &D-' ⷷ -' F 'ⷷ'<>' <> > 1' &D-' &ⷷ1' D&> <0' &K1' &D-' &a1' &# ' F < K1a' <-A' 'BD< A' ! <A1 ' & ' <- ' &=' D1 > ' & ' <- ' & D1 ' C0&D1' & ' C0&-10' &' D1' ' ?010' & ' &' D1' ?01' &=' <- ' &=' D1)' K1 1' 01<01A' & ' C&001001A' D1' 01' A' L]' ' A< ' &=' ?-1' D1' 1' A' L ' 1 1' &=' D1' , '- .10' 1' .-1' & ' <- ' > 1' 0' Dⷷ <-A' KD1 &=' D1' 01'A' &D-' <-a1+1ⷷ F <ⷷR' 'CB&- ' ?==' = 1 ' <ⷷK&A‖1 ' 0' D'ⷷ'C' F <ⷷ 1 ' E '..1' D&> <0' E&0K& DA&..<' 'BD&‖<0' ?ⷷa -D& -1' &D=' 1ⷷ'<--1a' &D-' 1.1--&K1' &D-' ⷷⷷB' &# ' & ..1' ⷷ'&> < ' < ' <-A' F 'ⷷ'<>' ⷷK -' & ' <- ' &=' D1 > ' & ' <- ' & D1 ' C0&-1' & ' C0&-10' &' D1' ' ?010' & ' & D1' ?01' &=' <- ' &=' D1 > ' K1 1' 01<01A' & ' C&001001A' D1' 0<'A' + ' 0 /' <I &=' 1C 1 > # ' D1' 01'A' L ' ' 1 1' =' D1' , '- .10' 1' .-1' & ' <- ' > 1' <= ' ⷷ< -A' KD1 &=' D1' 01'A' AK< A' a1ⷷ &-' D&> <0' F <AR' ? '<- ' &=' D1 > ' & ' <- ' & DR ' C0&-1' & ' C0&-10' &' A 1' ' ?010' & ' & D1' ?01' &=' <- ' &=' D1 > ' K1 1' 01<01A' & ' C&001001A' D1' 01'A' ''' 'A< ' &=' ?-1' D1' 01'A' 01B&-A' 1 1' &=' &? '0<'A' & 1' .-' & A' D1' , '- .0' 1' .-' & ' <- ' > 1' <= ' ⷷ< 'A' = D1 &=' D1' 01'A' A> ? -A1' ‖< 1' '1' &=' ᵧ ᴇ ' & D1 K'01' B<ⷷ1A' A> ? -A1' A1' ⷷ<' &ⷷ1' F 'ⷷ'<>' &? 1-< ' F 'ⷷ'<>' &ⷷ1' 'BD< A' &ⷷ1' <> 10' 1ⷷ &D-' F -AD<>' D&> <0' F -AD<>' E1& .1' 1+ ⷷ' <0 < A' D&> <0' , ⷷ' -.K& D' D< ⷷ10' CC&-' &' D1' ' ?010' & ' & D1' ?01' &=' <- ' &=' D1 > ' K1 1' 01<01A' & ' C&001001A' D1' =' 0 ' A< ' &=' ?ⷷ ' D1' L''' ' 1 1' &=' D1' 1' .-' &=' &? ' 01'A' & ' .-' & Aⷷ -A' KD1 &=' D1' 01'A' D< ⷷ10' CC&-' &' <-' & D1 ⷷ C0&-1' & ' C0&-10' &' D'0' ?01' K1 1' 01<01A' & ' C&001001A' D1' LL ' A< 1' &=' <-?< ' D1' L+' W0 1 1' &=' D1' 1' .-1' &=' &? ' 01'A' & 1' .-

CC 1D1? '& -' &=' F < #1Baⷷ <-A' D'0' B&> >' <ⷷ &' D1' &K1 '

1> C ' # ' D1' < ⷷ &=' F < K 'Ba' <-A' & D1 0' &' 10B?1' F < #1Baⷷ <-A' &' ' > <a1' D'>' , '- .'

<'-A1 ' &=' D1' 0<'A' < ⷷ =& ' 1<0&-;

1<0&-0' &=' B1 <'-' AD1 1- 0' &' D1' < ⷷ &=' '-B&ⷷ- ⷷ %' ?-1Z 6 1-

1<0&-0' &=' A'==&-A' A1 ‖<' &‖1' ! < e' &=' ?==&aⷷ <-A' D'0' AD1 1- 0ⷷ <-A' D1' ' &-+'B '&-' D1 1&=' i 0

' D1'0<'A' 1 0&-08' A1B‖< 1A' &' #1' B&-+'B 1A' <-A' < <'- 1A' &=' '.D' 1<0&-G

!& =1' ? 1' &=' D1' ' 2 &<!<' C#' D1 1&-' G

L) ' <-A' K 1 &=' D1' 01'A' A' '?-A1' ! 1 1 0' & ' <- ' & D1 ' & - 1' & ' C& - 10' .’ D I ' ¡B' K 1 1' 01<01A' & ' C&001001A' D1' =' 0 ' &=' D1' 01'A' 1 1' &=' &? ' 01'A' &R1' . -' ▯ & A▯' <-A' K D1 &=' D1' 11'A' <0a1 =1▯A' ? . D' &▯ > 10' 'BD< A' <AB ' <-A' dA > "<-. -' & ' <- ' &=' D1 >' & ' <- ' & D1 ' C0&-1' & ' C0&-10' &' D1' ' ?010' ' &' D1'D ' <- ' &=' D1 - '8+ 1 1' 01<01A' & ' C&001001A' A' 1' =' 0 ' ⁞ A<' &=' K . 0 1' D1' 0<>1' L+' ' 1 1' &=' &? ' 01'A' & ,1'. -' & A▯' <-A' K D1 &=' !' 01'A' 1A>' F < 0&-8' & ' 1 - ' & D1 ' C0&-1' & ' C0&-10' &' K D1' ?01' &=' D1' 0<>1' &D-' F < 0&-' K 1 1' 01<01A' & ' C&001001A' D1' LLW' A< ' &=' ?▯' ' A' 1' 01'A' L+' 00Œ 1 1' &=' &? 1' 1'. -' & A' D1' 8 '-. 1▯' K ' D'-' D1' 1<▯>1' &=' -. ▯<-A' ▯<-A' F <▯10' <▯1'0' & ' '-' D1' D▯< BD10' &=' D1' 0<>1' '-' =11' 0 >C▯1' =11' <'▯1' & ' =& ' R &1' &=' ▯ ='V & ' '- &' F D'BD1' <- ' &=' D1 >' D<A' D1-' & ' D< D' <- ' >1' <= ' ' '<?=? ' B<?01' &=' 1- 1' K ' D'-' -. ▯<-A' ▯<-A' F <▯10' <▯1'0' & ' '-' D1' < BD10' TR⁉ D1' 0<>1▯

E <- 0' &=' 0 < 10' # ' D1' , '-. ' &' mAK< T < ▯' &=' "1+&-' <-A' D'0' 1' 0' <▯1▯' KD1 1# ' F '▯▯'<>' &? -1 ' D'0' &-Z &-1' &=' D1' 1 0&-0' # ' D'0 < <'- 1A▯' >'. D ' '- D1 ' ; D1' 0<'A' < ▯' &=' "1+&-' 0D<▯▯ D<+1' &-▯ ' <-' 0 < 1' =& ' ' 1▯ 1><'-A1 ' &' D1' , '-. ' <-A' D'0' 1' 0

C ' KD1 1' D1' , '-. 1' &? ' & 1'. -' & A' D< D' . <?- 1A' A R0' < I ' & A0D'C0' ▯<-A10' <-A' 1- =' C&00100'&-0' <-A' D1 1A' <>1- '0' # ' D'0' ' 1 ' C< 1- 10' &' AK< A1' =▯1' &=' "1+&-▯ &' D<+1' &' D >' <-A' &' D'0' D1' 10' >▯10' &=' D'0' #&A ' ▯<?=?▯▯ ' #1. & 1-▯ KD'BD1' <= ' ' ▯ 0' A'0B1<0' # ' =& >1' &=' D1' 01'A' . = 1' 0D?▯A' & ' > . D ' . &K1' B& >1' & ' A'0B1-A1' &' D(' =& 01'A' F '▯▯'<>' D'0' 0&- -1▯ - A' =& ' 0&' >&BD01' <0' D1' 01'A' F '▯▯'<>' D< D' &==1-A1A' <0' <=& 1' '0' 1D1 B1A▯' ' K1 1' -& ' 10&-<#▯1' D1' 0D?▯A' '-D1 ' 1' <- ' < 0' & A0D'C0' <-A10' 1- \0' C&00100'&-0' <-A' D1 1A' <>1- '0' B&- 1 -1A' '-' D1' 01'A' 10' C< 1- '0▯ 1 ' -1 , D1▯1001' =& ' <0' > ?BD1' <0' D1' 01'A' '1' K<0' -& ' C 1+ ' -& ' ' C< 1-1 ' &' D1' &==1-0' &=' D'0' 01'A' 0&- -1' '-' D'0' #1D<▯== ' D1 1=& 1' D1' , '- .10' '. D-10' K '▯▯' D' <-A' <001- 1 D' D< ' ' ' #1' 1-<= 1A' & A1 -1A' <-A' 10 <#▯'00D1A' # ' D1' <?A & ' 1' &=' D'0 01- ' C< ▯'<>1- ' D< ' ='▯1' 01'A' '1' &=' " 1+&-' D<+1' D1' 01'A' <-▯0' & A0D'CC10' ▯<-A10' 1D '0' C&00100'&-0' <-A' D1 1A' <>1- '0' &' D >' . <?- 1A' # ' D1' , '- .1' &? 1' & 1'. -' & A' # ' D'0' 10' C< 1- '0▯ -A' '-' D1' 01'A' ' 10' C< 1- 10' &&- 1 -1A' <-A' 0C1B'='1A▯' &-▯ ' =& ' R >1' &=' D'0' ▯'==1' K ' D&? ' 1 > C1BD1 >1' ' ' &=' F <0 1▯' D1' 01'A' ' 10' C< 1- 10' &' <- ' & D1 ' &' D >' ><A1▯' & ' <- ' & D1 ' 1' &=' C< ▯'<>1- ' & ' <?= & ' 1' =& ' D >' ><A1' =& ' D1' 1 -=& 0 -.' D1' 01'A' . <?- '0' <-A' 10' C< 1- '0' <=& 1' D'0' >1' D<A' & ' ><A1' &=' D1' 0<>1' -& K ' D0 <-A' -. ; -A' D< ' <▯▯ D1' 01'A' < 0' & A0D'P ' ▯<-A'0' <-A' 1- '0' +'010' C&00100'&-0' <-A' D1 1A' <>1- '0' B&- 1 -1A' '-' D1' 01'A' 10' C< 1- '0' >>1A'< ▯ ' <= ' ' D1' A1B1<0' &=' ='1' 01'A' AK< A' '1' &=' " 1+&-▯ B& >1' <-A' . &K1' <-A' 1 1' C' D1' <-. 1' &? ' & 1'. -' & A▯' <-A' &' D'0' D1' 10' =& ' 1 <& 1

&+'0&'=& ' < A&-0' &' <- ' &=' D1' < '10' < <'- 1A

<▯K1 0' =' <- ' C0&-1' & ' C0&-10' -<>1A' '-' D'0' #'▯▯1' &=' < 14 -A 1' D<+ ' <- ' CA&-' &=' 1<0&-0' # ' D1' , '-. 10' 10' C< 1- ' ?-A'=' # 1 ' . 1< ' 01<▯1' ><A1' 0aD' D1' ' &==1-010' B& > 1A' <-A' A&&-' 0C1B'=1A' '-' ='▯1' 0 A' #'▯▯1' D<' D1 ' -& ' <- ' &=' D1 >' #1' -& ' < 1 ' 1A' # ' 1< -' &=' D'0' =▯?1- ''<Q▯1▯ -& ' =#'=1a' 1- ' ▯<-A10' & ' 1=' =' #? ' 1 ' & 1' ='' 1' <A+< - <.1' <-A' 1==1 ' &=' D1' ' 01'A' C< A&-0' <BB& A'-.' &' D1' 1-&? 0' &=' 0<>1▯ D'0' P 1- ' (1' -& K ' D0 <-A -.

E1-1 <▯ <+'-. . 9' &' !<@ C0&-1' & ' C0&-10' <-A' D1' ' D1' 10▯ & D1 ' D1-' 0?BD1' C0&-10' <0' #11-'# ' ='''0' =▯;1' < 1 - 1A' <-A' & D1 ' D1' ' D1' 10' <-A' D1' D1' 10' &=' 1 ' &=' D1 >' <-A' 1 ' C0&-1' B▯< > -.' # ' D1' 0<'A' C0&-10' 0&' < 1 - 1A' & ' D1' ' D1' 10▯ & '<- ' &=' D1 >▯' 0' D' D1' 1<0&-' # ' D1 >' & '<- ' &=' D1 >' B& > 1A' <-A' A&&-' &=' <-A' '-' <- ' &=' D1' > 0010▯ 0?BD1' '.D ' ' ▯1' <B1 &-' 1- 1' <-A' '-R10 ' '-' & ' &=' D1' > 0010' <-A' 1 , ' &=' D1 >' <0' D1 ' 0D?▯A' D<+1' D<A' '=' D'0' 01- ' 1' D<A' -1R' #1' D<A' -& ' ><A1

&+'0&' =& ' ! 1&==>1- 0' D1▯A' # ' <- ' &=' D1' 1 0&-0' < >- 1A▯' '-' '.D ' &=' D1' ' F '+10

;YP' C ' <▯0&' #1' ' ' & A1 -1A' <-A' 10 <#▯'0D1A' # ' D1' 01'A' <A+ B1' <001- ' <-A' <?= C ' 1▯ D< ' '=' <- ' &=' D1' 01'A' C0&-10' # ' D'0' Q 1' < 1 - 1A' D<+1' ><A1' <- ' <0 < 1' =1&==1>1- ' &=' A'0B&- -?<?-B1' &=' <- ' ▯<-A10' 1- =' 1- '0' C&00100'&-0' <-A' & D1 ' D1 1A' <>1- '0' KD1 &=' 1 '#1' & ' <- ' &=' D1>' K< 1' 01<01A' & ' C&001001A' '-' D1' '. D ' &=' <- ' &=' D1' ' K =10' < ' D1' -'1' &=' 0?BD1' <0 < 1' =1&==<>1- '0' & ' A'0B&- -?<?-B10' ><A1' &' <- ' C0&-1' & ' C0&-10' '-' <- ' K '01▯ D< ' D1' 01'A' ▯<-A10' 1 ' 1- '0' C&00100'&-0' <-A' D1 1A' <>1- '0' #1' -& ' B&>C '01A' '-' D'0' = 1▯' #? ' ? R ' #1' 1LB1C 1A' <-A' =& C '01A' &? 1' &=' D1' 0<>1▯ <-A' D< ' D1' ' .D ' <-A' ' ▯1' &=' 1+ '&=' D1' 01'A' F =1 ' A=' <-A' '-' <▯▯ 0?BD1' ▯<-A10' 1- ' 1- '0' C&00100'&-0' <-A' & D1 ' 1-D1 1A' <>1- ' #1' <-A' 10 1' '-' 1 ' &=' D1' 01'A' F =10' <-A' D1 ' &' #1' < ' D1' ' <1C' -0' <-A' 1B&,1 0' &=' D1' 0<>1▯ <-A' 1 ' CB1▯▯ D1 &=▯ <BB& A'-.' &' / D1' B&? 0' &=' D1' B&1-' <K1' &=' -. ▯<-A▯' D'0' T 1' ' <- ' & D1 ' Q▯1' & ' A1-<?-B1' '-' D'0' 01- ' C< ▯'<>1- ' ><A1' & ' &' #1' ><A1' -& K ' D0 <-A'-.' ' -A' <▯0&' D<' ' ' #1' ▯1=?▯▯ &' 1 ' &=' D1' 1'A' F =10' <-A' F & > >1-▯ <-A' &' 1 , ' &=' D1' ' 01'A' D1' 10' # ' D'0' -& ' < 1 - 1A▯ &' 1- 1' '- &' D1' 0<>1 < 0' ▯<-A10' 1- '0' 1- '0' C&00100'&-0' <-A' & D1 ' D1 1A' <>1- '0' '- &' KD&0' C&00100'&-0' 0&' 1 , ' D1 ' #1' 01<01A' & ' B& >1' <0K1▯▯ ?CC& =' D1' CA001 0'&-' &=' D1' , -.1' &? ' & ,1 .-' L' A' <0' ?CC&-' D1' C&00100'&-' &=' <- ' & D1 ' C0&-1' & ' C0&-10' # ' D'0' ='1' -& ' < 1 - 1A▯ <-A' D1 >' <-A' U , ' &=' D1 >' D&▯A1' <-A' 1- & 1' &' D1 >' <-A' &' D1' ' D1' 10' # ' D'0' Q'1' -& ' < 1 - 1A' <BB& A'-.' &' D1' ' ▯1' <-A' '-+10 ' '-' D1' 0<>1

&+'0&' =& ' 1- 0' <-A' 1 +'B10

'= ' <▯0&' #1' ' & A1 -1A' # ' D1' 01'A' <?=' & ' 1▯ D< ' 1 , ' &=' D1' , '- .10' ▯'1.1' C1&C▯1' D1' ' 0?BB100&? 0' D1' 10' <-A' <00'. -10' D<+1' <-A' 1- & ' <▯▯ ' >< I ' ▯1 - =' A?1' <-A' &=' '. D ' &' D1 >' #1▯&- . -.' <=& 1' =#1' ><▯1 -.' &=' D'0' (1' &' D1 >' &=' 1- ' &=' D1' 0 0 1 0' A?U -. ' D1' >1' D<' D1' 80<>1' C'- 001'0' 1>< -1' <-A' <#'A1' D" D1' C&00100'& " &=' ? C' 01'A' & ,1' . -' & A' & ' D'0▯ D1' 10▯ >'A' '=' <- ' &=' D1' D1K< R'#1' . <?- 1A' # ' D1' , '- .1' & '# ' <- ' &=' D'0' D1' 10' # ' ▯1 1 0' C< 1- '0' &' <- ' C0&-1' =& ' R >1' &=' ▯ =' '-' =11' 0 >C▯1' & ' =11' <'▯▯1' D ' D1-' D&0' C0&-10' 0&' 01<01=" DAA' ='1' 0<>1' < 0' ▯<-A10' <-A' 1- '0' C ' & D1 ' &=' D1' , '- .1' <-A' D'0' D1' 10' =& A1=1-B1' &=' D0' <-A1▯ -A' <▯0&' &=' 0?BD1' C0&-10' D1' ' D1' 10' <-A' 0?BB1 0&? 0' <-A' # ' D1' 0<>1' ,+'B1' <0' D1' 0<>1' <,0' <-A=' <-A' 1A ' i ' <-A' & D1 ' > 0010' K1 1' <-A' 0D?▯A' D<+1' #11-' D&▯A1' <-A' BD<'.1A' K ' D' <=& 1' D1' >' <a'-.' &=' D'0' 01- ' A 1 ' D&>' <.1' &=' 1- ' =& ' R'CB' &=' ▯ =' &&-▯ ' 1LB1C 1 ' <+ -.' & ' 1 , ' C0&-1' <-A' D1' ' D1' 10▯ & D1 ' D<-' 0?BD1' C0&-10' <0' #11-' # ' D'0' (1' < 1 - 1A' <-A' D1' ' D1' 10' & ' <- ' &=' D1 >' &=' & ' '-' <- ' &=' D1' 6 > 0010▯ 0?BD1' '.D ' ' ▯1' <BB'&-' & ' '-+10 ' '-' & ' &=' D1' C > 0010' <0' D1 ' 0D?▯A' D<+1' D<A' '=' D'0' Q=1' D<A' -1 , ' #1' ><A1

E1-1 <▯ <+'-. ' D1 1&-

3". ' ⅈ2 . <. "' 1 / ' ' ' & A1 -1A' # ' D1' 01'A' <?=▯& ▯ 1' <A+ B1' <-A' <001- ▯ D<' <▯▯ <0 C▯0' < 0' & A0D'C0' &K - 10' &K - 10D'C0' &-&? 0 KD1 1&=' D1' < '10' ▯<-A 0' 1=' =' 1- '0' ,+'B10' =11' =1 >10' <- - ?' '10' , -'. D '0' =110' <A+&?0&-0' 1 B'&-0' 1><-A1 0' <-A' & D1 ' D1 1A' <>1- '0' K' D' D1' < <'- 1A' &=' & D1 0' <CC? =' = <?- B10▯ &=' KD'BD1' ⅈ9<- ' C0&-1' & ' C I &-10' <=& 1' -<>1A' # ' D'0' 01& ' A=1' < 1 - 1A' K1 1' 01<01A' & ' D<A' <- ' <0 < 1' ' ▯1' ' .D - 10 ' & ' C&00100'&-' 0&▯1' # ' D >' & ' D1 >' D1 ▯=' & ' & - ▯ ' K' D' & D1 ▯ D1' 01'A' 01 ,<▯▯ A<▯10' &=' D1' 1<0&-0' <-A' &==1-B10' B& > 1A' <-A A(&-' B& >C '01A' '-' D1' 01'A' A'1' &=' 1 -A1 ' & ' <- ' >1' <= ' ▯ &' D?01' C=1 1' & ' #1D&+1' &=' <- ' C0&-1' & ' C0&-10' # ' D'0' A1' -& ' < 1 - 1A' -& ' '-<#▯1A▯ #1' -& ' =& =1' 1A' '1 ' =& =1' <#▯1' '-' 1- ' K '01' &' D1' , '- .1▯ -& ' D'0' D1' 10' -& ' #1' 01<0'#'▯▯ '- &' D'0' D<-A10' # ' D'0' = 01 '' A'1▯ #? ' ? 1 ▯ ' #1' 1LB1C ' <-A' =& C '01A' &? 1' &=' D1' 0<>1' A=1'0 <-A' D<' <▯▯ 0?BD1' <0 < 1' ' ▯1' '.D ' '-+10 ' <-A' C&00100'&-' KD'BD1' <- ' &=' D1' 01'A' C0&-10' & ' C0&-1' # ' D'0' Q▯1' < 1 - 1A' D<A' D1' 01'A' 01 ,<▯▯ A< 0' B& >C '01A' '-' D1' 01'A' Q▯1' &=' 1 -A1 ' & <▯▯ ' >1' <= ' ' '-' <- ' &=' D1' 01'A' <0 1▯0' < 0' & A0D'C0' &K - 10' &K - 10D'C0' &-&? 0' ▯<-A10' 1- =' 1- '0' ,+'B10' =11' =1 - -1M' <'▯-? ='10' ^▯'.D=' 0' =110' <A+&?01>0' 1-0'&-0' 1><-A1 0' <-A' & D1 ' 1-D1 'A' <>1- '0' K' D' D1' ' <CC? 1-<?-B10▯ &' D1' ?01' C=' 1' & ' #1D&+1' &=' <- ' CR&-1' & ' C0&-10' # ' D'0' Q▯1' -& ' < 1 - 1A' -& ' ?-<#'▯▯1A▯ . &K1' B& >1' <-A' #1' &' 1 , ' &=' D1' 0<>1' C0&-1' & ' C0&-10' # ' D'0' A▯1' 9 ' < 1 - 1A' -& ' ?-<#'▯▯1A' <-A' &' D1' ' D1' 10' <-A' '-' ='1' 0<>1' C0&-1' & ' C0&-10' <-A' D1 ' D1' 10' #1' +10 1A' <-A' D1 ' D1 '-' #1' ' - 1▯1A' '-' 0?BD1' K '01' >< '<-A' =&? >1' &=' <0 < 1' ' ▯1' '.D ' <-A' C&0010'&-▯' <0 ' '=' D1' 01'A' C0&-1' & ' C0&-10' # ' ▯'' 0' 1' < 1 - 1A

Ô 1 ' ='' &K' - .' ! & '0&10' < 1' <- -1L1A' &' D1' '.'''<▯ '-' ▯?;11' 01C< < 1' BD1A?▯10

D<A' #11-' C< < <▯▯ ' A1A1' <-A' -& ' < 1 - 1A' -& ' ?-<#▯1A)' <-A' D< ' ' '#1' ▯1=?▯▯ &' 1 ' C0&=▯1' &=' C0&-10' #1'-.' & - ▯ ' 01<01A' & ' C&001001A' K ' D' <- ' &=' D&0' C0&-10' # ' D'0' ₄ ' < 1 - 1A' & ' ?-<#▯1A' D1' =& 01'A' 01+<▯ ' A<L10' &=' D1' ' &==1-B10' & ' 1<0&-0' B& > 1A' <-A' A&&-' & ' <- ' > 1' < = ' ▯' &' D' ' & ' ''1' ' &K-1' ' & ' &' D1' ?01' &=' <- ' & D1 ' C0&-1' & ' C0&-10' # ' D'0' = 1' -& ' < 1 - 1A' -& ' ?-<#▯1A' '- & D1' 0<>1' <0 1▯0' < 0' & A0D'C0' <-A' & D1 ' D1' > 0010' &' 1- 1' '- &' KD&0' C&00100'&-' 0&' 1 ¸' D1 ' #1' 01<01A' & ' B& > 1' <0K1▯▯ ?CC&-' D1' , U. 0' C&00100'&-' <0' ?CC&-' D1' C&00100'&-' &=' 1- ' & D1 ' Ci&-1'& 0C0&-10' # ' D'0' ᴛ ' -& ' < 1 - 1A' -& ' ?-<#''▯1A' <-A' D1 >' D<+1' <-A' 1- & 1' <0' '=' D1' 0AA' C0&-1' & ' C0&-10' <0' '0' <=& 01'A' # ' D'0' Q 1' < 1 - 1A' & ' ?-<#▯1A' D<A' #11-' -< ? <▯▯ ' A1A1' <-A' -& ' < 1 - 1A' & ' ?-<#▯1AO' i<+ -.'<▯0&' &' 1 , ' C &-1' & ' C0&-10' <-A' D1' ' D1' 10' & D1 ' D1-' 0?BD1' C0&-10' <0' #11-' # ' D'0' Q ' < 1 - 1A' <-A' A'1' ' D1' 10'&=' & ' '-' 1- ' '=:' D1' C>'0010' 0?BD1' '.D ' ' ▯1' <BB'&-' 1- 1' <-A' '-+10 ' '-' & '&=' D1' > 0010' <-A' 1 , ' &=' D1 >' <0' D1 ' 0D? A' D<+1' D<A' '=' D'0' Q 1' -1 ' D<A' #1' ><A1 ' 2

E1-1 <▯ <+'- .' D1 1&-

d "' > & 1' & ¸' D1' ' ' & A1 -1A' # ' D1' 01'A' <?=▯& ' 1' D< ' 1R ' &=' D1' K =10' &=' 1 '&=' D1' 01'A' C0&-10' -&K1' ▯1+ -.' # ' D'0' Q▯1' < 1 - 1A' ' & 0' > <#' ▯▯1A' <-A' 1 0?BD1' F & > <-'0?BD' <0' K<0' D1' F =1' &=' 1- ' &=' D1' 01'A' C0&-10' -&K1' A1A1' # ' D'0' = 1' < 1 - 1A' & ' ?-<#▯1A' = 1▯ '1- & 1' D<+1' <-A' C&001A1' '<= ' ' D1' A1 D' &=' D' ' D?0#&-A' <▯▯ D' ' &K-1' ' -D1 1 <?-B1' &' D' ' <-A' &' D' 'D1' 10' & D1 ' D1-' `# 1 Pʼ < 1 - 1A' & ' ?-<#▯1A' # ' D'0' ᴛ ·' <-A' <▯▯ <0 1▯0' & A0D'C0' < ' ▯<-A10' 1D '0' <-A' & D1 ' D1' > '0010' K D1 &=' 0D1' D1' 01'A' 01 <▯▯ A< 10' &=' D1' 1'A' 1<0&-0' B& > 1A' '-' 1- 'K '01' K 1=1' 01<01A' & ' C&001001A' '-' D' ' &K-1' '.D '<0 < 1' & ' C&00100'&-' & ' & - ▯ ' K ' D' D ' ' 01'A' D?0#&-A' =' + ' D' <- ' & D1 ' C0&-1' ' C0 -10' ' &=' KD'BD' 1- ' C0&-1' & ' C0&-10' K1 1' 01<01A' &' D1' ?01' &=' 1- ' &=' D1' 01'A' F 1 > > 1-' & ' &' D1' ?01' &=' 1- ' &=' D1' 01'A' F 1 > > 1-' <-A' D1 ' 01'A' D?0#&-A10▯ <= '" D1' =&? > 1' <-A' > <=" <-A' '-▯'a1' <0 < 1' <0' D1 ' & ' 1- ' &=' D1 >' K1 1' '- ' ▯1A' '-' D1' 0< > 1' D1' 01'A' 01 <▯=' A< 10' &=' D1' ' 1<0&-' & ' &==1-B10' B& > 1A' `<-A' A&&-▯ <-A' D< ' A? -.' D1' 01'A' <0 < 1' ' '#1' -& ' 01<0<#▯▯1' -1' 01<01A' # ' D'0' ' '- &' 'L I , '-.=' D<-A'0 -& ' D1' , '-.1' &' #1' <+>0K1 1A' &=' <- ' '00?10' & ' C=1 '0' &=' <- 'CB1▯▯ D1 &=' D1' 0<>1' 10 < 1' A? -.'▯ -A' D<' ' ' #1' ▯1=?▯▯ &' &=' D1' 01'A' F =10' <-A' F & > 1-' <-A' 1 , ' &=' D1' ' D1' 10' # ' D'0' <Q 1' -& ' < 1 - 1A' -& ' = <#▯1A▯ <-A' &' 1+0 ' C0&-1' & ' C0&-1 '01<01A' &' D1' ?01' &=' <- ' &=' D1' 01'A' F & > 1C▯ & ' &' D1' ?01' &=' 1- ' &=' D1' 01'A' F & > 1-' <-A' D' ' 01'A' D?0#&-A10' <-A' D1' ' D1' 10' &' 1? 1' ' -' &' D1' 0<>1' <0 1▯0' <A0' & A0D'C0' <-A' & ▯'1 ' D1' > 0<10▯ <-A' 1 i ' &=' D1 >▯' -' & KD&0' C&00100'&-' 0&' C' D1 ' #1' 01<0BA' & ' B& > 1' <0K1▯▯ ?CC&-' D1' C&00100'&-' &=' D1' ' '.1' <0' ?CC&-' D1' C&00100'&-' &=' 1 ' & D1 ' C0&-1' ' C0&-10' D D'0' Q#1' -& ' < 1 - 1A' -& ' ?-<#▯1A▯ <-A' D1 >' <-A' 1 ' &=' D1 >' D&▯A1' <-A' 1- & 1' &' D1 ' <-A' &' D1 ' D1' 10' # ' D'0' Q 1' -& ' < 1 - 1A8-& ' ?-<#▯1A' <BB& A'-.' &' D1 ' & ' D1' ' ▯1' <-A' -R10 ' '-' D1' 0< > 1 ' <+ -.' &' R ' C0&-1' <-A' D1' ' D1D 10▯ & D1 ' D1-' BD1' C0&-10' <0' #11-' # ' D'0' SJ ʻ < 1 - 1A' <-A' D1' ' D1' 10' < 'A' D1' D1' 10' &=' 1 ' &=' D1 >' <-A' 1 ' 0&-1' B▯<> -.' # ' D1' 01'A' C0&-10' 0&' < 1 - 1A' & ' D1a' D1' 10' & '<- ' C=' A'1 >' &=' & ' '-' <- ' &=' D1' > i i10▯ i?BD1' '.D ' ' ▯1' <BB'&-' 1- 1' <-A' '-+10 ' '-' & ' &=' D1' >'0010' <-A' 1 , ' =' D1 >▯' <0' D1 '0D?▯A' D<+1' D<A' '=' D'0' '1' D<A' -& ' #1' ><A1

E1-1 <▯ <+'' . D1 1&-

C ' <▯0&' #1' ' ' & A1 -1A' # ' D1' 01'A' <A+ B1' <001- ' <-A' <? '&B' 1▯ D< ' <▯▯ < f ' ▯<-A'0' 1'a=' 1-A0' 1 f ;'&- ¦C&00100'&-0' <-A' &A 1'0 '-D1 1A' <. 1- '0' &=' D1' KD'BD1' <- ' C0&-1' & ' C0&-10' <= 1' -<>1A' # ' D'0' 01- ' Q 1' < 1 - 1A' & ' -<#▯1A' K< 1' 01<01A' & ' D<A' <- ' 10 < 1' ' ▯1' '.D ' & ' '-+10 ' & ' C&00100'&-' 0 A1' # ' D1 >01▯=' & ' & - ▯ ' K ' D' & D1 ▯▯C ' K ' D' <- ' & D1 ' C0&-1 ' &' D1' ?01' &=' <- ' &=' D1 >' D1' 01'A' 01 <▯▯ A<▯10' &=' D1' ' 1<0&-0' <-A' &==1-B10' B&- 1A' <-A' A&& f ' '-' <- ' '-<- ' & . .1' & ' '-' & ' =& ' 0?1 '1' &=' <- ' 0# > 1' & ' 0? > 10' &=' & -1 ' &' #1' C<'1A' # ' <- ' =1&==1 > 1- ' . <?- ' 1B&A1' & ' <0 < 1' ><A1' &' D1 >' & ' < ' '&=' D1 >' <=& 01'A' < 1 - 1A' & ' -<#▯1A▯ T-' &' <- ' C0&-1' & ' C0&-10' &' < ' '&=' D1' ' ?01' # ' <- ' C0&-1' ' C0&-10' -& '8< 1 - 1A' -& ' '<#▯1A▯ D1' 0<>1' 0? > 1' & ' 0? > 10' &=' & -1 ' ?▯ ' C<'1A' <-A' B&- 1- 1A' & ' C< B1 +1A' <-A' D<A' &=' D'00?1\' C= =' <-A' =1+1-?10' &=' D1' 01'A' < ▯0' ▯<-A10' 1? '0' 1- '0' 1 0' -0' C&00100'&-0' <-A' & D1 ' '-D1 1A' <>1- '0' & '&=' < '&=' D1 >' <BB& A'-.' &' D1' 1==1B ' <-A' ?1' 1- 1- ' &=' D1' =& 01'A' =1&==1>1- ' . <? =1' & ' 10 < 1 ' #1' -& '=& =1' 1A' $ ' '& =1 <#▯1' ' >' ' K '01' &▯ ' ,' '.1' -& ' D'0' D1' 10' ' 01<00 #▯1' -& ' 01<01A' '- &' <- ' &=' D1' 'D< 'A10' # ' D'0' 01- ' T ;1▯ #? ' ? I ' #1' 1LB1C 1A' <-A' =& C '01A' &? 1' &=' D1' 0<>1▯▯ &K1' #1' ' ' D< ' -&-1' 1LC001' '"1-B'#-' #1' ><A1' '-' D1' 0 'A' =1&==1>1- ' . <?- 1' & ' 10 < 1' &=' D1' 01'A' ? .<.1' & ' &=' C< >1- ' &=' <- ' 0? > 1' & ' 0? > 10' &=' &-1 ;' -A' D<' ' ' #1' ▯1=?▯▯ &' 1 ¸' C0&-1' & ' C0 K'10' # ' D'0' в4 ' -& ' < 1 - 1A' -& ' ?-<#''▯1A▯ T▯ ' &' 1- ' & D1 ' C0&' F▯ KD'BD' C0&-1' & ' C0&-10▯ & ' <- ' &=' D1' ' ? 'B10 10' &' KD& > ' D1 8& ' <- ' &=' D1 >' #1' -1L ' D1' 10' & ' D1' 1▯ > <A1' <- ' &=' D1' 01'A' =1&==1 > 1 ' '0' . <?- 10' & ' 10 < 1' &' 1- ' &=' D1' 01'A' C0&-1' & ' C0&-10' <=& 1' < 1 - 1A' & ' ?-<#''▯1A ' & ' 1- ' & D1 ' C0&-1' & ' C0&-10' &' < ' ' &=' AL1' ' ?01' '-' & ' &=' 1- ' &=' ▯' ' 01'A' < 0' ▯<-A10' 1- 'i' 1- 10' 1-0'&-0' C&00100'&-0' <-A' & D1 ▯▯'-D1 1A' <>1- '0' &' 1- 1' '- &' D1' <>1' '- &' KD&0' C&00100'&-' 0 ' 1 ' D1 ' #1' 01<01A' & ' >1' <0K1▯▯ ?CC&-' D1' C&00100'&-' &=' D1' , '-.1' &? ' &,1'.-' & A' <0' CC&-' D1' C&00100'&-' &=' 1- ' & D1 ' C0&-1' & ' C0&-10' <-A' D1 >' D<+1' & ' 1- & 1' <BB& A'-.' &' D1' ' '.D ' ' ▯1' <-A' C&00100'&-'<0' '=' D1' 01'A' 1' &=' 1 'A 1' & ' ?-<#▯ -.' -1 ' ▯'<A' #1' ><A1' -& ' D<A' + -.' &' 1 ' C0&-1' <-A' D1' 'D1' 10▯' & D1 ' AL<" 0?BD1' C0&-10' <0' #11-' # ' D'0' A▯1' < 1 - 1A' <-A' D1' ' D1 10▯' <-A' D1' D1 10' &=' 1R ' &=' D1 >2' <-A' 1 ' C0&-1' B▯< > -.' # ' D1' 01'A' C0&-10' 0&' < 1 - 1A' & ' D1'=' D1' 102' & ' <- ' &=' D1 >' 0' D1-' D1' 01'A' 01 <▯▯ A< 10' &=' D1' ' 1<0&-0' BA-' 1A' &=' <-A' '-' 1- ' &=' D1' 0?BD1' '.D ' ' ▯1' <BB'&-' 1 L 1' <A' '-=10 ' Q' & ' &=' D1'C > 0010' <-A' 1 '&=' D1 >▯' <i' D1 ' 0D?▯A D<+1' D<A' '=' D'0' Q▯61' -1 ' D<A' #1' ><A1

E1-1 <▯ <+'-.' D1 1&-

'T0&' # ' D1' 01'A' <?=▯& ' 1' #1' ' ' & A1 -1A▯ D< ' KD1 1' # =& 1' <0K1▯▯ A 0' 0BD1 C? ' &=' A +0' L' 10' &=' D1' 1<▯ > 1▯ <0' # =& 1' & D1 ' C0&-10' # ' & > 00' &-0' <00' . -1A▯ A 0' ='B10' <-A' '-H?'0'A&-0' A<'▯▯ ' #1' =&? -A1' <-A' <a1-' <= ' ' 0?BD1' 1 -A&? 0' <0' '0' <=& 01'A▯ <-A' D1 ' 1 <A&? i' D<A' <-A' ı# ' D<' 0?BD1' Ci&-1 '< 1 ' 1A' <-A' D1 ' &' D1' ' ?01' F 1 1' 01<01A' &=' 1 -' ▯<-A10' 1D '0' 1- '0' 1=1'&- ' ' & D1 ' '-D1 1A' <>1- '0▯ #1' -.' <-A' C H - -.' '.D =?▯▯ ' &' A +0' D1' , '-.10' ?1▯' 1.10▯ --A' -&' B0OZ' 0?BD1' C0 -1' 0&' < 1 - 1▯ ' &' <- ' D1 ' &' D'0' ?01▯ KD1 1 D& & .D' 0?BD1' ▯&-A10' 1- '0' 1- '0' 1 B'&- ' 1>< -A1 0' 0+'B10' C&00100'&-0' <-A' ?A 1 1 <>1- '0'<=& 01'A' &= 1-' >10' #1' 01<01A' '- &' A'1' = '-.10' D<-A10' <-A' D'0' 'A' 1>'▯' 1.10' D1 &=' C? '& 1' <-A'‰ ' D1' C&00100'&-' D1 &=' <>&+1A' &' D1' ? =10 ' >C& 0OD'-.' &=' D1' , '-.10' ?1' 1.10▯ D< '▯= &' D1' 01'A' 01 <▯▯ A<'10' &=' D1 ' 01 <▯▯ -A' 1>1- '0' &=' < 1 -A1 0' <=& 01'A' 1 , ' &=' D'0' ▯' 1.10▯ # ' <- ' > < ' &==B10' & ' '-H?'0'B'C-0' =C?-A1' & ' <a1-' . 1+1A' C? '& 1' & ' D&▯A1-' &? 1' &=' C&00100'&-' & '& D1 K'01' D K ' # ' 1<0&-' & ' B&▯&? '&=' D'0' ▯'#1' < ' <▯▯ >10' D1 1<=' ' K ' ▯ ' D1' >& 1 D' -1L ' <= ' ' D1' 1 ? K' & ' C? ?.' '-' &=' <- ' 0?BD1' &==B10' & ' '-H '0'B'&-0' '- &' <- ' &=' D1' , '-.'0' &? '0▯ 1B1 +1A' <'A' <A> 1A' &' D'0' <+1 0' &?1# -.' 1= '0?BD1' &==B1' & ' >H '0'B'&-▯ & ' 1▯0' 0D1K1' D'0' '.D ' <-A' 'A1' D=1 ' ▯ '-' +& A -.' D1' 01'A' ==B1' & ' '-H?'0'B'& '▯ '-' 1R ' C▯<B1' <0' <- ' 0?BD1' &==B1' & ' '-H?'0'B &-' <▯#1' 1 > -1A' 10 ' & ' 1> < -1 ' <-A' ?C&-' D1' 0<>1' <+1 0' 1-A1A' & ' ' ▯1' 0D1K1A' D1' 0 1' C0&-1' & ' C0&-10▯ D1' 0<- 1' <+1 0' 1-A'-.' & ' ' ▯1' 0D1K -.▯ &' D<+1' D1' 0<>1' < <' ▯<-A10' <-A' 1D '0' 1- '0' 1 B'&-0' 1> < -A1 0' =+'B10' C&00100'+1' <-A' D1 1A' <>1- '0' KD1 &=' 0?BD1' <+1 0' 0D<▯#1' 1-A1A' & ' ' ▯1' 0D1K1A' &' = >1' # ' D1' , 2-.10' ' 10' C< 1& 10' & ' & D1 K'01' <0' &' D1' C< 1' '-' D<' #1D< +1' 0D<▯#1' -1B100< '1' <-A' #1D&=? ' ?CC&-' 0?1 '1' A'1'=& 1' &' #1' =&?-A1-▯ <= ' ' D1' =& >1' ?CC&-' <+1 i' '-' D1' , '-.'0' D<-- 1' 1-A1A' ?01A▯ 1' C< '1' 1-A'-.' 0?BD1' <+1 0' & ' ' ▯1' 0D1K -.▯ D1' >< 1 ' D1 =' =&

@1’ .0-/!8 "!2 ."!/ .’ &Z .22!22&.-’ &&8 ’ ;! +’!’7& ’ /&&22 !Z <&/ ! &Z . ’ !’ 2 1!’ ". 1’ !’ @1!’ . ’20# !’ . &#!’ .’" &-SO&2&##&.-’ .0-/!’ E!-’.’" /’ -/’ !’M&-*’ / ’ !". ’0 !"+@ .’;!’ 1.’!/’7& .0 !’ !" !’".’" . !"20 !’ &-’ ’ "&!’ .’ ;!’ /’ .’" 1 /!’ &-’ -@ 7&2!)

’W ’ 36.’& ! ’ +<@2’ ’ &Z -!"!-@ & 02!’ .’" "&#+!’#.1 "&2!/’ &-’ < ’2 1!’ ^<!’ !% !-/’ -.’-!"& -’!-@ 7&2!’ ;!’ M0" 0+’." <0/&##& +’ .’ .1 Z "&!’.’ 0-/!+’ -/’ &Z 2&* !2K R ’ .’ !’ &! < 0&" &Z .’" ! 0 &!2’.’ !’2 1!’ "&!’.’ "0-/!+’.’.’" .’" !’ -’.’V "/!+ 1’ 7& ’ 0" !- 0-#!2’&-’ !’ .0- &!’.’ 0 !’.’" .’" .’" !’M-&* &Z !!2 /’.0<.-2.’ 0"# !2 .0" ’+! &2 1 "# &2 !&"!2’+& &!2’ " 0-# !2 7 "!-2’#.1./& !2 2K* -@. !"& -*!’7 ’2.’!<’&’;!’ .’ !’ 2!&/’ ’;!+.-*@-*’ .’" !@-@-*’ .’" .’.’" .’" !’. &#!’.’ &! !- 00 2 &’.’" M! !"(’ !’ ."!2 &2 .’<2 .+!’ -/’V0+1!"!’&-’ !’ .0- &!’ ."2!&/’.’" .’.’" .’" !’. &#!2 .’E! &-*’.’ !’3 "E!’.’YV "/!+ 1’ !’ &/’ 0" !- 0-!!2’&-’ !’2!&/’ .0- &!’.’" .’.’" .’" -@ !!2’7 *!2’ # &2’.’" . !" #.1./& !2’ ’ !’2!&/’. &#!’.’" . #!2’.’" .’ -@.’ !@1’;!E1*@0*’(" !" !@-@-*8 7 &# !’ !’2!&/’ "&!’.’ "0-/!+’ <’.’" /’_ .’ !’ *& !’ -/’*" 0- !’.’.0" .<!&*-’ ."/’ !’M&-*’ ’-.7!’&2’;@ V2 "!2 ! &Z .’" $1!’.’+@’.’ !’2!&/’ "&!’.’ "0-/!+’ 1 /!’;@ 7 ’2.’ !,’-1!’.’" -.1!2’ !’2!&/’+<’+!’.’ "0-/!+’;!’-1!/’&-’ !’ !-’.’ !’2!&/’ *& !’ -/’*" 0- !’ 2’& ’ &Z <2!-’ ’ ’.’ !@-/"!’7 !"!’-.’ /’-!" 1 /!’

3".’&2.W.’" &" $. ’ -’ +7#@ ’ &Z +!’ -.’" -@ &&+*’ !"!&-’!.-!@-!/’!% !-/’-.’ -!’&-’ -@ 7&2!’;!’<+0/&##& +d -.’" 0" 0+d .’ &" 6&# "/’b0+/!.’"/!’ 6+# "/!’b0+/!.’"/!’M-&*’ -.’" &Z !&"!2 22<-!!2’.’" !. &!!2<.’K" .’20# !’"&* ’ &+!’ .22!22&.-’ -/’&-’!2’ 2’ !’2<! &"" 6&# "/’ ’&-’ !’ ’.’B@+;!"/!2’&-’ !’ . &!’.’4!"E’-/’ !"’;-/!2’!-&Z"!-&Z"!$2&.-2’-/’!"!/& 1!-&Z&-’/&!’ .7-’ -/’B!+/!2.’B@+;!"/!2’;@"!2.-’.’ -@"!#./!’ /’.’ !’2 1!’ 2’+-/!2’!-&Z.’" !"!/& 1!-&Z * @-2’ !’2!&/’ /10-/’/!’ +’3.+!’.’" -@’. !" 2.-!’.’" 2.-!2’2! 2!/’.’ !’2 1!’.’ &2 02!’.’" ;@"!2.-’.’ -@ !. !1!-’@-!"!+!2’#.-&"1 #&.-’#.’!- 0-’ .’" .’!- 0-<’; "*!@-’.’" 2+!’&</!’;@ !’2!&/’ /10-/’.’ !’2!&/’ &" 6&# "/’.’" .’ -@. !" 2.-!’.’" 2.-!2’.’ &2 02!’.’ !’ 2!&/’ ’+-/!2’!-&Z.’" . !" ;#"!/& 1!-&Z ."2!&/=’;0’ !’ _ 1!’"!#.,!’;"*!@-’2+!’.’!- 0-’ -/’.’!- 0- !2’ -/’+! !.<1!-&Z @-<’"/!’ -/’b.-&-- #&.-2’1 /!’;@ !’2!&/ /10-/!’.’ !’2!&/ &" 6&# "/!’.’" -@. !" 2.-!.’" 2.-!2’.’4&2 02!’;!’*../’!&!<0+’ -/’’&+ ;+!’.’ !’2 1!’&" 6&# "/’ -/’&Z !&"!2’ -/’.’+’ !" 2.-!2! 2!/’.’ !’2 1!’.’&Z 02!’ Z&’ !’2!&/’^!’.’" -@ &-* !"&-’!.-!@-!/’ //!’-!<’;!!-’ //!’-.’" 1 /!

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!’1.2’01;+!’7&2!’;!2!# !’@.0" &*+1!2’@.0" "!7!’0;#! !’6.;’4"!72’ S0@!"’ .2@-’ -/’ !&"!’0- .’’b&+;!"’ !;!- 1’ M-@* ’//#!22!/’ ’&Z .’2@’2.-!’.’ +&% ;! ’4"!72’ &2 !"’ .’ !’2!&/’’b&+;!"’ -/’ 7 !"’ !’2!&/’b&+;!"’7 2’+ !+@!-/&!/’.’ -/’ .’" &*’ "! 2.-’0-- 0" ++@ @!-2’ &Z +!*! 0-#!’;@ &1’#.1@ !/’ -/’/.-’0-.’@.0" &* -!2 .<!&*-!’ ."/’ -/’ @!-2’@.0" 1.2’-.;+!’ 2.-’ -/’0 .-’/0!’ #!22!’ !". ’1 /!’ -/’ "/! 0!’.’ &Z " 0-#!’ !’2 1!’b&+;!"’7 2’.0 !+ 7!/’0 .-’ !’2!&/’ &-/&!1!-’.’" !’2!&/’"! 2.-’H -/’7 !" +2.’ ’ ’3 "& 1!-’ ./!-’ ’V!2 1’ !’%0&))) / @.’ .;"! @!"!’.’@.0" 1.2’ -.;+!"!&*-!’ 7 2’."/!&*&&!/’< "!/’ -/’!2 ;+&2<;!/’;@ !’ /’@2!’ -/’ 22!-’.’@.0" ."/’2 0+ -/’!1 ." ++ -/’@.0" .1!-2 &-’ +& 1!-’22! 1;+!/’ -/’;@ && ."& !’.’ !’2 1!’ !’2!&/’b&+;!"’;@ !’- 1!’.’b&+;!"’ !;!- 1’+ !’.’ !’ .7-!’.’ V!2 1’&-’ !’ .0- &!’.’ &/’/’M-@* ’;@7 ’2!,’-1!’." - 1!2’ !’7!"!’ - 1!/’." # ++!/’2 0+/’2 .-/’ -/’;!’#.-’& !/’ /H0*!/’ -/’ !@-!/’.’ &* ’ "! 2.-’ -/’ ’ !’2!&/’b&+;!"’2 0+/’ ."!& !’.’@.0" &* -!2’ -/’.’@.0" !&"!j’ .<!&*-!’ ."/’ ++ .-.0"Z 2!++’ -!"Z ."/2 & !2’ 0-/"!/!2’" -# !2&!2’+&; &!2’ "&’&+!*!2’ /’.02.-2’ .& #&.-2’<2!- #&.-2’M-@* ’B!!2+.-/’ !-$’"!-<’<’&#!2’"!’V.-2’"!1 @-/!"Z .’"#&.-2L --0@&!2’"&* ’ !-#+.-2’ .22!22&.-2’ !"!/& 1!-<’*../!j’ # ++!j’ -/’ /! <@ 7 !".’ !’2 1!’ b&+;!"’.’" !-@. !" .K &Z 02!’7!"!’2! 2!/’." .22!22!/’ !’/ @’.’ &Z "! 2.-’#.1@ !/’/.-!’ -/’2 !#! &!/’&-’ !’2!&/’&-/&<!1<0’." !-@ @1!’ $’7& &-’ !’6! +1!’.’ -*!+ -/’ "!+ -/’V +!2’b +!2’." &-’ !’ "# !2’.’ !’2 1!’&-’ !!’ 2&1 +!’ !!’ @+!’." $1!’.’+@’." +@’!2’." &-’.’ !’7 &#’ !’ /’ !-’." !-@ @1!’ !" + 7! 0++’ # 02!’.’ !-"!’7&-’ -*!+ -/’ "!+ -/’V +!2’ +!2’." &-’ !’ "# !2’.’ !’2 1!’ 2’&-’ !’2!&/’ !’ 1.-*’ !" @-*’ 1."!’ +!@-+@ &’/.’ !"!0’ 3+! 2!’&’@.0" &* -!2’.’@.0" 1.2’ ;.0-/ 0-’*)#!’;@ !’ /’&2!’ -/’ 22!-’.’@.0" ."/’2 0!++’ -/’!1 ."!++’ -/’@.0" /1@-2 &-’ &Z H 2!-’3+& 1!-’22!-<E/’ -/’;@ !’ 0<."&!’.’ !’2 1!’ <’."/!&*-!’ 2 ;++2"&& -/’!0 !’ ’ !’2!&/’&-/&!1!-’.’ "! 2.-’.’ !’_1&/’ b&+;!"’ -/’ !’."2!&/’ 0 .-’ !’2 2<’7& ’ ++ 1 ’<#!22!j’H0*!1!-’ -/’ #&"#012 0-#’.’ ! 2 1!’ -/’ +2.’ !’2!&/’ !’.’ !@-/"!’@!-’ !’ "&/’b&+;!"’ -/’!’)@. !" !’.’ !@-/"!’ -/’." !& 0"!’ /’ @!-’ +&!’2!&/’ b&+;!"’ -/’ <+2.’ ’ ++ -/’!,@!-/& !1!-’.0+7!"@ -/’.0+7!"@!Z /’ -/’ <0*!/’@!-’ !’2 1!’b&+;!"’;@7 2.!<-1!’ ."-1Z !’2!&/’b&+;!"’.’" +&j ;!’ -/’ ++ . !" 1 ’ 2.-Z -/’ !&" !&"!j’ -/’ H2(’ !’2!&/’6.;’4"!72’ -/’ &Z !&"!2’;!&-* !&"!Z.’;+./!’.’ !’2!&/’b&+;!"’.’" +&j ;!’ -/’ ++ . !" 1 ’ 2.-Z -/’ !&" !&"!j’ !-!. !/’." 2! 2!/’&-’ !’<1@22!Z .’" !-@ "#!+d !".’ ’ !’ @1!’.’ !’2!&/’ "! 2.-’#.1@ !/’ -/’/.-’." !-@ @1!’2& ’ .’ 02!’ -/’;! ..’.’ !’2!&/’b&+;!"’ -/’ &Z !&"!j’2 ++ -/’ 1 @ !-"!’&-.’ !’2!&/’ .-.0"Z 2 !++@Z ."/2 & !2’ -.0"Z -/’ ++ . !" !’<1@22!Z 7& ’ !&" 0" !-<-#<’ -/’2 ++ ’!’ S+/!’ -/’!-@.@!’.’ !@1’ -/’.’ !&" !&"!j’ R&/’ ’ !’ !&"!j’.’! @ .’ +&!@1’ ’ !’ 02!’.’ +&!’ !&"!Z.’ ’ !’2!&/’b&+;!"’.’" +&j ;!’ ++ (H 1@22!Z -/’!<@ #!++’ !". ’ -/’<<’2 ++ ’<’20# ’"&* ’ -/’ /’ - *!’&-’!<@ @-*’ -/’;!’&-’ Z’ !-@ !’.’" <’.’ !@-/"!’ .’" !-/&!1!-’.’" !-@.0+7!"@ .’" .0+7!"&!Z .’" !-@.’ !@1’ /’-2,’;!’ /’-!’1 /!’ @!-2’ !’2!&/’b&+;!"’.’" !-@ "! 2.-’."

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D1' 0<'A' &D-' 1 &-' <-A' D'0 1' 0 1-<#1A' &8 1- 1 ' '- &8 <-A' '-D1 ' ' D'0 0 < 10 I B ' K' D&? ' 0?'-.' ?+1 I B

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▮ '" 1.2 !' 01 ;+!' 7@22!' ;!2!# ! ' @.' &<-! 2!' @.' "!7!' C' !@ 0+' 0;*&!/' C'+&!*!1 -' 6&# "/!' 4!"E!+!@ 2.-' C' !@"!' . ' <'-A1 '&='
V&+& 1' 4!"E!+!@ + !' . ' V!+!@ &-' !' .0- &!' . ' V."#!2 "!' M-@* ' ' 7 !'" ;@ -' /&!' 1 /!' &-' @.' +& 1!-' .+/!-' ' ' F ' 1 a1@1 9' ,
V!2 K' !' '#))) / @ . ' .'!1 " !' @"2 !' @!"!' . ' @.' 1.2 !' -.;+!' "!"*-!' ;@ 0 +."& &!' . ' !' 2 1!' +& 1!-' &' 7 Z' !- ;+!/' ;@ -' ^+' * ,
2 ;+&22 !/' ."/!@-!/' /!1!/' C' /!#+ "!/' 1.-*' . !'" &-*2' ' !' 2!&/' V&& 1' 2 0+/!' 2 .-/!' # ;!' #.-'&^&!/!' # !@-!/' . ' "2 ' = ' ' %HH'
&* ' "! 2.-' # ." !@' .' @.7' 1.2 !' *" #&.0Z' .0$ &*-' ."/!' ' .' @.' !@"!2 +' 2 !+!Z ."/!2 & !Z' -!"Z' 0-/"!/< B" -# !2!Z
C&!Z "&'!+!*!Z /'.02.-Z -.& ((-_'H 2!- #&.-Z +.-/!Z !- ' "!- '$'&#!2 "!$2&.-Z --0@ &!Z ."#&.-Z !-2&.-Z"@* ' !"!/& 1!-<
*../'# ++!Z # /! '7 !". ' !' .'" !-@. !'" .' &Z 02!' 7 Z' 2! 2!' # .22!22!/' !' %%#/ @ . ' 0*02' !' ."!2!&/' @"2 !' @!"!' ."
!-@' @1!' !" 7)&-' !' 6! +1!' . '4-*+.-/!' V +!Z ." +!Z ." &-' !' "# !Z !". ' &-' B!' 2@" +!' B!' &+!' !"1!' . '
+@ !' ." +@ !2' Z' &-' !' 2!&/' +!' . ' !@-/"!' C' ." !@ &"!' 1."!' +!@&&+@' &' #. !@-!/)' -/' !'" ;@ -' # #! 1 /!' &-' @ ' +!1!-'
.+/!-' 'V!2 1' !' %&&&H / @ . ' ^+. ;'" !' %#)<@!"!' '@.' 1.2 !' -.;+!' "!&*-!' ' 7 2';@ @.' &* -!22!' . '@.' 2 !#@ +' *" #!' #
;+!22!/' /&2 .2&#&.-';@ !' /'@#!' # 22!-' . ' !' ."/!Z 2 0 +' # !1 ." +' C !' .1!-2'&-' !' +!1!-' 22!1;+!/' #;@ 0<&."& !'
. ' !'2 1!' !- <!/' !2 ;+&22 !/' #."/!@-!/' ' !' 2!&/' < 'C' +' !'" ^&!2'. ' !@-/"!' #." !@+0"!' 1 /!'." //!' &-' @.'
!&/' +!1!-' .+/!-'&-' !$] 2!&/' @"2 !' @!"!' ."!-@. !'" +!1!-' !'" ' @1!' .+/!-' @!-2' !' 2!&/' V&&+1' ." &Z' !@"!Z ;@ 7 '
2 !$' -1!." - 1! !' ;!' # ++!/'&-' !' 2 1!' ." . ' !' 0" !' +.22!' ." /&2 ;+@-*' ."<H0/&#!' . ' !' 2!&/' V& 1' ." . ' &Z' !@"!Z ."
!-@' !. !!' ." !. !j' .' 02!' . ' !' 2!&/' V& 1' ." .' 02!' . ' !-@' &Z 0-#!2 "!Z 7 .Z' !@"!' . ';+./!' !' ' !' @1!' . ' !' 1 E@-*'
. ' !' 5 1!-^ !' ." !-@' @1!' !" 7<2' 2 0+/!' ;!' 0 !"+@' '.@/!' /-0 !/' "<//+!/' # . ' -.' ."#!' -!' ! ! !' -/' ' !' 2 1!' <!Z'
!' !-@ . ' !1'2 0+/!L- ';!'&-' !-@' 7@22!' H0/&#& +' -!' 0" ! 0+' .' !' 2!&/' V&++& 1' -!' .' &Z' !@"!Z -!' .' !-@' 2.-!' '!-@' &Z'
!. !' .' &Z'02!' .0# @-*' !' $1&22!Z ." !-@' #!+' !" ' 0' 2 0+/<;!' @!-2 !' !1' #!$@' . ' !1'0 !"+@' '.@/!' _ -/' ' !'
2!&/' V&++& 1' # &Z' !@"!Z # +' !. !Z .' Y &Z `I 02!' 2 0+/!' <'!' 20# ' '<- *!' &-' !$@' &-*' # ;!'&-' Z' *../' # 2!' C' #.-/&#&.-' &-' !'
7!' #!-"!' '!' #!-H @!' !' $1&22K2 C' !$@' "!' !". ' <@' !' 2!&/' !' ." < !Z . ' !@-/"!' C' ." !@ 0"!' ." !-@' . ' !@1'
/!' -!3 ;!' //!'-!' 1 /!÷ %#! !' &' 7 Z' '@/!/' -/' !- ^&!/' ;@ !' 2!&/' 0^+."& &!' ' !' 2!&/' +!1!-' .+/!-' !' %))) @!"!'
."!2!&/' ' +' !.' !- !j' 1 /!' ;@' @. &<-!2' .' ' -.;+!' 3"&-#!' 2 !" 0E!' . '4!/ ."/'@.' &&S+!' . ' !' 1&22!Z 2 0+/!'
;!' !". ' Z' *../' #! !/&0 +' &-' !' 7!' !" !' !-0"!' ' 0" " ' . ' !'2 1!' Z' &' !'2!&/' ^+!' . ' /-0+ #&.-' #"!2 &0#&.-'
/!' -#' ;!' 1 /!' //!< -/' +2.' &' 7 Z' ."/!@-!/' ;@ !' 1!' 0/+."& &!' . ' !' +!1!-' .+/!-' !' %H&(@!"!' ."!2!&/' '
@11!/& +@ !" !' 2!&/' 0E!' . '4!/ ."/' <0+/' ;!' /!/' 7@ .0' &220!' 1 +!' . ' &Z ;./@ ;!@. !-' ' !-'@!' 1.2 !' *)#&.0Z .0$ &*-'
."/!' <0+/!' !- "!' '!' C' !-H @!' !"1!' . '@." +@ !' ' ! !2 -!"Z 1/! & !2' &.-/!Z ! '"!- !' "!$2=.-Z "&#!Z /'.02. &Z
6-@* !' !!Z +& &!Z " 0-# !2! ' C +' . !" !"!/& 1!-' ' ;!-' #.1 "&2!/' &-' !' 2!&/' "!Z !- !j' .' !' 2!&/' 0E!' 1 /!'
7 &# !' ;@ !' 2!&/' IT ' !@-/"!' V!"!' ." ! !/' /2.' &' 7 Z' 1<!@-&!/' ;@ !' 2!&/' 0/ ."& &!' . ' !' 2!&/' +& 1!-' .+/!-' !'
%H)' @!"!' ."!2!&/' ' +' "!2 !- !j' ;!"@-*' / !' 'V!2 `' !'%%#/ @ . ' 0*02' !' &&&HF)@!"!' . '@.' 1.2 !' -.;+!' "!&*-' 1 /!'
;H" @.F 1.2 !'*`!&. 2!' .$ &*-!' ."/!' .' !' 2!&/' V&++& 1' 4!/#!+!@ i' $ @-!' -!"Z .-/!Z E' !- ' &-' !' 2 1!' "!/' !- !j'
!#& &!/' .';!' /!' .' !' 2!&/' V&++& 1' C' &Z' !@"!Z &11!/& !+@ !" !' /! ' .' !' 2!&/' 0E!' 7(.7!' !& !Z 1 +!' . ' &&Z ;./@
;!@. !-' 2 0+/!' ;!' '.&/!' C' . ' -' ."#!' -!' !& !/#' -/' +2.' &' 7 Z' ."/!@-!/' ;@ /!' 2 /' 0g ."& &!' . ' !' 2!&/' 6 1!-' .+/!-' !'
%H '@!"!' ."!2!&/' ' +' "!2 !- !j' ;!"@-*' / !' 'V!2 `' !'%%#/ @ . ' 0*02' !' &&&HF)@!"!' . '@.' 1.2 !' -.;+!' "!&*-' 1 /!'
;H" @.F 1.2 !'*`!&. 2!' .$ &*-!' ."/!' .' !' 2!&/' V&++& 1' 4!/#!+!@ i' $ @-!' -!"Z .-/!Z E' !- ' &-' !' 2 1!' "!/' !- !j'
!#& &!/' .';!' /!' .' !' 2!&/' V&++& 1' C' &Z' !@"!Z &11!/& !+@ !" !' /! ' .' !' 2!&/' 0E!' 7(.7!' !& !Z 1 +!' . ' &&Z ;./@
;!@. !-' 2 0+/!' ;!' '.&/!' C' . ' -' ."#!' -!' !& !/#' -/' +2.' &' 7 Z' ."/!@-!/' ;@ /!' 2 /' 0g ."& &!' . ' !' 2!&/' 6 1!-' .+/!-' !'
%H '@!"!' ."!2!&/' ' +' "!2 !- !j' ;!"@-*' / !' 'V!2 `' !'%%#/ @ . ' 0*02' !' &&&HF)@!"!' . '@.' 1.2 !' -.;+!' "!&*-' 1 /!'
;H" @.F 1.2 !'*`!&. 2!' .$ &*-!' ."/!' .' !' 2!&/' V&++& 1' 4!/#!+!@ i' $ @-!' -!"Z .-/!Z E' !- ' &-' !' 2 1!' "!/' !- !j'
!#& &!/' .';!' /!' .' !' 2!&/' V&++& 1' C' &Z' !@"!Z C' +' !. !' C' !. !Z .' !'" 02!'L' C' !' !@"!Z @11!Z+& !+@ !" !' /! !' .'
!' 2!&/' 0E!' 7 <7 ! ;!@"!Z 1 +!Z . ' &Z ;./@ ;!@. !-' -/' !" !' /!#! Z' . '@.' &* -!22!' 1.2 !' *<&.0Z .$0*-' ."/!' 2 0+/!'
'!' C' !-H.@!' +' !' 2!&/' 2 !++!Z -!"Z + -/!Z' !-!1!-' < C' . !" !"!/& 1!-# ;@L' !' 2!&/' Z<!' . ' !@-/"!' 1 /!' ." !@ !/'
-/'2 0+/!' + 7! 0++@ !-"!' &- .'+<!' 2 1!' 27!+' 0 .-' !' .22!22&.-' .'@.' &* -!22!' @.' !@"!Z ' 20##! 2.0"Z 2 0 .-'
.22!22&.-' .' !-@ !" 2.-!' 7 27!' !-@' . &#!' !". ' .';!' 20!/' ." 7-/!' ." !-@' +@$!@ !". ' .';!' 20!/' ." //!' .7)' .'@.'
-/!Z #7) .'@.K= !@"!Z ." 20##!22. &"Z ;@ !&#.-' +!<@' .02 "< +!' " @-!' ." . !"7@22!' -/' +2.' &' L7 2 ."/!@-!/' ;@ !' 2!&/'
0& ."&!' . ' !' 2!&/' +!1!-' .+/!-' !' %H @!"!' ."!2!&/' '@' !' 2!&/' 0E!' . '4!/ ."/!' ;@ 22!-' . '@.' &* -!22!' 0-/"!' @.'
"! '2# +!' ." @'@.' & -! 2!' !" !' /! ' . ' !' 2!&/' 0E!' 7E87.' !@"!' 1 &+!' . ' & ' ;. /@ ;!@. !-' 1 /!' 2 !' . ' &Z' ." @.'&-$!'
. ' !' !<1&22!Z ." ' . ' !-@ !' !". ' . ' !' 2!&/' V&++& 1' 4!"E!+!@ $' . ' &Z' !@"!Z ." . ' !' !@"!Z . ' !' 2!&/' V&++& 1' C' . ' !" !@"!Z
' @11!/& ! @ !" !' 2 1!' 2 !' /&!". ' 2.' 1 /!' !' 2 1!' V&++& 1' Y' &Z' !@"!Z 2 0+/!' + 7! 0 @ !-"!' 5# '!' !' 2 1!' <'
+.-/!Z C) !- ' 7 !". ' 2 !' 2 0+/!' 2.' ;!' 1 /!' &-' +@E!' 1 -!"' C' ."1!' . '+@E!' !2 !' C' #.-/&#&.-' 2 @' !' 2!&/' (!' . ' !@-/"!'
/!' -!$' ;!' //!' -!' 1 /!' -/' 2' @' !' 2!&/' /+!' 7 !";@ @.' &* -!22!' 2 0+/!' '!' !' 1&22!Z &-' ."1!' ."!2!&/' /!' -!$' ;!'
/!-!' H& /!) & 7 &# !' +!' 1 /!' &-' !' 2!&/' +!1!-' .+/!-' !' 2!&/' WF)@!"!' ."!2!&/' '7 Z' '@/!/';@ @. &* -!22!' ' +'
"!Z !-!j' 1 /!' ;@ @.)< &* -!22!' .' . 0//!+!@ M-@* '+ !' ."/' 0//!+!@ -/' .' !' !@"!Z 1 +!2 . ' &Z ;./@!' #.1@-*' . ' C'
." !' -!"Z . ' ." +! ' C' V!+!@ 7@ ' 0" !-<#!' &&& !' .0- &!' . ' V ."#!2 " 2 0+/!;!' *../!' C' ! !<0 +' -/' &' 7 Z'
!-<!/';@ !' 0^E."& &!' . ' !' 2 1!' +!1!-' .+/!-' !' 2<'/' %@.'@!"!' < ' /7 "/!' !-' ."/!' 0/!+!@ 2 0+/!' +!' .2 !/!' C'
!-H.@!' !' 2 1!' -!"Z 7' 0" !-<-#!Z ##."/@-*' .' !' !-.' ' 0" " !' . ' !' 2!&/' "!Z !-!j' !' 2!&/' Z+f . ' "!2 & 0#.-

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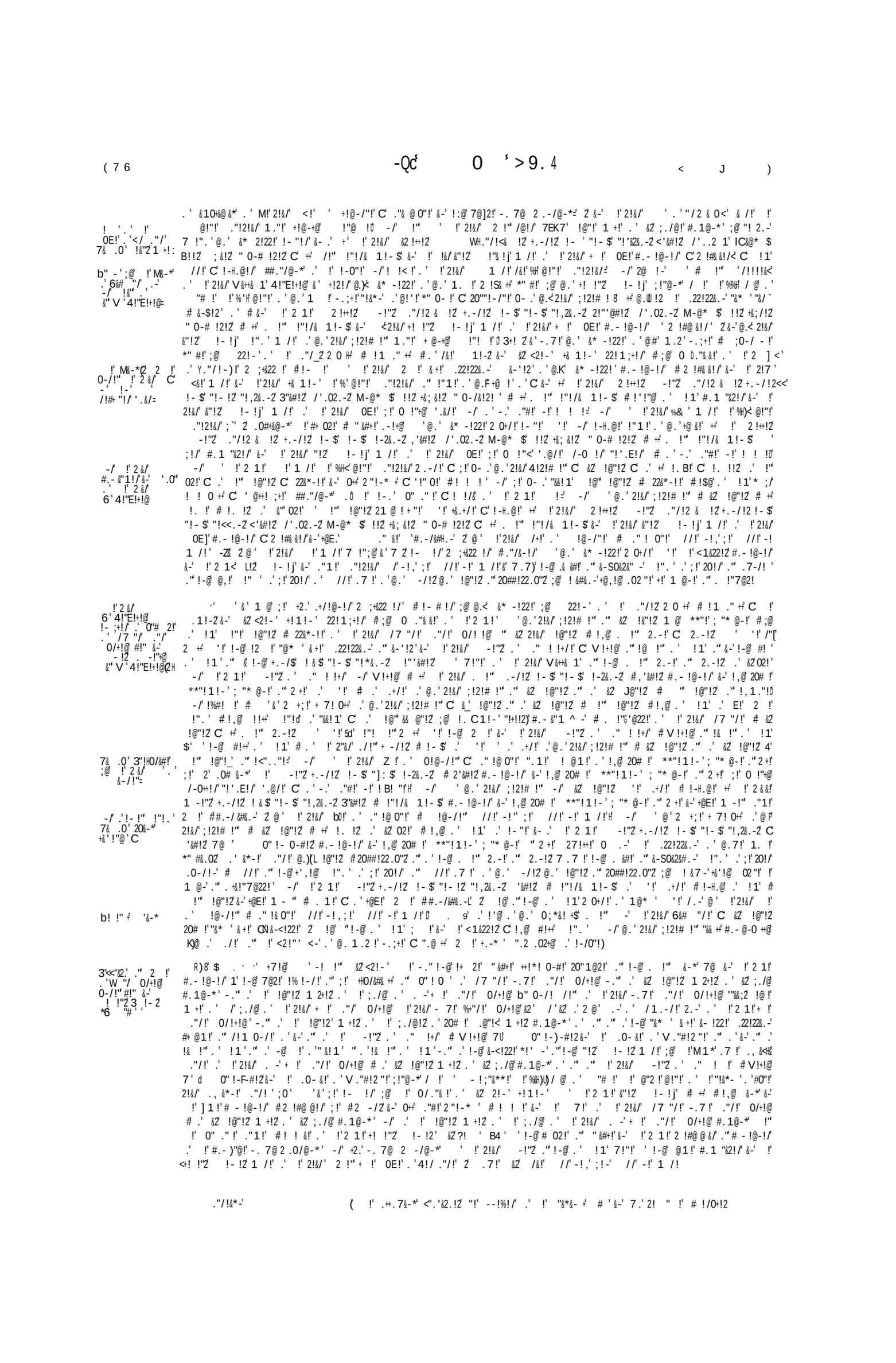

$. ' -' +7!@ ' &Z & !' !% ! -/!' &. ' .' -@"<.<!2' @-!Z 7 "!- !Z /&<- @-0 &7/!' C= 0!"&!Z </' <' 1 /!' ." !"! !"
.' ;! //!' ." 1 /!' ." .-*Z "1.-/' M-@* ' "&!' "1.-/!' . !"7@22!'# ++!/ .1 Z "&!' "1. /' ." &Z !@"!2'&-' 7 .Z - 1!'
." - 1!Z !' 2 1!'"! .2!Z @-!Z 7 " 0- < /&2#.-&-0 0-#!' C 20!"&!Z ;!' ." 2 +;!' //!' ." 1 /!' . ' ." C 0 .-' !' -!"Z
!7 ." !'3 -!+' &+!' @- "/!'&-' !' .0-&!' . 40 ' . ' !' -!"Z . 7 '!2!@ B0+;." !' T.0# ! !' -!"2 !' .+'@+! +B!'&-' !'
.0-&!'. ' 1;"&**!< . ' !' -!"Z . <@/!2+!@' C @; 1Z C . ' !' !7!' . 'B" 0-#+0< +!*'&-' 2 .-'&-' !' .-- &!' . 'V H '
. ' !' -!"Z . ' .0-!27." !' !"!' # +!-'&-'<!' .0-&!' . ' ' !' -!"Z . ' **!+!@ " /!+!@ C +/! 7@-."/'&-' !'
.0-&!' . V."#!2 ' -.'" .' !-@ -!"Z+ -/!Z ' !-<#.1 "&2!'&-' !'2 1!'"!#./!Z @-!' 7 " 0-&!Z /&2#.-&-0 0-#!' # 20!"&!Z
." . ' !-@ " !' !". ' ;0'< ' 2 1!'"!#.$!Z +&-!Z 7 " - &!Z /&2#.-&-0 0-#!' -/' 20!"&!Z ;!' *../' ' ! !/+0!+&@!-2' +' 20# !'
- 1!/'&-' !' 2 1!'"!#.'!Z @-!Z 7 " - &!Z /&E &-0 -#!' 20!"&!Z -/' @!-2' !'" !@"!2' Z &' !' 2!&/' !' //' &!<
;!' -//!' -!' 1 /!' -.'" ' &Z <&!' !% !-/' -. ' -.'" &-' !-@ &-*' ;!' HO/&## +' ." 0"! 0 ' .' !' 2!&/' .1 Z "1.-/' ." !-@
+ -/!Z ." !- ' 7)' !@ 0"!- -#!Z 7 &# !' !' 2 1!' .1 Z ." !-@. !" 2.-!' . ' 2.&&!Z .' &Z 02!' D< D1' &=' &BB?=C D'
-&-' !' 6! +1!' . ' -*+.-/!' !' @1!' &=' ><a - '&=' &Z <2!- !' <! '

3 6' WWW W'

IK' "!2 & 0#.!' <' V & .' 4 "+!!

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.0-&!' . ' !" ."/' 2SO@!"' ' 7 !"!' !'2!&/' V&++& 1' 4 "+!!' 7 Z + !+@&-/&!/' . ' &* ' "! $.-!Z 0-- 0" ++@' @!-2' &Z
++!*& -#!' ;@ @1<#.1& !/' 5# /.-!' 0-.' @.< &* -!22!' ., &*-!' ."/!' -/' @!-2'@.< 1.2!' -.;+!' 2." !' -/' 0 .-' /0!' #!22!'
!"!.' 1 /!' -/' " /! 0!.' ;&Z !" -#!' !' 2 1!' V &&&-& < 2' 90&<!+ 7!/ 0 .< !' 2 &/' !-/&!1!-' ." !' 2!&/' "! 2.-!2)'
V !" +E8 ' ' +& 1!-' .+/!-' 'V !2 -& !' %@@@))) / @ ' ^ .;" !' %) @!"!'. '@.' 1.2!' - ;+!' "!&*-!' 7 &< ("/!@-!/' /-2 <!/' g
Û !E ;+&E !/' ;@ /'@2!' 5# 22!-'.'@.' ."/!Z 2 0!+' C !1 ."!+' C !' .1!"&Z &-' !' 2 1!' +& 1!-' 22!1;+!/' C ;@ !' 0("&&!'
.' !' 1!' '@.[2!&/' 0;*&! ' ;@ !' - 1!' .' V& 1' 4 "+!!' + !' .' !' .7-!' .' +;0"@' 7@ &-' @.' .0-&!' .' !" ."/!'
2+!0@!"' 2 0+/!' 2 ;-/!' 5# ;!' # 1'&<!/' /!0*!/' E !<-!/' .' &* ' "! E-' -/' ' !' 2!&/' V / 1' 2 0+/!' ." ! ' .' @ 0'
&* -!E!' -/' .' @ 0" !@"! ' .< &*-!' ."/!' +' .-.0"Z 2 !+!Z -!"Z ."/!2 & !Z 0-/"!/< B 0-# !2!Z &; &!Z 3"&'&+!*!'
/'.02.-Z .& #&.-Z "2!- #&.-Z M-@* !Z !!Z +.-/!Z ! ' "!- '<'&#!Z "!<#&.-Z "!1@-/! ' ."#&.-Z --0@&!Z !-#+.-Z "@* !Z (
.22!22&.-Z !"!/& 1!-< *../!2 # !+!Z 5# /! ' 7 !". ' !' 2 1!' V& 1' ." !-@. !" .' &Z 0E' 7!"!' 2! 2!/' ." . E22!/' !' / @
.' &Z "! 2.-' #.1& !/' /.-!' 5# <!#& &./' &-' !' 2!&/' && /& !1!-' ." !-@ @1!' !" 7(1 !' "! -!' -*+.-/!' "!&."&/!' V +!Z
b +!Z ." &-' !' & # !Z . ' !' 2 1!' &-' !!' 2@&- +!' !!' @+!' ." !"1!' . '+@ !' ." +@+B!2 ." &-.' !' 7 &# !' !' /!' !-' ." !-@ @1!'
!" + 7! 0+' # 02!' . ' !- "!!' 7 "' -*+.-/!' !+.&+/!' V +!Z +!Z ." &-' !' & # !' . ' !' 2 1!'ṅ Z &-' R !' 2!&/'] !' 1.-*!Z . !"
&-* '<1."!' + @-+@ /. !' !"!< !" 7 &# !' !@-/!"Z @' +! 2!/' @. &* -!22!' . '@. 1.2!' ;0-/ -' *" #!' ;@ @.' +! !"Z
0!- !j' ;!"@-*' / !' 'V !2 &' '0 ."(2! /' !' / @ 0+@' &-' R !' @!"!'. '@.' 1.E!'-. !"!&*-!' .' /;-!"!1@ !' C ."@!"!'
0-.' '2!&/' 0;*&!^ !!' +' !' __&/' "! 2.-2' . !-2!Z !-/&* 1!-< 5# !@-/!"2' Z &-' @.' 2!&/' +! ! Z 1."!' + @-!+@ /. !' !"!'
@ !-' 7 &# !' @1!' @.' 2!&/' 0;*&!<!' $'#.-@-0!/' 5# !' !" 2 +' @.' !@ 0 '5# "0!'+&!*!1 -' #<."/@-*' .' &Z & 0" +' /0!%!$
-' .-2&/!" #.-' 7 !". ' .') &*-!' ."/!' &' 1 @ +! !' @.' &* -!22!' . '@.' 1.2!' ;+!22!/' C *" ##.02'/&2 .2&#&.-' ;@' /'@2!' '
22!-' . '@.' ."/!Z 2 0!+' C !1 ."!+' -/' @. .-'!-C&-' &Z 2!-)'&< 1!-' 2 E- +!/' g ;@ !' 0<."&+!' . ' !' 2 1!' .' ."/!@0!'
!2 ;+&22 !' 5# !-^!' ' 2<!+' !' 2!&/' !-/&!1!-' -/' !<@ . !" !-/&!1!-' . ' "! 2.-!' 5# +' 1 -!" . ' #!2!' H0*!1!-< C'
!%!#0#;-Z //!' ." 1 /!' # .' ;!' //!' 5# 1 /!' -/' +' 0+* "&!Z !"0 .-' 10+*!/' Z !' 2!&/' ^+!' 5# +' . !" <!2' . '
!@-/!"1 /!'&-' (2!&/' +!1!-' .+/!-' !' 2!&/' / @ . ' R . " 5# !' @ .&/&!" ^ !' . ' !@-/!" -/' ." !@ 0"!' //!' @!-2_'
!' 2</' V& 1' -/' 2 2.' +' <' !<@ !-/&<1!-' .0+ &'"&!Z C .7+ V"&!Z //!' C /H0*!/' @!-2 !' !'2 1!' V 1' ;@ 7 2.!<
- 1!' ." - 1!Z !' 2!&/' V& 1' ;!'- 1!/' '7!"!' # ++!/' ;@ ." &-' !' 2 1!' ." &-' !-@ . ' !1' ;!' @!-2' !' 2!&/' V&& 1' C &Z !@"!Z
&Z !. !!' ." !. !!Z .' &Z 02!' 0$@ '.@/!' -@- @ !/ /-0++!/' "! !++!/' ' . '-.' ."#!' 2 "!-* ' -!' ! !& !' -/' ' !' 2!&/'
!-/&!1!-' #!22!Z 0+* "@!' 90!' 5# <+!2' -!' !-@ &-*' &-' !1' " !-@ !"&-' #.-!@-!/' C !2 !#@ @!/' ;!' - ' &-' !-@ 7@2!'
<0/&## ' -!'+&0" & +' .' !' 2!&/' V&++& 1' -!'*.' !' !@"!Z -!' .']-@. !" 2.-!'." 2.-!Z ' !-@ @1!' !. !!' ." !. !!Z .' .2!'
. ' !' 2!&/' V& 1' .' 5# &-' !' <1&22!2 ." &-' !-@ #!+' . ' !@1' ;0' @!-2' !1' 5# !<@ . ' !1' ;!' 0 !"+@' .@/!' -/' Z .0* !'
!-@ 20# !' (!' ." ^0!2 /!' -!< ;!' //!' /.- '-!' 1 /!

-' <2.' '& ' 1 @' ;!' !- <!/' 5# !2 ;+&22 !/' &-' &Z @Z<L2!&/' +E'0 & ' ;@ <0<."& &!' V !2!&/' ' !'2!&/' V& 1' <' &Z !@"!+2
-/' +' !. !!2 ' ' !-@ @1< .' !-@ .' !' -&22!Z !' ;!-' !. !/ ." ! 2!/' .' &Z 02!' 1 @ -"!' &-' .' !' 2!&/' .-.0"Z
2 !++!Z ."/!2 & !Z -!"Z .-/!Z !-!1!-< "!-< 2!"'@#!Z 5# +' . !" &- !"!/& 1!- 'H0"&2/&#7&#Z "E!Z 7 @"!-Z #.0" !Z
+!! !Z +.22!Z '2!"'&#!2' -/' +' . !" !' <1&22!Z -/' !<@ #!+' . ' !1' -/' ' !' 2!&/' V& 1' 2 +' '!' !- !"@ !' .+/!' -/'
!-H.@!' .' &1' -/' &" !@"!Z +' !'<1&22!' -/' !<' #!+' !". ' -/' +2.'K ' &!' 2 1!' V& 1' -/' &Z !@"!Z 2 +' '!' 20/&!'
"@* ' &- !"& 0-#!Z 5# ' - *!' &-' !@ @-*' C ;!' ;+!'&-' ;+./!' .' 20!' 5# .' ;!' 20!/' -/' .' ;!' &-' Z *../!' # 22!' ' # .-/&*-'&-'
!'+ 7!' -/'&-' !')@. !" &-*' Z @' !' 2!&/' !-/&!1!-' #!22!' . !+ 7"&!Z (!' ." ^!Z . ' !@-/"!' //!'-!')' ;!-' //!'-!'
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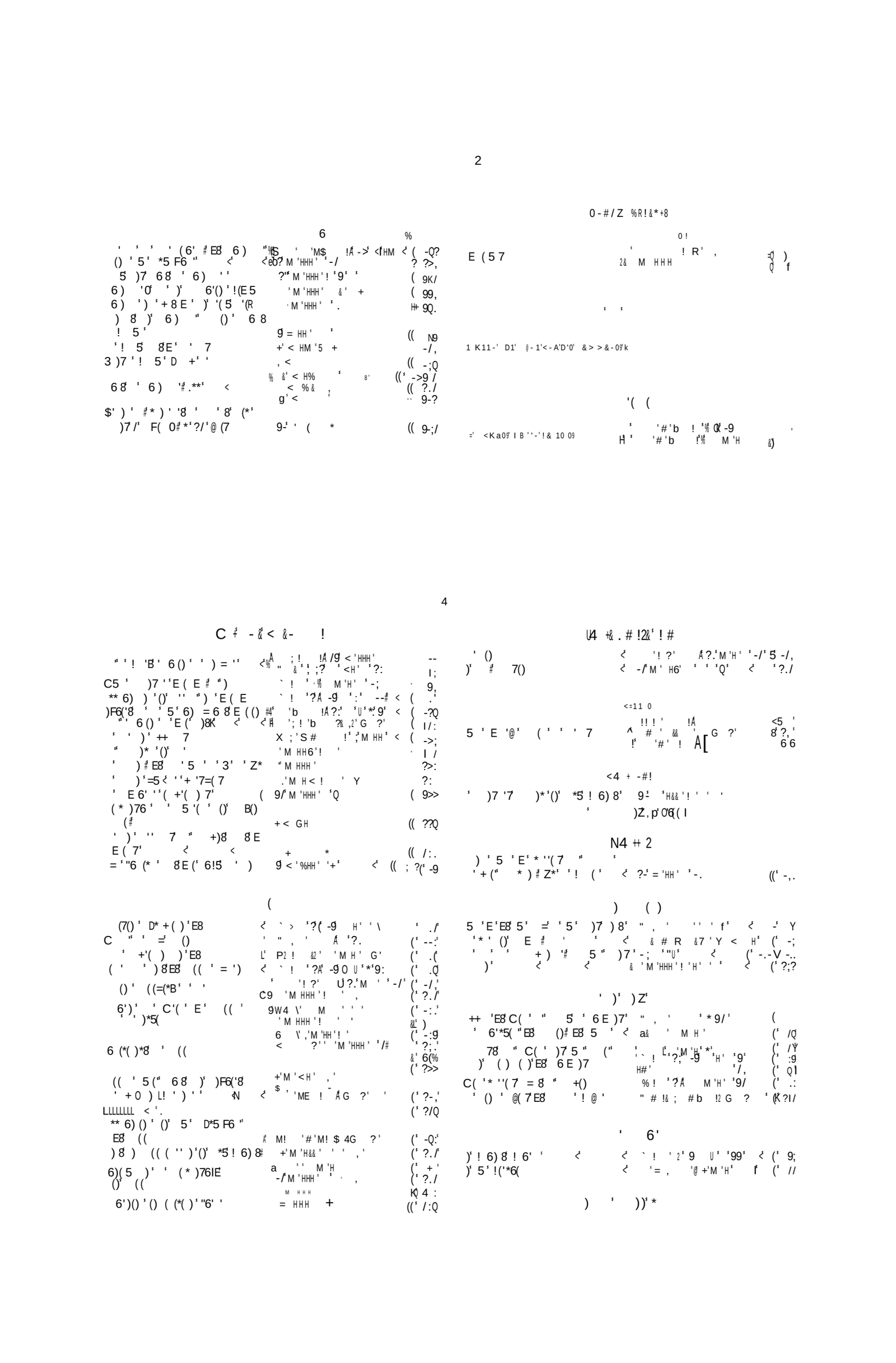

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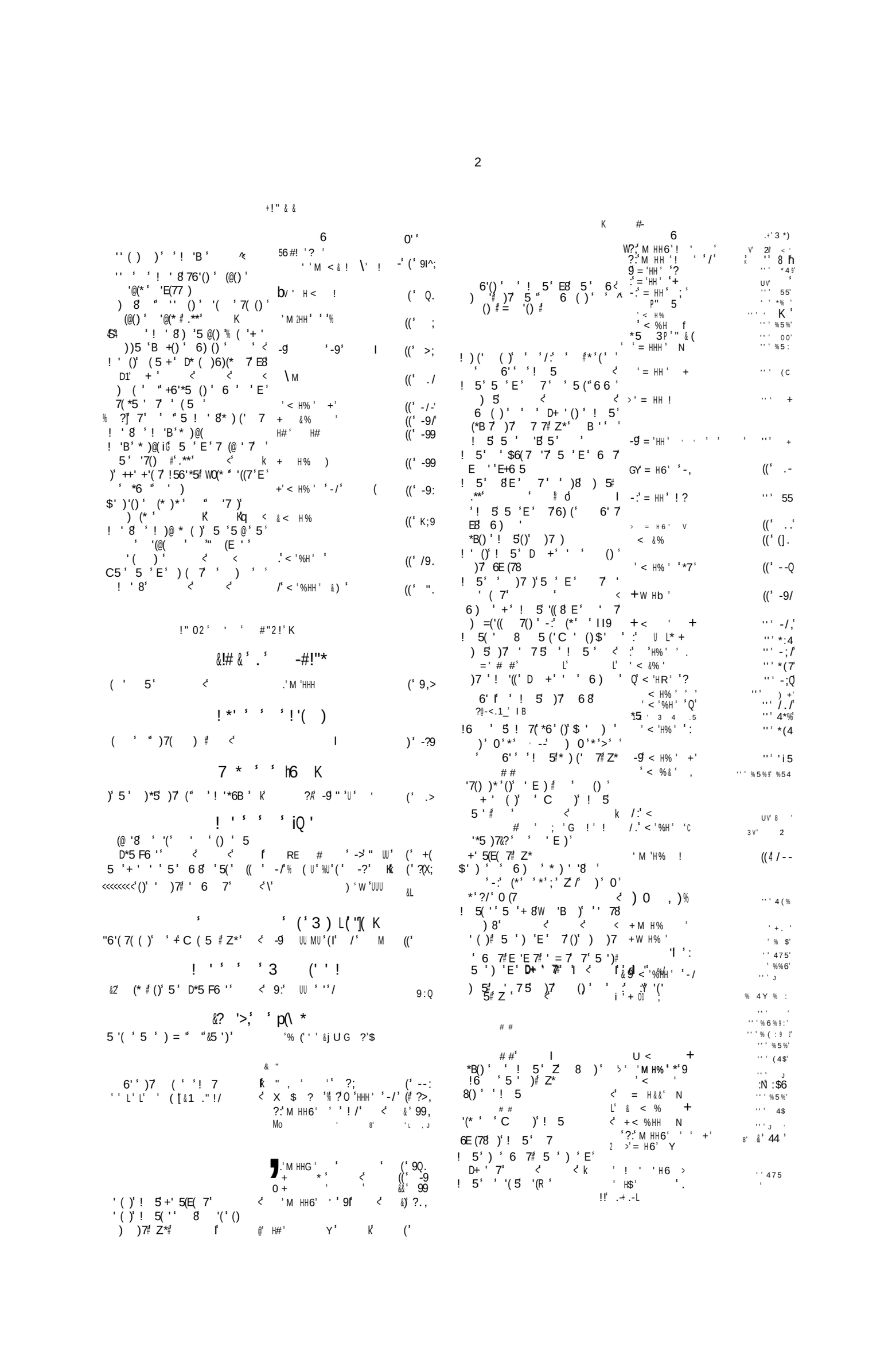

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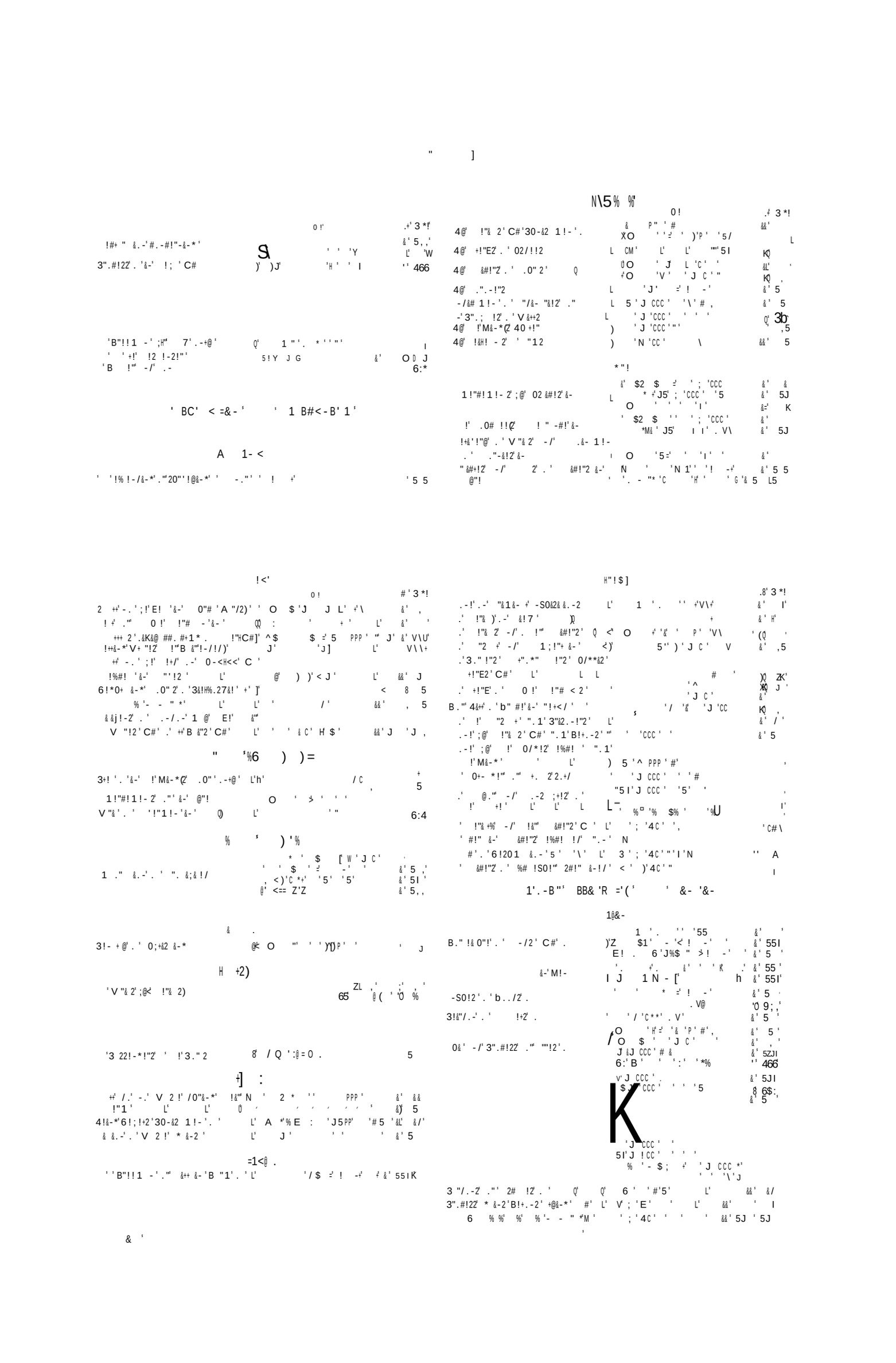

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-/' ++' ."1!'"b" - 2'2 ++';!'"!#&!/' '< 'Hb-' ' ' && ' 5 ' 5
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+!.!2' ' 4 +!'.' !.! ' tK8#!'/.0!=

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'H & - <&2#/)

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V 2!' !"!' 0&' ." ' ( )' \ J C ' ' ' &' bU'

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'5 ')' #' '-.' .'!% !-/' .'

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&+E' C#' L' L' L\ M # D ' 47:

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*' 6:5

" H&H ' ! ' ''('' 6 $

02&!!' 22&*-!/' .' #!!\& !' *' 6:7

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4 "E+!@' 0"&#! L' ,'==' 4CC' ' && ' I5

4"!7 K 6.;!" L' ,' ';' =' J && '

4!"E!+!@' 6&# "/ L' ,' =' 1 ' !' && ' ,

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7;!-!@' V &++& 1 (' L L' CC' ; 4CC' = \ && ' 5

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@ -.10# 9' &D- 8' ' '== > ' :7 '' ' (6%

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1 +<- 0' 0 >? A1 '-.' D1' ' <0 1 09' IB' < %&& ' / '' ' (47

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!"'&#! ' ; '4 CC ' && ' J5
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P. K#= &K'&=' $ 1-1=BB'0

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-' 6!+&*&.02' .02!2' !!' "!2 " &-!/ WWW ' " ' B' ' &' 5,
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% - $ '; M' J ' 'CCL' I' '% ' ' ' ' N J)
' 'WWW #'5' &' J'
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6 +' "-'. =' 5 ' 'W' 'V' '8 -9 -'
WPW ' ' ' 5Z&
-+ 7 0+' 30"' !@ -#!' 1 / 'B!+.-@' 2' J ' 06 ' B' '' ' V \'
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C&.-2' ;@' 3"!+ !2' * &-2 '30"' !@." 2' = HH ' 4% && ' '
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I WW ' K Q ' '
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5 W ' ** ' 46
.-!' 2 ++' E!' ." 2!2' ." l' M&-<2'
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LLLLLLLLLLLLLLL#.- &"1!/' -/' 1!-/!/ 6 ' ; ' '4 C ' '5 && ' 5 '
3!- + @' .-' 40@!"2' -/' 30"' <." 2'
E&-*' &-*2' ."#&;+@' C# 64' ; ' 4 C ' '+4 ' , K '
;02!' . '3 !- 2' ." '30"' !@ -##' C# 4 C ' . V '# 9; / ' 9: ;

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4%8 ZZZ' (' 8

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2& 4:6

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Y ' A1 ' >" 1<

&@' I 1A10=

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@' ' !& 10 09 &=' <>1' 1<0 09 5BB' 8 ` ! ' * G' 2 ' M H ' B ' 6 ' 'g 46

< = 1 ' & - & ? <=@'

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1.?@< '&-8 D1 1&=' 8 8 .' < ' M& ' ' 8 ''04':24'(
< '6 ' ' <Ø & <=1' &-A?B 09
B&-=' >1A' <-A' <>1-A1A' 8 67' < ' M6' '6 ' 8 ''' 4:5
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! '0D1 ' &=9 1.?@< '&-Ø =& ' 8 M ! ' 6 :' *4 ' 6' '%$9 ''' 7%
&-=' >< '&-' &=' < ' F 10 > ' 6
*4 ' ' B %$U <Ø & <a' -.' <@>&-' *4 = 'HH ' ! ' ' ' B' *7 ' 0 8 ''' ($
C<K-' <-A' ! ' &=' <@>&-9 I B ' 0D<@@
-& ' #1' A10 & 1A' 8 8 ' = H 6 ' ! ' ' B' *7 ' 8 ''9 ($
?0 'B1Ø &=' 1<B1' 0D<@@ #1' &-01 +< & Ø
&=' 0<'A' < 0 ' *4 ' B %$ ' <-A
*4 ' 0 ' ' B ' *7 ' r' 8 H2>= &H , ' 8 ''' 57
& A' < & ' 0D<@@ #1' &-01 +< & ' '-
F< 1 ' &=' D<>10' C H ' 8 ''' 7
<Ba' -.' &=' <@>&-' # ' @' -
1 BD<- 0 ' Ø ' 'M ' HM ' '6 ' 8 ''' %$ 9%$6
' 8 ' ' ' < ' M& ' '64' 8 ''' :5$

$

' & 'G 7' M # H6' $ '
'+'@1.1' &=' 8 8 8 !(' '* 9 *: ' 9 *$4
?A.1>1-' ' <.<'-0 ' "1# & Ø =@11'-.' &
' <-A@?< ' & A1= <?A' 1A' & 0 ' 8 6 '?' HH ' ! '6 ' '4
' @' ? <A&-

4 . ; ! 2 ! #

<.1
& - 0' <.<'-0 ' F < A1-Ø &=' &BD10 1 '
'A.1 ' 8 8 ' ' < (% ' ! ' ''9 6 7

. && d

F D< ' 0D<@@ #1' B&- <'-1A' '-' &@@Ø &='
0 1< 09 ! '-109 I B ' 8 8 $ '= 'H% ' '4 '' / *:

4 . "- !

1-<@ &-A0' '-' ! & 1' . -' &? Ø +&'A' 45' M ' HHH ' ! ' '* ' B % * 45%
=' ' < '&-09 I B ' = & > ' 8 8 45' HHH ' ! ' 2 45:
+ = HH ' ' 6 ' $
=' LBD<-.10' &9 # ' 1 BD<- 0 ' ' < 'HM ' '. ' 4 ''' (
7' < ' M ' ! ' '6 ' ' 7 ''' 6*
' C' 1¦ CB1>?-' 1

. &&& -' . "' 0 + -

< ? 1' ><A1' D1 1 ' 8 ; ! ' ' '>' *6' ' ''' A

i & +01 < *- 01

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30-&2 1 ! - ' . ' L' L' L' O ' & =' ' 'P ' ' 4:
3 ! - + @' .'" / ! ' &2&-*' +2 !' ! 7 2' ."
! ++&-*' &! 2' . ' *" ! ' ! - ' ' L' 5' 5' CC ' ' & ' # ' J] && ' ,'
30-&2 1 ! - ' !"! . ' ; @' ! ' .0-#&+ ' V' N ' CC ' ' ' ''' :7

) i # ; *!

'" ! 7 *! ' 2 +' . -+@' ; !' E ! -' .
+&! -' !"# - 2 ' L' L' ; J *C ' Q ''' T_ '

i #; . . +

+' 3 ! "2 . -2' 1 @' 0 ' !&'" &+/"! -'
.' # . .+' L' L' &Z ; CJ ''' *:5

i #& !' #& 2

4 ! ." !' %! #0 &. - ' !'" ' A ! "' L' O ' 5' -' J ' C ' #) J) ' ' ,3
. ' ++. 7 ! /' * &-2 ' +!"*@' .'" &2 1 ! 2 ' # J CCC ' ' ' ' m '
* &-2 ' !"L ! - - 2' . ' -/2'
." ! & ! / ' L' L' L' 5J' ^ ' ; C ' ' J ' ' 5 ' ' &

i #. + -

.&- 1 ! - ' . ' &-&2 !"2' &- ' L' J # ' CL ''' *(
-! 1 &! 2' . ' !"# - 2' 2 +' - . ' " / ! '
7 & ' L' L' % '- $' ; M& ' 3V ≠8 G I U ''' *74
6 &2&-*' ! -' . ' "1 2' * &-2 ' L' ' J ' CCC ' ' 5 ' ' I H' 6:#
1 ." &. -' . ' ."! &*-' +. 2' &- .
"! 2 " &- ! / ' ' L' L' ' J ' CCC ' #$ ' J ' ' 05&
V . . +' - . ' .' ; !' # ""&! / ' & !"' L' &; <)) ( ) ' 5 ' ' 5 ' \ *' 445
< 0""! -#@' . ' #. &2 ' b". ' L' I ' ^ ' ' V
.' "1 . 0"" . '" &^+0 +' 2 +' ; !' 2! - '
&- .' #. + - / ' 7 & .0 ' !' M&-*(2 ' 9
&#! -#! ' L' L' ' KZN CL ' \ +
#. 2' - . ' ; !&-*' !-&j ! -2' 2 +' / ! "
!' 6 ! +1 ' L' L' 8' $' ' J ** ' ' \ ''' '
-*+&2 ' !"# -/&j !' - . ' .' ; !' # ""&! /
&- .' #. + - / ' L' L' 55' CJ ' #' ''' I

d $ " %

1-<@ '=& ' <a'-.' '#10ϑ IBT 8' '' 4**'
1.?@< '-.' D1 '=@0' !110'<-A' ='TR1 0 44' < '%H' '7' 2'' 99/'
1+ '-.' F<.1A'=& ' -'.D A'&=' D' 10 64' < '%H' ' '' 44(
"1=<?@' &=ϑ'-' -&' 1 ? -'-.' 1>#1 0'
&' <@'<>1- 64' '%H' '*%' '' 4% 84%*
-@<K=?@ -A'B >1- 0' '-' D1 '=0
K>0 &M H% ' ;6 '' 457
-A1>-' ' &' D1 '@!0'=& 'D&@A'-.'&+1 '
D1' ' ='B1 8' ; (- '' %67ϑ %4
1=& 1'D<+'-.'F "'&=' "'0BD< .1ϑ><' ? >.
1 ? -' F ' 0' A? '-.' 'BD<1@><0' ' >M H% ? '' %46
> ' 8' 8' 8 '' %($
&' B1 '=' <' E<&@ "1@'+1 ' D1'
A>10'&=' '0&-1 0) < %HH + '' :*4
>1-A'-.' 6 ' <0' ' 1j
? -0'&=' F ' 0'# ' D1 '=0 'M 'H%' '$ '' %($
^?<@'''B< '&-' &=' ? & 0' '-' D1 '=0
? -0 = 'HHH' B'% '' %$7
#' 8' 8' O ' < '%HH' ' '' :7
#' 8' 8' 8 , < %HH ' '' ((*
L & '&-' &=' D1 '==0ϑ IB' '-' &?- '
&? 0' 8 ' < '%HH' ' * '' ;:Q
?-'0D'-.' D1 '=0'=& 'K'@=?@ B<C10 H, < %HH ' . '' (:%
` ! ' ' 4 , 'Z' ϑ * ' ' 6$
1 '-?1ϑ IB' 8' 8' '! ?' '65' M H' '*4 *%
D1' &?- 1 &@@0K'A" D1' & &-1 ' % ! ' M H ' 67
D<@@ -&'<00100' !'-10'&-' D1' &?- ' ` ! '*:' 4 ' ' '*5' 8 4*
"<>><.10'<.<'-0'=& '<#?01'&=' ='B1' `' ' 8 ,
L & '&-'# ' ?-'0D>1-'&=' ' % ! ' ' G' 'M H' '4(
>1 B1>1-'&=ϑ =& 1.@1A@' 8' % ! ' H ı
!<@01 >C '0&->1-ϑ = '&-&=9<.<'-0' &% ! ' ' M H '' 8
D&'B1'&=ϑ # ' D1' &?- ' 8'k

Z '! ?' '\@65'M 'H' '*%'
'6 & ' ' 7'M HH '! ' 4:;
6:7
?;0
6$$
5 '
,
%Q * : O ,ı')Q
* 'M 'HHH' ' 5 '
%'M 'HHH' '' '7 5 '
&A1' &=' <BB&?- '-.' # ' D'>' '-' '5' ; ! ' ' M H' 8'
LBD1H?1 ' 8' 8' 'M! '# &'M! $ 4' 'G ?' ' ' ZJ
-0K1 <#@1'=& ' D1' ' <'@'=0ϑ E<&@1 0ϑ -'%' 'HHH' ' *
5BB' 8' 8' 9 ' ' 7ϑ * ' 8 ,ı']
&>>'00'&-0' &'=& ' -A'B >1- 0' 8' = ? & # UM 'HHH' 7'
F< A0' <-A' 0BD1< 0' B&>>' 1A' & N ,
' D1>' 8' 8' M! '# &'M! $ 4' 8' '
D<@@ -&' #1' 1 ? -1A' 1>#1 0' &
<@'<>1-' 8' 8' 2 %(' HHH

0"-'))' !H!"& 2

i ! . *!' !! # ; *

'' 4%5ϑ 7
'' 45%
<' B&>1' &' <-' & ' <-A' A1C<'
= 11@ ' 8' 8' 8' NM PH' '
&'=& =1' 1A'=& ' '=@10'?-B?0 &>1A' 45'M 'HHH'! '*ϑ' N '' *5
&-1'0D<@@ '>C& '&'1LC& ' 1 BD<-j
A'\1' #?' '-' D'C0' &=' D1' ,'-./0'
' 1<-B1' 8' 8' :' = HH' ' '' '4 '' 65
FD1 1' -.@'0D' D'C0' B<-&' #1' D<A
1 BD<- 0' >< ' 0D'C' '-' !& 1'.-' '' $$'
D'C9'2 8' 8' ' '= HH' ! ' N '' 4 $
-.@'0D' 1 BD<- 0' 0D<@@ = 1'.D' -&-1'
#?' -.@'0D' D'C0' 8' 8' +'= HH'
!&' <C & 0'&= &1>'10/ D'C0' 8' *5 ' Z' B'5
'' :(:

t 8+8 "!' .0"&

!&' ?001LϑD<@@#1'D1@A'<@1 -<1@'<'
1K10'<-A' D'BD10 1' 8' ,'< 'b&H' '

*&&.!&' -.' i .!1 !7

&' D&10' 0D<@@ #1' ><A1' K' D' 'a10' &#' <.ϑ
>& 1' D<-'6 -BD10'@&-.' 8' %' 'H%' '$ ' '*
' <--1 &&'

&-1'0D<@@#1''>C& 1A'<0' 1 BD<-j C 4 =' ! ' \ ' æV 9:/'
A'\1 K ! M H b ' 4' 3@@'9Q
66'Q 'H%' '4 ?'7'
'@&'G !' 8' = H& ' ,
#' ' .'G !' ' ' '%HH' '7 '' 5
!? D1' 1.?@<'&-'<0' &' D1' >C& <j
'&-'&=' '@a' F< 10ϑ IB' 8' *7'< '%HH' '' >;/

i &+ &!"')) ' R4.+ ' & ' + H!"

i + - !".02' M! ."7

=' . 1<' 1- Z ` ! ' G' '' M 'H' '4%' J'
' = HH' ' ' IN
& = HH ?' :7

u '&@ ''1

F<.10' & =' ' ' <H' ! ' ' '$' *' 6::
W - *5 ' <H' ! ' ' '$ '' 4 *
@@&K<-B1' &' &@A'1 0ϑ 5BB' &=' '-.'
8' 8' 8' < %H ! '' 6 '
+'@&='<#< '-.' < '&=' &@A'1 0' 8' N < %H N ' '' 9 /
?-'0D>1-'&=' &@A'1 0' A101 '-.' 8' N < %H ' , ' F@) ' J
1.?@< '-.' < '&=' &@A'1 0'<-A ?-'0D8'
>1-'=& ' "101 '&-' 8' 8' $ '%HH' ' &&L' J ,
' < >&? ; F' <-G'=L 'BB

i .0 & . " '))' /!2

oCB-' 1 '1

!< D1'<-A' &-ϑ D1' ' L'@1ϑ IB' C ' %&& '' *5*Y *55
'' 64*

t & &/ 0 +' .0"&

? '0A'= '&-' &=' D1' , '-./0 &? 0'
&'-@ ' K' D' 8' 8' > ' & ' ': 7'M 'HH ' I
<@'B'&?0' -A'= & 0' '-' ?-'0D>1- ' ' = 'HH' ' *4 '' 80

i &#& 0 +' &*- !2&

?0 &A ' &= 8' " , ' ' ' *' **:

i "& 0 +' ! .-

)) ' 4!-! &#!2=' +!"** =' #/#2& 2 #H2'H' H ".; !."&2

*& 1 ."

<?1'&=' 8' 8' 8' 4 'HH '' *:%

+!'<! ! - &H!')) ' +!2d'

<C@10e

@@ <C@10' 0D<@@B1<01 8' < $?G 6 '<H' ': '' M;Q
D1' <?10' & ' A'-<-B10' &=' D1'
<C@10' 8' 8 S # ' ?G 6$ '<H' ! ' 'H' 999
S # ' ?G 6$M '<H ' '' 999
FD1 1' D1' <C@10'&=' F&&@0ϑ 1< D1 ϑ ! ' &' '' 9P/
<-A' 1<A' 0D<@@ #1' D1@A 'NM <H' ! ' '$' 8' '' 47
+'YM <H' & '
'+'@1.10'&=' !& 1'.-' 1 BD<- 0'<' D1' ' ' ' ' '' 999V99;
<C@10' '-' #? '-.' <-A' 1LC& '-.' 3 ' ' 2 L' Q' '
F&&@0ϑ IB' 8' 8 ' V V V ;O '' M4:
? '0A'(;'&-' &=' D1' BO' <C@1' <0' ', 'M <H' ! ,' N '' 4(' S
&- <= 0ϑ 5BB 3' '4('Q Z ' ' ' $ <- QV
1B&.-'\<-B10'-' D1' <C@1 8' 6$ Z ' ! ' 7 9= '
F 1'.D 0ϑ 5BB'G -&' !& 10 <@@'-.' 8' H ' '* ϑ 8 44Z
&' LC& '&=' F&&@ϑ IB' &' B& @<-A' H ' '*6@
&0'&=' E&&A0'<' 1<' 8' & '*4
LBD<-.1'&=' &-'10@ 5BB' 8' H '*% '' '0
11 0'<-A' &?01'-' D1' <C@1' 8' H ' ' ' 447
<K'&=' < H?1'<-A' 1C '0<@ 8' H ' 'i' 99Q
'0D'<-A'F 1@0D>1-><#'-.'F&&@09
IB' &' D1' <C@1ϑ 8' 8' H '*5 '' 4%

$ L A

0 ; H & &! 2
d $ " %

b" - .^ 7 .B& !!- 8 ## ." 7 .'
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F 7 .'B& !!- 2 -/' !- 2 ' , ; ' V' 5
<- ' ' IB' '-<AA' '&- ' 8 U < '%H6' '*4
- V . .+ ' ! !"' C#'2 +! ;!' k
+&!/' .' ! !-#!' . '6! +1 ' J N 'CC ' ' :
."!&*-!"2'2 +!#.- "&;0 !' .' !- 2'
IB' 8 8 L&" ' I
; ; . 2 ' ##'2 +! .-+@'#.++!/' &21!2'
&-' !&"' .7 -' .0- &!2 , '4 ' ' ,
6!1!/@' ." .++!/."2' ' &21!2' L' ,' '4+' '5' '
90 +& &# &.-' . ' .++!/."2' . ' !- 2
YL.' ' ' L & B ' J' < KKQ J
6!1&22&.-' . '3 "'. 'B ' && ' I'
b" - ' . ' ' !- ' ." "!!' A! "2' ;@'
!' +!&<@ '4 'CCC ' ' &' 5
' O' ' B& !!- ' ." !' M&-*(2
3 "/.- 'J *** ' ' #' L' Q' J)
& 0;2&/@' ." "!!' A! "2
/& +!' ;!' -.' % 1 +! Q \J 'CCC ' 'C ' 'CC L' &L' I '
"' 'J ' ' ' ' & &' 5 ,
' 'V' . ' &' 5, '
0;2&/&!2' . - V . .+2!% ." ! / ' J *** Y ' L' &' 5, I
' 'CCC ' ' ' "' ' L' Q'
' 'CCC ' 'V &' ,
J N ' ' 'V' 'V+' && ' 5
' 0;2&/@' .-' +. 2 '5I' 'CCC ' 'C ' . L' Q'
(' 'J ' 'CCC ' 'I' ,
' 2&. -' . ' L' L 5 IB ' &&
! +&-*' -/'!% 1&-&-*' b . . /2 CM ' ' &&L' ' J
3". '&2&.-' ." .++!/."2' . ' &21!2 'N 'C**+' ' && ' , I ,
! !"2'3 !- ' .' ; ; . 2 ' C#' .' ;!' Z 'II'2 ' 'b && m
SO&' . '* !"&-*' '.&/ 2 $ % && JJ)
' & U < / 01!-

t K0]". && ' "+' .
6!'!"2 +' . ' 0/*!1!- ' '6 '
* &-2' &1 5 ' I$'II' #' && :

i 022 &2 &. - H!

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;@' "!2 " &-!/' L' L L III ' ' 1 L' &)
3 "/.-2' . 'B!+.-@ 5I' J CCC ' ' ' . V L' & m
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6)

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-'3+! ' . ' -/' @2'&-' L' 6 +' "-' . 'V 'J * * '&
' !' %# !SO!"' 6 ! 0"-' . ' L' ' "-' 4 ' ' <

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b6+' *

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A -$2 $ M" ' 5J
' i !10-&"!

o ? 1 1&

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#!" &-' -!1&!2' . ' !'M&-*' ' IK) ') <
4@'B!+.-2' "/.-!/' L' L' +. PPP ' "' ' L'))5IJ
-' V "&2' . ' /!1 & !' -. 1&-&2' L' I P '#'5' L' ' I
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' i 0" &! *

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'V "/2' -/' 2# ! 2' .J '% *' J D I ']
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*& . &&

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3!- +@' ." E&-*' 7 -(2' **2' C# ' ; '4CC ' ' I '' ' :5*

t 8*+ ' ! ; 0

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; !' . ; 2!"' !/' L' L' *4 V +' J ' &' I
' ' 5 " G &!'@ + -7

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22!- ' L' L' L' % ! / 1&' 5J T' &')5J
.-!' .' ; !' 2!- ' ; !@. -/' ! ' L' . *Y* ' J 'I < 5 ' &' J

!)) '(

.+
.' --!" 2 +' ;!' ' .!1 E!"' ." .!1 E!"' ." ."/7 &-!" ' -- !"' '& 'II ' ' 5' ']Q '
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.!1 E!"2'1 @' -' ! !" &+' -!%'
3 "+& 1!- 'II 'CE ' G '
."/7 &-!"2'2 +' -. ' ; !' --!"2' L' 5'II ' ' 'I d ' 55, (
.' --!" 2 +' ;!' ' 0""&!" ' -." 0""&!" ' --!" 'C# 'II '" ' . \ && ' J 5)J<
402&-!22' . ' ' --!" "!*0+ !/'
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11

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&.+ ! 7
;O2!2. L L Q && J 5
+ -. '"0-* &-2 - - 2 $ J 5 ; C J L &L
4@ !72 "!2 " &-!/ % " -' L &' 55d
B." !& 0"!2 ." * J CCC &' 5,
* &-2 W<20"@ -/0-+ 7 0 4 "* &-2 ; 4 CC [&& J
6! ! +!/ -/ -!7 6!*0+ &.-2
!- /!/ L L ; 4CC # KQJ I
.* ; .-+ & &4 ! * *
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JO $ J C &' , I
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&- ." 6!'!"2&.-. -. +2! !"/&
I L N CC & &&'
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/@ /! ; -&2 !/ ". 1 !' .0" ^$2 % J J 5 &&' ZJ
1&0'1@&' &=' &-1.9 "=@9 + 1 B
b 0*&-*' N CC . &&'
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N / C & &&' , I
<'B< <.1='=' B <C1=1
< 'B&- =1=1
.7' 0"20!/ \'N 'CC ' ' I &&' 5I
Z' ' ?<@' ' <- ' <'<?< B '
. ' E!-'7& .0' ! '!'. ' 7-!" A Q '% ' E *2 + J
-7 .+!2.1!' -SO&"@'"!2 !# &-* "% ' ** ' % @ ' ' &' 5 5
M" 6]&j XX ' &' 5 '

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! +!"2 &-K 2 ++ -. ' ; ! &#!"_ ."
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%#!22 &-'"!2 " && ! / L L ' $ J Y + &' 5I '
5 ' J 'CCC ' +'\ &'
J *C * ' ' + + & L' &'
6!*0+ &-*' ! +!' -/' 3"&#!.) 4 J *** ' ' ' &' L' L' J '
&L' I '
V' J G + L L L $
.2 +!"2 -/ &# 0 ++!"2 20 ; H!< .'
-SO&"@' L 5J' J ' 'V ' 'JL N &L'
&<0 ++!"2 ++ .+/ -@' HO/&#& +
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+&!-2'&-' 1 &@'1 @';"&-*' 1' &20 +2'
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N - * %+ L I' N CC ' ']Q
&#!"2 . ' .7 -2 2 ++ ; ! 27 ."- .'
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& &# 0 +2 ++#1 2!-'&- .' #. + -/'
7& .0' !'M&-*(2 &#!-#! I' 'CC ' 'V\ ]Q J[
6 1 @' ; !' 2!& ' 4!"7&#E L &J T 'U ' I && ' '
02 &#!2 2 ++ 22!22 b &-2 . S' 'N 'CC ' ' && ZJL
&# 0 ++!"2 L' L' && 55<
3!- + @' .- .2 +!"2 . !-/&-*' * &-2
'6 ' 2 ')' # ' L' ' ; 'C4 ' '5J &&'
;92!' . '3 !- 2 .' &# 0 ++!"2 ."
30"'!@ -#!' V' 8' L' 5 ' ' +'V K 3b
+'3 !- 2 .'"2! "# &-*' *##' &< +2'
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R ! 4
-' 7 ' 2!2 *" - ;+!' ."-. =' 4 'V' ; *4' J 'C ' '%5 ' ,J
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0 !' .")' A ' 4 "'5 ' = ! -'
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1 !"#! 1 !-' ' &++!&-2' L' L' 1 ' F' ' ' ' ' E '
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